



### YOHO Safety Credo

- All accidents and injuries are preventable.
- Each of us has a personal responsibility for our safety and the safety of others, both on and off the job.
- No business objective is so important that it will be pursued at the sacrifice of safety.
- A job is well done only if it is done safely.

### INTRODUCTION



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## 1.0 ARRIVALS

This manual is for the use of Nigerian Government officials, Mobil Producing Nigeria (MPN) Yoho FSO Facility Staff, Masters, and Crew of Export Tankers visiting the facility, Masters and Crew of hold back tugs, and Mooring Masters involved in the export of Yoho crude oil.

- Mooring Master On Board/Mooring
- Export Tanker Pre-Mooring Checklist

Arrivals chapter includes:

- Communications
- Arrival Notifications
- Export Tanker Approach

Checklist to complete:

## ARRIVALS

### 1.1 Communications

#### Normal Operations

The table below provides communication information used during normal operations.

#### Item Description

Name YOHO FSO Facility

Call Sign C6NI4

Position Latitude 4° 01.8' N, Long 7° 31.3' E

Operations calling YOHO FSO Facility ("Control Room") ("Mooring Master")

VHF operating channels Channel 16 or Channel 70, 24 hours per day

Helideck homing beacon 119.1 kHz: Call Sign "C6NI4"

FSO Facility Postal Address

YOHO FSO Facility c/o Cameroon Oil Transportation

c/o QIT Terminal

Ideno

Eket

Nigeria

FSO Facility Fax +871 330 936315

FSO Facility Telephone +871 330 936315

#### 1.1.1 General Communication Requirements

##### General Requirements



This section of the manual provides information about communications requirements during normal export operations.

## Language

All communications between the Export Tanker and other stations within the MPN Yoho FSO Facility area are conducted in English.

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## ARRIVALS

### 1.1 Communications

#### Safe Communications

## Equipment

Effective and efficient communications are essential to safe operations. Breakdowns in communications both by radio at a distance and interpersonal communications face-to-face can and do lead to accidents and / or incidents. Every care is taken to ensure that communication equipment is in good working order and that all spoken communications are acknowledged, received and understood. All orders and instructions must be repeated back so that the person giving the order or instruction knows that the intent and meaning are fully understood by the person receiving the order or instruction.

All portable communications systems in use must be certified intrinsically safe and must comply fully with applicable safety requirements.

## Transmissions



## Use and Testing of Dedicated Channel

High frequency and medium frequency (HF/MF) radio transmissions are not permitted within the FSO Facility Restricted Areas. Low power satellite communications are permitted.

One dedicated channel of voice communication between the FSO Facility and the Export Tanker must be agreed upon, maintained, and continuously monitored at all times while the Export Tanker is in the FSO Facility Area.

All stations taking part in operations must test and establish clear communication on these channels.

### 1.1.2 Other Communication Requirements Communications Notifications

The Export Tanker should send all communications directly to the Yoho FSO Facility and a copy to MPN.

### FSO Facility Approaches

When within 50 nautical miles of the Yoho FSO Facility, the Export Tanker maintains a listening watch on the FSO Facility VHF Operating Channels.

### Tanker Arrival Information

## 1.0 ARRIVALS

### Mooring Master Transmissions

To receive current information, the Export Tanker should attempt to establish verbal communication with the FSO Facility as early as possible. This information



flow includes, but is not limited

to,:

- Mooring prospects: Export Tankers that do not berth immediately are directed to the Anchorage or Waiting Area.
- Berthing time.
- Weather conditions and forecast conditions.
- Mooring Master or FSO Facility Representative boarding time.

The Export Tanker also confirms:

- The amount of ballast and time for deballasting.
- That no defects or problems exist that may affect

Export Tanker operations while approaching, mooring, and loading at the Yoho FSO Facility.

The Mooring Master and his or her Assistants have portable VHF and UHF transceiver units. These units are used for communication between the Export Tanker, FSO Facility, Field Vessels, and work boats.

When the Export Tanker is within the Yoho FSO Facility Area, all verbal communications relative to loading the Export Tanker are routed through the Mooring Master. The Mooring Master or FSO Facility Representative may delegate to make direct verbal communications with the Yoho FSO Facility Control Room for specified periods of time.

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## ARRIVALS

### 1.1 Communications

#### 1.1.2 Other Communication Requirements

##### Communications Failure

In the event of radio communications failure, all mooring, unmooring, and cargo operations must be suspended until satisfactory communications are restored.

##### Radio Silence

Radio silence is rarely requested, but at times it may be required within the FSO Facility Safety Zone. If required, all export and transfer operations are suspended until the period of radio silence is declared over.

### 1.2 Arrival Notifications

#### ETAs

Export Tankers must send an initial Estimated Time of Arrival (ETA) message via email to the FSO Facility when they start on passage to the FSO Facility.

A series of ETAs must be sent as listed below:

- Start on passage
- 72 hours before arrival
- 48 hours before arrival
- 24 hours before arrival
- 6 hours before arrival
- Updates when in VHF range
- Additional notification must be given if the Export Tanker ETA varies from the original ETA by four hours or more

The following exceptions apply to the above rules:



- If the sea passage from the Export Tanker's last port to the Yoho FSO Facility is less than 72 hours, the first ETA must be given immediately after leaving port. Subsequent ETAs must be given at the time intervals specified above.
- Should the ETA change by one hour or more following the 24-hour notice, the Export Tanker must notify the Yoho FSO Facility of the revised ETA.

## 1.2 Arrival Notifications 72 Hour Questionnaire

On receipt of the 72-hour ETA notice, the Terminal sends the Tanker Master the 72-Hour Vessel Questionnaire for completion and a timely reply.

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

FROM: Vessel Master  
TO: Offshore Installation Manager

1. Provide the name of the Tanker Master.
2. Provide the name and contact details of the vessel in-country agents.
3. Provide the vessel name, flag, and call sign.
4. Provide name and address of Owner and Operators.
5. Provide the voyage number when leaving the Terminal.
6. Provide the summer deadweight, length over-all, and beam.
7. Provide the previous name and date of vessel build.
8. Provide the name of the last port of call and of the next destination.
9. Provide the ETA to the Terminal Waiting Zone.
10. Provide the destination or place for orders of the cargo.
11. Provide the net standard volume in barrels at 60°F to be loaded.
12. Provide the cargo nomination quantity and loading window.
13. Provide the quantity or quality of slop on board. Is the load on the top procedure to be followed?
14. Provide the quantity of clean ballasting or segregated ballast on arrival.

15. Can loading and deballasting be carried out concurrently? If not, state reasons.
16. What is the deballasting time?
17. Provide the quantity of cargo on board.
18. Specify the H<sub>2</sub>S concentration in vapor spaces in parts per million (ppm) for all cargo tanks and identify the measurement device used to measure the H<sub>2</sub>S concentration. (The Master is to advise of any changes during the regular ETA message notification.)
19. Advise whether you have received any instructions regarding insertions from Owners or Charterers or special remarks to be added to Commercial Lifting Documents.
20. Confirm that heating coils (if fitted) and tanks are sound and not leaking.
21. Provide the loading rate during and after deballasting in barrels per hour (bbls/hr) and confirm that the manifold is fitted with two 16-150 ANSI (for example, ASA) flange.
22. Confirm that the bow fair leads and bow stoppers are suitable to accept 76millimeter chafing chains. Provide the number and the distance between the fair leads and the chain stoppers.

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### 1.2 Arrival Notifications

#### 72 Hour Questionnaire ((Continued))

23. What is the safe working load of the derricks or cranes? Are there cleats, eyes, and bits available in the manifold area for securing vessel rail hoses in line with Oil Companies International Marine Forum (OCIMF) recommendations?
24. Confirm that cargo and slop tanks are under inert gas on arrival (below 8% O<sub>2</sub> content by volume).
25. Provide the vessel experience factor for the previous 10 voyages.
26. Provide the crew list and crew health status.
27. Provide the export tanker telephone numbers, fax numbers, e-mail address, and Inmarsat numbers.
28. Confirm that the export tanker is in possession of valid SOLAS, Safety



Management and Document of Compliance (International Safety Management [ISM] Code) Certificates.

29. Provide the estimated draft forward and aft on arrival and departure and the distance from bridge front to bow.

30. Provide the distance from the bow to the cargo manifold connection.

31. Advise whether the export tanker has any reportable sickness on board or whether the Master advises a clean bill of health.

32. Is the vessel in compliance with International Ship and Port Security (ISPS) requirements?



## 1.2 Arrival Notifications

### Notification of Readiness (NOR)

#### 1.0 ARRIVALS

The laytime shall begin (regardless of the availability of the loading berth) six hours after the presentation of the Notice of Readiness (NOR) on the agreed arrival date to the FSO Facility or Mooring Master or at the commencement of loading, whichever occurs earlier.

When the Export Tanker is moored, the Mooring Master signs the NOR to acknowledge its receipt. This receipt does not constitute an acceptance of the NOR or an agreement that the Export Tanker is in all respects ready to load.

If the Master of the Export Tanker or their agent presents the NOR prior to the agreed arrival date, then the laytime shall not commence before 06:00 hours [Local Time] on the agreed arrival date or at the commencement of loading, whichever is earlier.

If the Export Tanker arrives after the agreed arrival date, then the FSO Facility authorizes the Export Tanker to berth as soon as possible. Laytime begins only upon commencement of loading but not so that it interferes with the loading or projected loading of any Export Tanker that has arrived or is expected to arrive at its agreed arrival date.

Export Tankers must vacate the berth as soon as it is safe to do so after loading is complete and upon the disconnection of hoses, provided that the Export Tanker remains in the vicinity of the FSO Facility to await documents.

The Master is advised to purge all vessel cargo tanks, nominated and non-nominated, to ensure that H<sub>2</sub>S levels are less than 10 ppm measured in vapor prior to



arrival at the FSO Facility. The Mooring Master must verify that H2S levels are below 10 ppm prior to the vessel being accepted for berthing at the FSO Facility. All times required for purging cargo tanks to meet this requirement are for the owner's account.

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## H2S Terminal Requirements



## ARRIVALS

### 1.2 Arrival Notifications

#### 1.2.1 Personnel Boarding

##### Personnel

The Export Tanker must be prepared to accept onboard the following personnel:

- 2 MPN [Mobil Producing Nigeria Berthing Masters]
- 1 GAC [Agent]
- 2 Customs
- 2 Immigration
- 1 Public Health
- 1 NPD [Nigeria Petroleum Directorate]
- 1 DSS
- 2 Independent Cargo Inspectors
- 1 MMS (Minerals Management Service)
- 1 Nigerian National Petroleum Corporation (NNPC)

In addition, any persons required by the Yoho FSO Facility, Owner, or Charterer may be invited to board the Export Tanker provided that the Export Tanker life saving capacity is sufficient.

Several of the above personnel will remain on board the Export Tanker throughout the export. The Export Tanker Master is required to provide all Personnel who remain onboard with reasonable accommodation.

The actual list of the boarding personnel is communicated to the Export Tanker Master upon their arrival in the waiting area.

**! IMPORTANT:** Personnel going to or returning from the Export Tanker should not bring gratuitous goods onto any MPN transports or facilities. MPN reserves the right to inspect personal effects prior to boarding MPN transports in accordance with MPN standard policies, and



will confiscate any contraband discovered.

## ARRIVALS

### 1.2.2 Pre-Mooring

#### Required Boarding Equipment

Export Tankers should rig their pilot boarding equipment in compliance with the diagram shown below. They should also have a responsible officer and other boarding personnel available to ensure safe boarding of the FSO Facility Mooring Master.

Required boarding arrangements for pilot in accordance with I.M.O. requirements and I.M.P.A. recommendations.

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### 1.2.2 Pre-Mooring Continued

#### Other Pilot Boarding Methods

Pilot boarding methods and restrictions for each are listed below.

#### Personnel basket

- On Export Tankers with suitable cranes, the Mooring Master may request to board by personnel basket provided by the FSO Facility.

Note: This method must be used only with the approval of the Export Tanker Master.

#### Pilot and Combination Ladder

- Before arrival at the boarding position, the Export Tanker must have in place a combination ladder arrangement that complies with the requirements detailed in this section of the manual.
- A means for lifting hand baggage onboard must be in position for immediate use.

Note: This arrangement is not required if helicopter boarding is confirmed.

### Helicopter

The Mooring Party may board the Export Tanker by helicopter if an agreement is reached among the Mooring Master, the Export Tanker Master, and the helicopter operator. The following limitations are considered:

- Cloud ceiling and visibility.
- If the helicopter has no winch facility, the helicopter must land on the deck.
- The marked Helicopter Landing area may be required to have collapsible shipside rails, which must be lowered for the operation.
- Adequate Export Tanker crew must be available to standby as a fire and rescue party.
- The helicopter operator must approve of the landing area aiming circle, clear zone, and maneuvering zone dimensions.
- All helicopter operations are carried out under the guidelines contained in the publication "Guide to Helicopter and Ship Operations" (International Chamber of Shipping [ICS]).
- Helicopter personnel transfers must not take place inside the FSO Facility Restricted Zone.



## 1.0 ARRIVALS

### 1.3 Export Tanker Approach

#### Normal Approach

The information below shows the normal operation expectations that occur after mooring to the Marine Terminal. This information is provided for guidance only. It is subject to change and is subject to the judgment and decision of the Marine Terminal Mooring Master.

#### Anchorage or Waiting Area

If the Export Tanker is not scheduled to berth on arrival or the FSO Facility is closed due to adverse weather conditions, the Export Tanker Master is advised by radio and is asked to proceed to the Anchorage or Waiting Area.

#### Permission to Enter

Export Tanker must first obtain permission from the Marine Terminal by radio to enter the Marine Terminal Area.

The Mooring Master gives the Export Tanker Master a boarding position in terms of bearing and distance from the Marine Terminal.

#### Mooring Master and Pilot Boarding Area

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### 1.3 Export Tanker Approach

#### Compulsory Pilotage



## Hose Equipment Box

Compulsory pilotage Pilotage is compulsory within the FSO Facility Area.

Export Tankers must not enter the FSO Facility Restricted Area until one of the following conditions is met:

- The Mooring Master is onboard.
- Permission is granted by the FSO Supervisor for the Export Tanker to enter the Restricted Area.

The Assistance Vessel presents a container of equipment for connecting floating hoses. The assisting Vessel Crew with the Mooring Master or his or her assistants in attendance places the container on board close to the loading manifold before approach operations commence.

## Securing Anchors

## Manifold Preparations

Prior to approaching the FSO Facility or passing over pipelines adjacent or near to the FSO Facility, the Export Tanker Master must ensure that the anchors and cables are secured to eliminate the possibility of an anchor dropping accidentally.

The following items must be made ready:

- Two 16-inch by 150 ANSI presentation flanges, on the port side manifold to receive the FSO Facility hoses
- A suitable assortment of slings, chain blocks, and tools to assist in hose connection
- Drip containers and absorbent material

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### 1.3 Export Tanker Approach Hydrocarbon Gas

### 1.0 ARRIVALS Hold Back Tug Connection

To avoid sources of hydrocarbon gas:

- All cargo, ballast, and bunker openings must be closed before the Export Tanker enters the FSO Facility Area or before the hold back tug comes alongside.
  - The Export Tanker Master must confirm when it is safe to permit the hold back tug or any other vessels alongside the ship, including the pilot boarding vessel.
- The following requirements must be met for hold backtug connection:

- Making fast the hold back tug must be conducted under the direct guidance and coordination of the Mooring Master after they board. An Export Tanker officer must be present during the operation.
- A mooring line and chain stopper must be ready aft to pick up the towing wire from the holdback tug.
- A sharp knife or axe should be available.
- With the Export Tanker stopped in the water, the:
  - Hold back tug backs up to the stern of the Export Tanker.
  - Eye of the mooring line passes by the heaving line to the work deck of the hold back tug.
  - Hold back tug crew shackles the eye of the towing wire to the eye of the mooring line.
  - Mooring line is then brought onboard.
  - Towing wire is secured with a chain stopper.
  - Eye of the towing wire is placed over one of the stern



bits of the Export Tanker. (Confirm SWL of the bits are adequate for the operation.)

-Chain stopper is released.

- The hold back tug Master then pays out the towing wire to the required distance.

Note: During hold back tug connection and at all

times once the hold back tug is connected, all nonessential personnel should be clear of the area.

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### 1.3 Export Tanker Approach Bow Mooring Preparations

#### Assistance Vessels

Under normal operational circumstances the following preparations must be met for bow mooring:

The Export Tanker must be moored with two 76-mm chafing chains and two hawsers of 24-inch circumference:

- Bow stoppers must be checked for proper grease, free movement, undamaged locking pins, and pawl prior to commencing mooring operations.
- A heaving line, spare rope messenger, crowbar, sledge hammer, and sharp knife or axe must be available at the bow.
- Two messengers must be prerigged, led through the bow stoppers and bow fairleads, and led outboard clear of obstructions to the shoulder or to where the parallel body begins to avoid the danger of the work boat contacting the bow.



- A shackle must be fitted at the end of each messenger to facilitate connection to the pickup line.
- For a less hazardous and smoother mooring operation, the pickup line can be stowed directly onto the stowage drums (rather than the warping drums) to receive approximately:
  - 110 meters of 1-inch diameter pickup line
  - 110 meters of 10-inch diameter messenger for each mooring hawser.

Note: Panamax size vessels may occasionally visit the terminal, these are considered as abnormal operations and the Yoho FSO Facility will make special arrangements to berth them at the Facility.

Assistance vessels are at the disposal of the Export Tanker throughout the Export Tanker approaching maneuvers and during its presence at the FSO Facility. The Mooring Master directs the assistance vessels, and the vessels request actions or assistance from the Mooring Master.

The number of assistance vessels varies according to:

- Export Tanker displacement and deadweight.
- Meteorological and sea conditions.



#### 1.4 Mooring Master On Board/Mooring Holdback Tug Fast and General Operational Safety Inspection

After boarding, the Mooring Master advises the Export Tanker crew to pick up and secure the hold back tugs' tow wires. After a briefing, the Mooring Master or his or her Assistants direct the hold back tug to be made fast.

The Mooring Master or his or her Assistants then conduct a General Operational Safety Inspection of the Export Tanker before final approach. The inspection includes, but is not limited to, the following items:

- Bow mooring arrangements and equipment
- Anchor and cables and their security
- Cargo loading manifold
- Cranes or derricks and associated gear
- Poop deck arrangements
- Cargo control room
- Any other area that the initial inspection may indicate
- Oxygen and H<sub>2</sub>S content of the atmosphere in the cargo tanks
- Tanker Master-reported status of the following items:
  - Main engines
  - Rudder
  - Auxiliary equipment
  - Operational
  - Control equipment

Reference: See Export Tanker Premooring

Checklist.

The Mooring Master immediately advises the Export Tanker Master and the FSO Supervisor if the Export



Tanker is found unacceptable for FSO Facility berthing or loading.

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#### 1.4 Mooring Master On Board/Mooring Export Tanker Pre-mooring Checklist

The Export Tanker Pre-Mooring Checklist is included below. Upon completion, Masters and Mooring Masters may sign and date this list.

##### Item Master Mooring

##### Master Comments

1

Are berthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?

2

Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, hold back tug, work boat, and FSO Facility?

3 Is English, the agreed language of operation, being spoken?

4 Is Export Tanker upright with suitable trim?

5 Is an alternate anchorage designated and agreed upon?

6

Have limiting environmental criteria for the following operations been established and agreed upon?

- Approach/connect
- Cessation of cargo operations
- Disconnect.

7

Has Export Tanker Master shared information with

other relevant parties concerning the manoeuvring characteristics of the Export Tanker and shipboard equipment?

8 Do both parties know how many consecutive engine starts are available?

9

Are methods of approach, passage plan, maximum speeds, and mooring procedures reviewed and agreed upon?

10 Are weather forecasts obtained, and will they be updated on a regular basis during the operation?

11 Is a bridge and anchor watch established?

12 Are bow stoppers, leads, and lines inspected and satisfactory?

13 Are deck winches in good order with power on?

#### 1.4 Mooring Master On Board/Mooring Export Tanker Pre-mooring Checklist

##### Item Master Mooring

##### Master Comments

15 Is crew ready to secure hold back tug and carry out mooring?

16 Have fore and aft fire wires been inspected and deemed ready for deployment?

17 Are poop deck power, mooring lines, and chain stoppers ready?

18 Is manifold lifting gear suitably rigged for use and located on the port side?

19 Are manifold reducers in place and fully bolted?

20 Is hose securing equipment rigged at applicable manifold?

21 Is adequate lighting available?

22 Are bridge and navigation equipment and machinery operational?

23 Is Main Engine tested astern?

24 Is a proficient helmsman on the wheel?

25 Is at least one cargo tank checked having an acceptable O<sub>2</sub> level (<8.0%) recorded?

26 Has at least one cargo tank been checked having an acceptable H<sub>2</sub>S level (<10.0 PPM) recorded?

27



Have support vessel Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?  
28

Is safe working load (SWL) established for towing bits and leads to be used? Is this information relayed to the hold back tug Master?

Masters Signature

Mooring Masters Signature

Date/Time

Motor Tanker (MT)

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1.4 Mooring Master On Board/Mooring  
Final Approach and Mooring

Distance from the Single Point Mooring (SPM)

The Export Tanker is considered on final approach when it is one mile out from the FSO Facility.

The following duties, subject to the prevailing environmental conditions, are performed for the Export Tanker approach to the FSO Facility:

- Before mooring, the cargo hose is secured clear of the mooring area or is held clear by a support vessel.
- When the Export Tanker is approximately 300 meters from the stern of the FSO Facility, the first messenger line is made ready to bring the pickup messenger onboard as follows:



- A work boat brings a pickup line to the bow of the Export Tanker and connects the line to the tanker messenger.
- The pickup rope is heaved on board until the chafe chain is through the bow stopper.
  
- Once the chafe chain is in the correct position and secured in the bow stopper, the load is then transferred to the stopper by slacking back on the messenger.
- The line boat passes the second pickup rope to the Export Tanker, and the second chafe chain is heaved on board and secured in the stopper, ensuring even tension on both mooring hawsers.

- The Export Tanker approach speed and heading are controlled so that line tension is minimal until both hawser assembly chains are secured.

#### Settling the Export Tanker Once Removed

The distance from the stern of the FSO Facility is closely monitored during the final approach and throughout the mooring operation.

The Mooring Master or his or her assistants and the Export Tankers Officer on the bow should each independently report distance off to the Mooring Master and to the Export Tanker Master respectively.

Once the Export Tanker Master and Mooring Master are satisfied that the Export Tanker is securely moored, the following activities may occur:

- The hold back tug adjusts the towline to an appropriate length, depending upon the prevailing weather and current conditions.

#### 1.4 Mooring Master On Board/Mooring

##### 1.0 ARRIVALS

- The hold back tug commences towing at the power and heading as determined by the Mooring Master.
- The hawser load monitoring equipment receives hawser tension readings.
- The Export Tanker deck officer and AMM may leave the bow.

The Export Tanker main engines must be at a state of constant readiness. The mooring hawsers, fitted with an emergency hawser disconnection system, are under the direct control of the FSO Facility Loading Operator.

#### Mooring Master and Assistants Roles Once Moored

After mooring, the Mooring Master and his or her Assistants remain on board in the capacity of Loading Master and Assistant Loading Master.

#### Monitoring of the Mooring Hawsers

**Mooring Master and Assistants roles once moored**  
After mooring, the Mooring Master and his or her Assistants remain on board in the capacity of Loading Master and Assistant Loading Master.

**Monitoring of the mooring hawsers** The Export Tanker Master is responsible for providing constant monitoring of the moorings in the following manner:

- One crewmember must be equipped with portable radio communication with the Export Tanker Central



Control Room (CCR) and must be stationed at the bow of the Export Tanker at all times to monitor the condition and direction of the mooring hawsers and distance from the stern of the FSO Facility.

- Duty crew members must be directed to check their portable radios at intervals not exceeding 30 minutes by reporting to the CCR.
- Spare radios and batteries must be made available.
- Abnormal or adverse conditions must be reported immediately to the Mooring Master or his or her Assistants.

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## 2.0 GENERAL INFORMATION

This chapter describes the Mobil Producing Nigeria (MPN) Yoho FSO Facility information including location, general weather conditions, and miscellaneous country requirements.

General Information chapter includes:

- General Information
- FSO Facility Locations
- Restricted Areas and Exclusion Zones
- Miscellaneous Information



## GENERAL INFORMATION

### 2.1 General Requirements Requirements

### 2.0 GENERAL INFORMATION

The following general requirements apply to the Yoho FSO Facility:

- MPN must approve any vessel nominated to load at the Yoho FSO Facility for each loading. MPN has the right to reject any Export Tanker in its absolute discretion.
- Prior to loading at the Yoho FSO Facility, Export Tanker Owners must agree to be bound strictly and fully by the FSO Facility Regulations, conditions of use, and legal indemnities set out herein and by any exceptions to safety measures that MPN decides to make under specific circumstances.
- Upon arrival of the Mooring Master or FSO Facility Representative on the vessel, Export Tanker Masters are required to sign on behalf of the Export Tanker Owner an acknowledgement of receipt of the FSO Facility Information and Safety Regulations, an agreement that binds them to these regulations and FSO Facility-specific manuals.
- The Mooring Master or FSO Facility Representative may refuse, suspend, or delay berthing or loading, or may unberth any export tanker when either conditions or the export tanker does not comply with Yoho FSO Facility Information and Safety Regulations and procedures. If the Master and the Mooring Master or FSO Facility Representative cannot agree to a procedure by which the export tanker can meet satisfactory operational conditions, immediate contact with both Yoho FSO Facility and the Charterer of the vessel must be made so that corrections can be rectified.



• If for any reason the above formality is not accomplished, the provisions of this article remain fully binding.

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## GENERAL INFORMATION

### 2.2 FSO Facility Locations

Yoho Field

FSO Facility Description

Yoho FSO Facility Bow turret moored FSO with a centre point position at 4° 01' 8" N 7° 31' 3" E and tandem Tanker offloading operations

Waiting Area or Anchorage Area South Anchorage 3° 59' 0" N 7° 34' 0" E

Service vessels Mariners are cautioned that Mobile Offshore Drilling Unit (MODUs), buoys, anchor moorings and service vessels may be found working in the Yoho Field area. Some of this equipment may not be illuminated.

### 2.3 Restricted Areas and Exclusion Zones

Regulations

The following restricted areas and exclusion zone regulations apply to the Yoho FSO Facility:

• Restricted areas and exclusion zones prohibited to navigation and fishing activities protect Yoho FSO Facility installations.

• Restricted areas extend in a .75-mile radius from each installation.

• Exclusion zones extend in a .75-mile radius from each installation.

• Access to the prohibited zones is restricted exclusively to service vessels either working for or authorized by the Yoho Field OIM or Yoho FSO Facility FSO Supervisor.

Reference: Insert of chart of restricted and exclusion zones may be used.

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## 2.4 Miscellaneous Information

### Introduction

The following table provides miscellaneous information about the Yoho FSO Facility:

### Terms Information

**Local time** The local time is Greenwich mean time (GMT) -1 hour.

### Meteorology

(as an indication only)

The rainy season predominates April through September.

The dry season lasts from September through April.

### Visibility

During heavy rain and harmattan, visibility may be limited to half a nautical mile.

### Squalls

Squalls frequently occur in the area and may occur at any time of year.

### Currents

Since the Yoho FSO Facility is located in relatively shallow water, the ocean circulation currents have very little influence on the local currents. Recent measurements in shallow water indicate that the largest current velocities are in the east and west directions.

### Rip Tides

Rip tide activity frequently occurs in the area around the FSO Facility Export Tanker Master, Officers and crew are advised to be aware these normally occur around 4 days after a full moon. Officers and crew are advised to monitor the radar for evidence of approaching rip tide activity.

### Bunkers and potable water

There are no facilities to accommodate bunkers or drinking water at the Yoho FSO Facility.

**Provisions and stores** There are no facilities to accommodate provisions or stores at the Yoho FSO Facility.

**Repairs—Tooling** No facilities exist at the Yoho FSO Facility for repair. Masters of export tankers are further reminded that main engines must be available for use at all times when berthed at the Yoho FSO Facility.

**Boarding formalities** The Vessel Master may be granted free pratique (clearance given an incoming ship by the health authority of a port) by radio.

The immigration, health, customs, and harbor authorities may arrive with the



Mooring Master on the vessel.

Medical care While there are no medical facilities available on the Yoho FSO Facility, emergency medical evacuation to Yoho may be organized by MPN at the expense of the vessel. The Transportation mode depends on logistic planning and availability and is decided by MPN.

The shipping agent of the vessel officially makes requests to MPN for medical evacuation. The shipping agent is responsible for all logistic and medical arrangements for the evacuees upon arrival on shore Nigeria.

Transport connections  
with Yoho

No crew change facilities are available at the Yoho FSO Facility. Use of the Yoho FSO Facility transport facilities is restricted to MPN personnel and staff only.

## 2.0 GENERAL INFORMATION

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## 3.0 MOORING/SAFETY & POLLUTION

In this chapter:

- Moored
- Safety and Pollution
- Export tanker Safety and Pollution Mitigation Checklist Checklist to complete:
  
- Export Tanker Safety and Pollution Mitigation Checklist

## MOORING/SAFETY & POLLUTION

### 3.1 Moored

#### Normal Operations

This section covers the normal operation expectations once mooring is completed to the Yoho FSO Facility. This information is provided for guidance only. It is subject to change and is subject to the judgement and decision of the Yoho FSO Facility Mooring Master.



### 3.0 MOORING/SAFETY & POLLUTION

#### Readiness to Manoeuvre

##### Signals

- All equipment and machinery essential for the safe manoeuvring of the Export Tanker must be maintained in a state of immediate readiness while moored.
- Any malfunctions or failures of the Export Tanker's propulsion or control systems must be immediately brought to the attention of the Mooring Master.
- Equipment and machinery must not be immobilized for repair while within the limits of the Yoho FSO Facility Restricted Area.
- The Export Tanker is not to be operated in the unmanned machinery space (UMS) mode at any time while in the restricted area.
- For Export Tankers of their length, applicable navigation lights, sounds, and signals must be displayed in full compliance with the latest edition of the International Regulations for Preventing Collisions at Sea.
- Applicable flags and their night time equivalent light must be displayed where they can best be seen. This includes display of the international code signal B, H, and Q as appropriate.
- Export Tankers must display the Nigeria national flag at all times during their stay at the Yoho FSO Facility.

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## MOORING/SAFETY & POLLUTION

### 3.1 Moored

#### Hose Connection

The Export Tanker crew, under the guidance and coordination of the Mooring Master or his or her Assistants, conducts cargo hose connection operations. The normal connecting sequence is described below in the following steps:

1. An Export Tanker Officer designates the manifold connections to use.
2. When the Export Tanker is secure and settled at the mooring, a field support vessel (work boat or supply vessel) brings the cargo hoses to the port side of the Export Tanker ready for connection to the Export Tanker manifold.
3. The lifting wire of the derrick or crane should be lowered and connected to the upper ring of the lifting chain of the forward hose.
  - The barbell ends of the cargo transfer hose are hoisted until sufficient hose is above the hose saddle to reach the manifold.
  - Care must be taken to prevent kinking or damage to the cargo hoses. A minimum radius of 3.5 meters for any bend in the hose is recommended.
  - The pelican hook of the snubbing chain is connected and secured.
  - The weight is transferred to the snubbing chain. The hose is then lowered and located for connection to the manifold.
  - The Mooring Master confirms with the Yoho FSO Facility that the hoses are not under pressure.
  - The hose end butterfly valve is confirmed closed by the Mooring Master, and the blank flange is removed. The hose is connected to the designated manifold and is secured by using all bolts where directed, and the cam locks.
4. Repeat all of step three for the aft hose.

5. The export hoses must be supported on strops held up by the Export Tanker derrick or crane during the export operation to ensure that they are not damaged by contact with the hose saddle.

6. The Mooring Master or his or her Assistants inspect the hoses for any kinks or damage, they open the hose end butterfly valves.

**! WARNING:** Connecting hoses is a potentially dangerous operation. Only competent and experienced crew and crane drivers should be assigned to connecting duties. The Export Tanker's crew must be under the direct supervision of a duly qualified officer at all times.

#### Care of Hoses

#### Monitoring the Cargo Hoses at the Manifold Area

**! IMPORTANT:** Care should be taken during the hose handling operation to avoid serious damage to the hoses and associated equipment. If any action taken by the Export Tanker Master, or crew causes or contributes to damage to the loading system, the Export Tanker Master, Owners, or Charterers are held accountable for the cost of rectification of such damage, including, but not limited to, consequential damages.

A crewmember who is equipped with a portable radio and is in communication with the Export Tanker CCR must be stationed at the manifold area throughout export operations.

This crewmember monitors the hoses and hose securing arrangement and reports on the following conditions:



- Hose or connection leakage
- Damage to or possible failure of the hoses
- Leakage or damage of the hose string over the Export Tanker's side and in the water

Manifold duty crewmembers are responsible for the following actions:

- Be in radio communication with the Export Tanker Watch Officer or CCR (or both) at all times.
- Immediately report any noted abnormal or adverse conditions to the Mooring Master or his or her Assistants.
- Check their portable radios at 30-minute intervals.
- Report the radio checks to the CCR.

### 3.0 MOORING/SAFETY & POLLUTION

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#### MOORING/SAFETY & POLLUTION

##### 3.1 Moored

##### Emergency Unmooring

##### Emergency Unmooring

##### Preparedness

The Mooring Master or his or her Assistants may decide after consulting the Export Tanker Master and FSO Supervisor to unmoor the Export Tanker at any time it is necessary for the safety of personnel, the Export Tanker, or the Yoho FSO Facility.

During loading operations, the Export Tanker is held clear of the Yoho FSO Facility by the hold back tug. If due to adverse weather or current (or both), or any other circumstance, the hold back tug cannot prevent the Export Tanker closing on the Yoho FSO Facility. The Export Tanker



main engine must be in a state of constant readiness and immediately available for use as required to assist the hold back tug. Cargo loading must be stopped, and the manifold and hose end valves closed.

When the Export Tanker is steadied, preparations for disconnecting the hoses may commence. When the hoses are disconnected, the Export Tanker is then unmoored in a controlled manner if necessary. Both hoses are equipped with Gall Thompson breakaway couplings to protect the hoses, Export Tanker, and Yoho FSO Facility in the event of an uncontrolled breakout.

### 3.2 Safety and Pollution Introduction

This chapter, including the Export Tanker Safety and Pollution Mitigation Checklist, covers MPN Yoho FSO Facility specific requirements that must be carried out prior to starting cargo transfer from the Yoho FSO Facility to the Export Tanker.

These requirements remain in force throughout all operations until the Export Tanker leaves the Yoho FSO Facility Area.

#### Export Tanker Emergency Organization

MPN recognizes that visiting Export Tankers have standard procedures that must be followed in the event of emergencies such as fire on board. The Master of the Export Tanker should provide the Yoho FSO Facility Mooring Master with a copy of the Export Tanker Emergency Organization and any contingency plans.

#### 3.2.1 Safety Operational Requirement



The following information describes Yoho FSO Facility requirements for conducting safe operations throughout the stay of the Export Tanker in the Yoho FSO Facility Area.

**! IMPORTANT:** The Export Tanker Officer in Charge (OIC) of cargo operations must complete the Export Tanker Safety and Pollution Mitigation Checklist (located in Section 3.3.1, "Safety and Pollution Mitigation Checklist" of this chapter) with the Yoho FSO Facility Mooring Master. The checklist sets specific Yoho FSO Facility safety and pollution mitigation requirements and must be completed with reference to the accompanying guidelines.

### 3.0 MOORING/SAFETY & POLLUTION 3-5

#### MOORING/SAFETY & POLLUTION

##### 3.2.1 Safety

Export Tanker Master

Yoho FSO Facility  
Mooring Master

The Master remains at all times wholly and fully responsible for his or her vessel and its officers and crew.

International Safety  
Guide for Oil Tankers  
and Terminals (ISGOTT)

Fire



The Mooring Master is following decisions:

authorized to make the

- Advise and request Export Tanker Masters to take any additional necessary measures to ensure safe operations and eliminate risks should the circumstances require.
- Suspend oil transfer operations if safety is compromised or a hazardous situation exists. Export Tanker operations are conducted in accordance the latest ISGOTT recommendations (a copy should be available on board the Export Tanker).

Should a fire occur on the Export Tanker, the Master or responsible officer:

- Sounds a continuous blast on the whistle.
- Sounds the General Alarm.
- Warns the Engine Room to be ready for immediate maneuvers.
- Informs the FSO Facility.
- Ceases all loading operations once the following phases have occurred:
  - Cargo is stopped
  - Manifolds are shut
  - If required, preparations are made to disconnect

hoses and vacate the berth



### 3.2.1 Safety

Yoho FSO Facility

Emergency Procedures

MedEvac

### 3.0 MOORING/SAFETY & POLLUTION

Yoho FSO Facility emergency procedures In the event of an emergency occurring at the Yoho FSO Facility, the principal point of contact for the Export Tanker is the Mooring Master who has a set of Yoho FSO Facility Emergency Procedures. The Yoho FSO Facility Emergency Procedures contain detailed actions, procedures, and communications for any Export Tanker emergency.

Emergency Readiness  
on the Export Tanker

If any person on board the Export Tanker needs medical attention, the Export Tanker Master should inform the Mooring Master:

- The Mooring Master endeavours to make arrangements for transportation to see local medical personnel.
- The Export Tanker Master (through the Export Tanker appointed agent or representative) must arrange all in-country medical and logistical requirements.
- If a person requires repatriation following medevac, arrangements should be made through the Export Tanker appointed agent or representative.

The Yoho FSO Facility will assist Export Tanker Masters where and whenever possible if a medevac situation occurs.



Prior to commencing any cargo operations, the Master of the Export Tanker must do the following:

- Confirm the crew's readiness and proficiency in emergency, safety, fire fighting, antipollution, and other related procedures.
- Ensure that all activities carried out by the crew are done so safely and efficiently.

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## MOORING/SAFETY & POLLUTION

### 3.2.2 Pollution Prevention and Mitigation Requirements Operational Requirement

#### Spill Response Readiness

The following information describes Yoho FSO Facility requirements for conducting pollution-free operations throughout the stay of the Export Tanker in the Yoho FSO Facility Area.

**! IMPORTANT:** Export Tanker Masters should note that all possible measures to prevent pollution must be carried out and maintained. In the event that a pollution incident does occur, prompt and efficient action including raising the alarm, initiating an Export Cargo Emergency Stop, containment, and reporting must be carried out.

**! IMPORTANT:** The Export Tanker Officer in Charge (OIC) of cargo operations must complete the Export Tanker Safety and Pollution Mitigation Checklist (located in Section 2.3.1, "Safety and Pollution Mitigation Checklist" of this chapter) with the Yoho FSO Facility Mooring



Master. The checklist sets specific Yoho FSO Facility safety and pollution mitigation requirements and must be completed with reference to the accompanying guidelines.

Spill response readiness requires that:

- Export Tanker antipollution equipment must be readily available to deal with a Tier One level pollution incident.
- Emergency response and antipollution equipment is adequately checked and is maintained ready for immediate use.
- Export Tanker crews are familiar with the use of all spill prevention and pollution mitigation equipment.

### 3.2.2 Pollution Prevention and Mitigation Requirements

## 3.0 MOORING/SAFETY & POLLUTION

### Export Cargo Emergency Stop

Reporting requirements at the Yoho FSO Facility

If oil spillage occurs during loading or deballasting operations:

- All such operations must cease immediately.
- Action must be taken to control and contain the spillage.

Reference: See Chapter 4, "Operations" of this manual for Export Cargo Emergency Stop procedures.

Any spillage or leakage must be reported immediately to the Mooring Master.

It is essential that a pollution incident be reported immediately so that the earliest activation of the MPN Spill Response Procedures, which are in the possession of the Mooring Master, can be carried out.



Note: This does not relieve the Export Tanker Master of their responsibilities to activate and initiate their emergency response plans and procedures.

#### Yoho FSO Loading During Cargo Transfer

Loading at the Yoho FSO Facility is a continuous operation. Reporting of a pollution occurrence should be clear and concise to avoid confusion and the activation of incorrect cargo emergency stop procedures.

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### MOORING/SAFETY & POLLUTION

#### 3.2.2 Pollution Prevention and Mitigation Requirements

##### Leaking of Oil

##### From Export Tanker

If at any time oil is observed leaking from an Export Tanker either on deck or to the sea, all cargo operations must stop immediately. In addition:

- The Export Tanker Cargo Officer must immediately stop all ballast operations.
- Operations can only resume when the cause of leakage is definitely established and positively stopped so that it cannot recur.
- The Export Tanker may be required to leave the Yoho FSO Facility Area.

If an oil leak source is due to structural or mechanical damage or failure:

- The FSO Supervisor may refuse to resume loading the Export Tanker until repairs are carried out to the satisfaction of the FSO Supervisor and the Yoho Field OIM.



- Careful monitoring of the sea is carried out and includes the area around the stern. Export Tanker Masters must ensure that no leakage occurs from stern seal arrangements. If the leakage of oil is due to equipment failure:

around the Export Tanker

- Repairs and tests must be carried out.
- Equipment must prove to be operational before loading can resume.

After the incident, a joint investigation of the incident and a survey of the Export Tanker by the Export Tanker Master, the Mooring Master, and other Yoho FSO Facility personnel may be conducted.

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### 3.3 Export Tanker Safety and Pollution Mitigation Checklist Operational Requirement

The Yoho FSO Facility Mooring Master and the Export Tanker Officer in Charge (OIC) of cargo operations must complete the Export Tanker Safety and Pollution Mitigation Checklist before cargo operations can commence.

#### 3.3.1 Export Tanker Safety Checklist (Also placed in back folder for copy distribution)

##### Normal Operations

-This checklist represents the main device of the Yoho FSO Facility for ensuring safety and pollution-free operations. The letters M, R, A, and P in the column labeled Code indicate the following:

M Requires monitoring throughout the transfer operation.

R Indicates items to be re-checked at intervals not exceeding that agreed upon in the declaration.

A

Any procedures and agreements should be in writing in the remark column of this Checklist or other mutually acceptable form. In either case the signature of both parties is required.

P

In the case of a negative answer, the operation should not be carried out without the permission of the Yoho FSO Facility.

Item Export FSO

Tanker Facility Code\* Remarks

1 Is the ship securely moored? M

2 Are emergency towing wires correctly positioned? R

3 Is the Export Tanker safely accessible? M

4 Is the Export Tanker ready to move under its own power? PR

5

Is there an effective deck watch in attendance on board with adequate supervision?

MR

6

Is the agreed Export Tanker to Yoho FSO Facility and ship-to-ship communication system operative?

MA

7 Has the emergency signal to be used Export Tanker to Yoho FSO Facility been explained and understood?

A

8 Are the procedures for cargo handling information and ballast handling agreed upon?

AR

9 Are hazards associated with toxic substances in the cargo being handled, identified, and understood?

10 Has the Export Cargo Emergency Stop been agreed upon? A

11

Are fire hoses and fire fighting equipment on board the Export Tanker positioned and ready for immediate use?

R

12 Are cargo hoses properly rigged for the service intended?

13

Are Export Tanker scuppers effectively plugged and dri trays in position?

RM

14

Are unused cargo and bunker connections properly secured with blank flanges fully bolted?

### 3.0 MOORING/SAFETY & POLLUTION

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## MOORING/SAFETY & POLLUTION

### 3.3.1 Export Tanker Safety and Pollution Mitigation Checklist, continued

#### Item Export FSO

#### Tanker Facility Code\* Remarks

15

Are sea and overboard discharge valves closed and visibly secured when not in use?

16 Are all cargo and bunker tank lids closed?

17 Is the agreed tank venting system being used? AR

18

Is the operation of the pressure valves (PV) or high velocity vents verified by using the check lift facility where fitted?

19 Are hand torches of an approved type?

20 Are portable VHF/UHF transceivers of an approved type?

21

Are the Export Tanker's main radio transmitter aerials earthed and radars switched off?

Note: Radars may be required at the Mooring Masters discretion for weather monitoring.

R

22

Are electric cables to portable electrical equipment disconnected from power?

R

23

Are all external doors and ports leading to the accommodation closed?

MR

24 Are window-type air conditioning units disconnected?

25

Are air conditioning intakes, which may permit the entry of cargo vapours, closed?

R

26

Are the requirements for use of galley equipment

and cooking appliances being

observed?

R

27 Are smoking regulations being observed? MR

28 Are naked light regulations being observed? MR

29 Is there provision for an emergency escape?

30

Are sufficient personnel on board to deal with an emergency?

R

31

Will sufficient personnel remain on board to deal with an emergency throughout the Export Tanker's stay at the Yoho FSO Facility?

32

Are measures been taken to ensure sufficient pump room ventilation?

MR

33

Have requirements for closed loading operations been agreed upon? Is the Export Tanker capable of closed loading?

MR

34

Are Export Tanker fire control plans located externally? If so, state location.

35

Is adequate deck illumination provided for Export Tanker operations conducted between sunset and sunrise?

36

Is an all-round red light or the International Code flag "B" exhibited?

37

Will repair work be carried out while the Export Tanker is secured to the Yoho FSO Facility?

38

Will a watch be maintained for movement of hold-back tugs, workboats, and other craft?

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### 3.3.1 Export Tanker Safety and Checklist, continued

Pollution

Mitigation

Item Export FSO

Tanker Facility Code\* Remarks

39 Is it been confirmed that swimming in the sea is not permitted?

40 Is it confirmed that fishing is not permitted?

41 Is Export Tanker IGS (Inert Gas System) fully operational?

42 Are Export Tanker deck seals in good working order? R

43 Are Export Tanker liquid levels in P/V breakers correct? R

44

If in operation, what is the perecnt of Export Tanker Oxygen at plant production?

45

Are all Export Tanker cargo tank atmospheres at positive pressure with an oxygen content of 8% or less?

P

46

Are all Export Tanker individual tank inert gas and vent valves (if fitted) correctly set and locked?

R

### 3.3.2 Declaration

The following responsible officers and representatives jointly checked (where appropriate) the items on the relevant checklists, and satisfied themselves that the entries made are correct to the best of their knowledge and that the necessary repetitive checks were carried out as necessary.

Yoho FSO Facility Export Tanker Receiver Date and Time Completed

Signature Position Signature Rank/Position

Condition check logs: Log of repeated checks to ensure all conditions of the Export Tanker and the Yoho FSO Facility Safety Checklist are maintained are listed below.

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments



### 3.0 MOORING/SAFETY & POLLUTION

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#### MOORING/SAFETY & POLLUTION

#### 3.3.3 Export Tanker Safety Requirements

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#### 3.3.3 Export Tanker Safety Requirements

For the quick reference sheets shown below, please refer to the back of this manual.

### 3.0 MOORING/SAFETY & POLLUTION

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### 4.0 OPERATIONS

This chapter contains the following information:

- Pre-Loading
- Operating Parameters
- Hydro-Meteorological Hazard Warnings
- Export Cargo Emergency Stop
- Loading
- During the Load
- Ballast Operations
- Cargo Documentation



## OPERATIONS

### 4.1 Pre-Loading Preloading Conference

Before the start of loading operations, the Mooring Master, FSO Supervisor, Export Tanker Master, and other key personnel conduct a preload conference. The conference includes discussion and agreement of a number of items and procedures to follow throughout the cargo loading operations.

The conference also includes a discussion of procedures relating to any ballasting or deballasting operations.

### Export Tanker Safety And Pollution Mitigation Checklist

## 4.0 OPERATIONS

**! IMPORTANT:** Any issues raised by completion of the Export Tanker Safety and Pollution Mitigation Checklist must be discussed and a resolution agreed upon between the Mooring Master and Export Tanker OIC.

### Cargo Quantity and Specification

The Mooring Master's responsibilities include:

- Comparing the Export Tanker cargo requirement with the nominated cargo quantity.
- Advising the Export Tanker OIC of the expected cargo specification—approximate cargo density (American Petroleum Institute [API]), loading temperature, and any known or anticipated amounts of water in the cargo.

Yoho FSO Facility



## Cargo Export Plan

The Mooring Master informs the Export Tanker OIC of the following:

- Plans or requests that affect Export Tanker loading
- Communications procedures including confirmation of the verbal and sound signal for emergency stop
- Maximum loading rates available
- Maximum pressure available at the manifold connection
- Standby time for normal pump stop or slow down
- Communications for cargo export operations including Export Cargo Emergency Stop procedures
- Any other specific requirements

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## OPERATIONS

### 4.1 Pre-Loading

#### Export Tanker Loading Plan

#### Loading Rates

The OIC should inform the Mooring Master of the following situations:

- Plans or requests that affect Export Tanker loading
- Maximum allowable:
  - Loading and topping off rates
  - Line pressure during loading
- Quantity, quality, and disposition of:
  - Ballast
  - Slops
- Quality of inert gas and tank atmosphere
- Arrival and departure:
  - Revised deadweight and displacement
  - Fuel and water
- Details of any equipment deficiencies that may affect

the Export Tanker operations or performance

• If the vessel is part loaded:

- Cargo grade
- Volumes
- Stowage

Loading rates Loading rates are set by the following procedure:

1. The Mooring Master advises the OIC of the maximum loading rate available.
2. The Yoho FSO Facility, after consultation with the Mooring Master, requests a loading rate above 40,000 barrels per hour (bbls/hr) that is mutually agreed between the Export Tanker OIC and the Yoho FSO Facility CCR.
3. If the Export Tanker cannot accept a loading rate above 40,000 bbls/hr, regardless of the pumping capacity of the floating storage and offloading unit (FSO), the vessel would be unacceptable at the Yoho FSO Facility. The Mooring Master may then take actions as defined in this manual to deem the Export Tanker unacceptable to operate at the Yoho FSO Facility.

#### 4.1 Pre-Loading Cargo Information

Prior to the start of cargo operations the Mooring Master provides specific cargo information as indicated in the table below.

Term Description

Technical Name Yoho Crude

Code: PIN Product Identification Number (where applicable).

Code: UN United Nation number.

Flashpoint

Displayed in °C (where applicable).

For this guideline, two broad categories

of flammable liquids are defined (using the closed cup testing method):



- Non-volatile flammable liquids with a flashpoint of 60°C or above
  - Volatile flammable liquids with a flashpoint below 60°C.
- True Vapor Pressure True Vapor Pressure of the cargo, if required.  
Precautions Precautions such as H2S content.

#### Material Safety

Data Sheet A Material Safety Data Sheet will be provided to the Export Tanker

Temperature Loading temperature.

Maximum pressure The maximum allowable pressure in the hoses.

Limitations Any other limitations, which may influence transfer operations.

## 4.0 OPERATIONS

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### OPERATIONS

#### 4.2 Operating Parameters

##### General Parameters

The following table shows general Export Tanker operating parameter information. In the event that a parameter is exceeded, the Mooring Master decides whether to start, continue, or abort an operation.

This information is provided for guidance only. It is subject to change and is subject to the judgment and decision of the Yoho FSO Facility Mooring Master.

##### Item Parameter Comment

Sustained maximum wind speed 25 knots

Sustained maximum sea and

swell height

3 meters

Visibility 1/4 miles

One mile

Hawser tension No more than 120 tons

Export Tanker deadweight tons Maximum 310,000 tons

Export Tanker

deadweight tons Maximum 320,000 tons Export Tanker must never

be < 30% of Summer Dwt

Maximum Draft allowed 25 meters



Maximum trim

Not greater than 0.015

length. Propeller to remain immersed at all times.

Hose lifting equipment 15 tons This is minimum safe working load (SWL)

Hose connection 2 x 16 in (ANSI 150)

- Manifold as per Oil Companies

International Forum recommendations

- Hoses are connected to port side manifold

Bow chain stoppers

Chain diameter 76 mm

Minimum 200 ton SWL

- Per OCIMF recommendations

- Must have two

- The Yoho FSO Facility has the ability to add 54 mm chains for smaller vessels

Poop Deck Bits SWL Suitable SWL Min 120 ton SWL.

Cargo tanks atmosphere Inserted to less than 8% O<sub>2</sub> Before mooring operations start

Cargo tank H<sub>2</sub>S content 10 ppm or below Before mooring operations start

Minimum Bulk Loading rate 40,000 bbls/hour

Maximum loading rate 50,000 bbls/hour

Normal Yoho FSO Facility

notice required for stop loading 10 minutes For normal operations

Time required to stop cargo

after Cargo Export

Emergency Stop demand

1 minute For Emergency Cargo Stop



### 4.3 Hydro-Meteorological Hazard Warnings Threats to Operation

The Mooring Master continuously assesses hydro meteorological conditions and makes decisions regarding the start, continuation, or cessation of operations. Such decisions are made in full consultation of the Export Tanker Master who retains the right to order a cessation of any operation. The following warnings indicate conditions that pose regular threats to operations. Readiness to take mitigating action must be maintained at all times. The Mooring Master or Export Tanker Master may at any time decide to take such action as necessary to protect the Yoho FSO Facility and the Export Tanker during any operation. The Mooring Master or Export Tanker Master may request a stop of cargo and a disconnection of export tanker hoses and hawser due to any change of weather or operational parameter at their discretion.

**! WARNING:** Line squalls can occur at any time of the year but are more likely to occur during the rainy season between April and September. Reduced visibility and torrential rain often accompany these squalls. The wind can increase to 60+ knots and blow from any direction. As the squall approaches and passes, wind shift can be sudden.

**! WARNING:** During periods of local squalls and at any other time, a high incidence of electrical storms can occur. Lightning often strikes the water surface at or near the Export Tanker.

**! WARNING:** Local direction and rate of current is often variable and is not predictable. Sudden changes of current direction and rate may be experienced at any time. This may delay mooring and unmooring operations.



! WARNING: Rip tides (soliton waves) occasionally occur in this area of operations. On detection, cargo operations may be suspended and action taken to disconnect hoses and move the Export Tanker clear of the Yoho FSO Facility until the phenomena has subsided.

#### 4.0 OPERATIONS

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#### OPERATIONS

#### 4.3 Hydro-Meteorological Hazard Warnings, continued High Hawser Loads

#### Tandem Mooring Sectors

If due to conditions, including deteriorating weather, squall events, high swells, or other conditions such that the vessel experiences high hawser loads (in excess of 125 tons), the transfer operations must be suspended and preparations made to leave the berth including:

- Ship's engines placed on stand-by
- Bridge manned and steering gear on
- Export Tanker oriented to best heading by use of tugs
- Hoses made ready for disconnection

If conditions continue or are expected to worsen and a second pull in excess of 125 tons occurs, the Export Tanker must vacate the berth immediately.

45°

45°

10°

10°



The above diagram indicates the sectors in which the Export Tanker should remain while station keeping. Position outside the green sector prompts immediate halting of cargo transfer and readiness for hose disconnection and departure if position is unable to be safely regained or entry is made to the red zone.

When deciding to halt transfer and prepare for departure, the rate of heading change and the ability to control the rate of turn must be taken into account.

#### 4.4 Export Cargo Emergency Stop Introduction

This section provides Export Tanker Masters with guidance to the MPN Yoho FSO Facility Export Cargo Emergency Stop procedures and expectations.

Information on action taken at the Yoho FSO Facility is also included to provide Export Tanker Masters a complete picture of the chain of events that Export Cargo Emergency

#### 4.0 OPERATIONS

Stop initiation causes.

##### General

##### Export Tanker Initiation of an Export Tanker Emergency Stop

Emergency Stop of Export Tanker operations can be ordered by the Yoho FSO Facility FSO Supervisor, Mooring Master, Mooring Masters Assistants, Yoho FSO Facility Loading Operator or, Export Tanker Master, Chief Officer, Duty Cargo Officer of Export Tanker, or Master or crew of the Work Boat or hold back tug.

Export Cargo Emergency Stop procedures must be



initiated automatically if an emergency alarm is sounded.

Reference: Section 1.1.2,

#### "Other Communications Requirements"

The Mooring Master may direct the Yoho FSO Facility to stop cargo operations and to prepare for emergency hose and hawser release.

The aim of the Export Cargo Emergency Stop system is to prevent or minimize damage to personnel, property, and the environment.

This information is provided for guidance only, is subject to change, and is subject to the judgment and decision of the Mooring Master.

Any emergency situation such as fire, explosion, significant leakage or spillage of oil, failure of strategic equipment, or other event likely to endanger the Yoho FSO Facility, an Export Tanker or other vessel, or their equipment or personnel, is justification for ordering an Export Cargo Emergency Stop.

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## OPERATIONS

### 4.4.1 Export Cargo Emergency Stop Procedure Procedure

The following table shows action to take after initiation of an Export Cargo Emergency Stop demand.

Initiated from: Action required by: Action required  
Export Tanker

If for any reason the Export Tanker requires an Export Cargo Emergency Stop,



1. The Yoho FSO Facility will be voice communication channel with the following message:

"YOHO FSO FACILITY CONTROL ROOM"  
"THIS IS EXPORT TANKER {NAME}"  
"STOP. STOP. STOP."

Onboard the  
Export Tanker  
Yoho FSO  
Facility

2. The Yoho FSO Facility will respond with:  
"STOP. STOP. STOP."

The Yoho FSO Facility must operate the cargo pump  
Export Cargo Emergency Stop procedure and advise  
the Export Tanker when the pumps are stopped.

Export Tanker

**! IMPORTANT:** If radio communication fails, continuous sounding of the Export Tankers whistle will initiate an Export Cargo Emergency Stop.

YOHO FSO  
FACILITY or  
Export Tanker  
Export Tanker  
,

When an Export Cargo Emergency Stop demand is initiated by the Yoho FSO Facility or the Export Tanker, the Export Tanker must:

1 Close the following valves:

-As soon as all liquid flow has ceased, cargo transfer manifold valves.

-Cargo hose butterfly valves.

2 Order the following groups to action:

-Fire control and other emergency teams to stations.

-Order hold back tugs and work boat to standby for action, per Mooring Master.

3 Prepare to disconnect and blank off cargo hoses.

4 Order the following groups to standby:

-Engine room, to receive status updates.

-Bow mooring crew, for mooring hawser release.

called on the agreed

5 Continually monitor the  
of communications.

emergency channel

6 Advise Yoho FSO Facility if any outside  
assistance is required.

#### 4.4.1 Export Cargo Emergency Stop Procedure

Initiated from: Action required by: Action required

Export Tanker Export Tanker

If the Export Tanker initiated the Export Cargo Emergency  
Stop demand, the following additional actions should be carried out:

- Ensure that all cargo transfer operations are stopped.
- Advise Yoho FSO Facility of status and cause of the  
emergency.
- Advise Yoho FSO Facility whether it intends to disconnect cargo transfer hose and moorings for  
emergency  
departure.

Yoho FSO Facility Yoho FSO  
Facility

CCR Operator

When an Export Cargo Emergency Stop demand is  
initiated by Marine Terminal, the Marine Terminal CCR  
Operator will:

- Secure cargo pumps
- Close cargo transfer discharge valves
- Order fire and other emergency teams to stations
- Advise shore Production Supervisors that an  
emergency exists which may require shut down  
of production operations
- Order mooring crew to stations on standby status

Export Tanker Yoho FSO  
Facility

If an Export Cargo Emergency Stop demand was  
initiated on the Export Tanker, the Yoho FSO Facility  
must continually monitor radio traffic from the Export  
Tanker to determine further course of action.

Yoho FSO Facility Yoho FSO  
Facility

If an Export Cargo Emergency Stop demand was



initiated at the Yoho FSO Facility

Facility, the Yoho FSO

must advise the Export Tanker with status of the

emergency and any recommended actions.

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## 4.0 OPERATIONS

### OPERATIONS

#### 4.4.2 After Export Cargo Emergency Stop Situation Secure

##### Emergency Unmooring

When the emergency situation is secure, the initiator of the Export Cargo Emergency Stop should notify all stations accordingly and operations must be resumed only when safe.

Details of the occurrence are to be entered on the Export Cargo Emergency Stop report form provided in Appendix B, and the cause is to be investigated.

Crew response and performance should be evaluated to determine the necessity for additional training, drills, or equipment.

**! IMPORTANT:** Operations are not to resume until it is determined that it is safe to do so. Operations can resume only with FSO Supervisor authorization and Mooring Master and Export Tanker Master agreement as shown on the Export Cargo



## Emergency Stop Form.

In the event of the Export Tanker moving into a dangerous position relative to the FSO, due to whatever cause, or in response to an emergency situation, the Mooring Master can request that the Yoho FSO Facility stop cargo operations and ask the Export Tanker Master to prepare the Export Tanker to leave the mooring. An emergency disconnection of the Export Tanker from the Yoho FSO Facility must be carried out if considered necessary.

The primary aim of the Mooring Master must be to ensure, if possible, that if the Export Tanker must vacate the berth in an emergency, the departure is as controlled as possible as for a normal departure.

In the event that a controlled disconnect and release of the moorings is not possible, the Export Tanker Master should be guided by the Mooring Master's advice.

Note: The Mooring Master must have available a set of Emergency Procedure Action Checklists that detail actions, procedures, and communications relating to emergencies concerning the Export Tanker.

Note: In the event of an emergency, the primary point of contact is the Yoho FSO Facility Central Control Room.



#### 4.5 Loading Requirements

On completion of the preload conference, the Mooring Master and Export Tanker OIC can agree to commence loading operations. The information below describes requirements for the

#### 4.0 OPERATIONS start of loading operations.

#### Hoses Connected and Manifold Operation

#### Start Loading

The Export Tanker OIC indicates readiness to commence loading when satisfied with the following operations:

- Cargo hoses are correctly connected.
  - Cargo system is ready for loading operations.
- On receiving instructions from the Mooring Master, the manifold valves can be opened.
- Once fully open, the Export Tanker cargo manifold valves:
    - Must remain open until the Mooring Master gives instructions to close them.
    - Should be fitted with a restraining device to prevent them from closing accidentally.
  - During commencement of loading and until the full loading rate is achieved, the Mooring Master or his or her Assistant, accompanied by an Export Tanker officer, remains at the manifold.
  - When the Export Tanker confirms that its lines, tank valves, and manifold valves are open, the Mooring Master requests that the Yoho FSO Facility Central Control Room (CCR) start the loading pumps at the

mutually agreed starting rate (slow rate).

- The Export Tanker observes the flow of oil into the designated start tanks, checks that the oil is flowing into the correct tanks, and checks that all valves, venting, and other systems are correctly aligned and that there is no leakage.
- During the period of slow loading and building up to full rate, the area around the floating hose must be under constant observation.

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## OPERATIONS

### 4.5 Loading

- Once all the systems are checked and verified and there are no reports of sea pollution, extra tanks are opened and the rate increased to the agreed maximum.
- The Mooring Master instructs the Yoho FSO Facility CCR to increase the loading rate to the agreed maximum only by request of the Export Tanker OIC.
- The Mooring Master or AMM and Export Tanker Officer on deck must make a further over side visual check around the Export Tanker, all floating hose strings, and a check around the entire visible sea surface area for any sign of oil leakage.

### 4.6 During the Loading

After loading commences, vigilance must be maintained by all concerned with the loading operation. Prestart checks must be repeated and safe pollution-free conditions maintained.

During the load many other operations may start and stop. The information below describes Yoho FSO Facility requirements that must be met during the load. The requirements are not exhaustive, and if the Export Tanker OIC or Cargo Officer requires further clarification, the Mooring Master or AMM must be consulted immediately.

The Export Tanker Cargo Officer can ask the Mooring



Master or his or her Assistant to request a reduction in loading rate if required before topping off a tank or at any time during the loading operations. The agreed normal standby notice period for the Yoho FSO Facility must be observed for normal rate reduction requests. Observance of this requirement prevents the Yoho FSO Facility from having to implement a Cargo Emergency Stop.

The Export Tanker CCR is to be manned at all times and under the control of an Export Tanker Officer. An efficient deck watch is to be maintained so that the mooring assembly, the loading hose, tank deck, and the manifold are under constant observation.

#### 4.6 During the Loading Valve Closure During Loading and Pressure Surges

#### Comparison of Hourly Loading Rates

The operation of valves on the Export Tanker is carried out with due regard to the effect upon the flow and loading rate.

- It is extremely dangerous to close any valves against incoming cargo as this can create excessive pressure or surges that may damage hoses, piping, or other facilities and cause pollution. Caution should be taken by the Export Tanker OIC when closing valves to ensure other valves are open.
- Export Tanker valves that reduce the flow rate must not be operated without prior consultation with the Mooring Master and without notifying the Yoho FSO Facility.
- Export Tanker Masters are held responsible for any

damage or pollution resulting from failure to observe these precautions.

#### 4.0 OPERATIONS

- The Yoho FSO Facility, the Export Tanker CCR, and the Mooring Master or Assistants confer on an hourly basis and note the following:
  - Cargo loading rates
  - Quantities transferred
  - Balance of the cargo required
  - Estimated time of completion
  - Any other relevant matters
- Careful note should be taken of these comparisons as the compared figures can indicate a problem or miscalculation.

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#### OPERATIONS

##### 4.6 During the Loading Completion of Loading

- At least 30 minutes before the loading of cargo is completed, the Mooring Master is advised and told the amount of cargo required to complete loading.
- The Export Tanker advises the Mooring Master when to stop cargo loading unless the maximum nominated quantity has been delivered by the meter, at which time the Yoho FSO Facility will stop the cargo transfer.
- When the Yoho FSO Facility CCR confirms that the loading pumps are stopped:
  - Export Tanker valves and lines to the last tank being loaded must be left open.
  
  - The Mooring Master will advise the Export tanker OIC when the manifold valves can be shut.

-When the manifold valves are closed, the Export tanker OIC can instruct other Export Tanker valves to be closed.

-The loading hose-end butterfly valves can be shut.

**! IMPORTANT:** The Export Tanker Master is responsible for:

- Ensuring that the nominated quantity of cargo is loaded.
- That the Export Tanker is not overloaded.
- Any oil spills caused by failure to stop at the required quantity are cleaned up.

#### 4.6 During the Loading Cargo Measurement and Sampling

#### 4.0 OPERATIONS

- The Export Tanker Crew, an Independent Cargo Surveyor, and a Government Surveyor perform cargo measurement, measurement verification, and sampling.
- Any delay due to the independent surveyor's survey does not count as laytime.
- The Export Tanker figures are to be provided to the Mooring Master as soon as possible after the completion of loading:
  - If the Export Tanker and Yoho FSO Facility Cargo figures differ by greater than 0.25%, the Export Tanker may be requested to



regauge and recalculate the cargo figures.

– The Mooring Master does not witness or check these figures unless there is no independent surveyor available.

– If after both the Export Tanker and Yoho FSO Facility have rechecked their figures and the difference still exists, a Letter of Protest is issued.

The carrying out of tank inspections, gauging, and taking water dips and temperatures must be performed in compliance with the recommendations of ISGOTT.

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## OPERATIONS

### 4.7 Ballast Operations Requirements

Export Tanker Masters should note that there are no dirty ballast facilities at the Yoho FSO Facility.

The information below provides Export Tanker Masters with the Yoho FSO Facility requirements for Export Tanker ballast operations.

#### Dirty Ballast

#### Segregated Ballast Tank (SBT) Operations

- Export Tankers must arrive with clean or segregated ballast suitable for discharging directly to sea in accordance with standards set by International Conventions.



- Export Tankers arriving with ballast that is unsuitable for discharge to sea must be rejected for loading.
  - Any Export Tanker rejected because of contaminated ballast or sea pollution automatically invalidates its Notice of Readiness and loses any priority of loading.
  - Export Tankers discharging contaminated ballast overboard are subject to the antipollution laws of Nigeria.
  - Any ballast discharge to sea must have an oil content not greater than 15 PPM.
- ! WARNING: Export Tanker Masters are warned that penalties for pollution are severe.

When the Export Tanker is loading, SBT operations may commence and be carried out concurrently with loading. The SBT ballast must be checked for contamination prior to discharge. Oil discharge monitoring equipment should be in use where fitted.

#### 4.7 Ballast Operations Cargo Tank Ballast

#### 4.0 OPERATIONS

- The Yoho FSO Facility does not normally permit simultaneous cargo loading and deballasting of Export Tankers operating with clean ballast.
- If an Export Tanker arrives with clean ballast that is not part of a segregated ballast system and wishes to discharge such ballast to the sea, the following requirements and conditions must be met:
  - Permission for this type of operation may be granted in exceptional circumstances, but only at the Mooring Master's discretion and after a review of the Export Tanker operating procedures.
  - The Export Tanker Master must confirm that there is a full segregation between the ballast and cargo system at all times. Segregation must include a minimum of two valves.

— Normal procedure for the Export Tanker is to:

1. Partly load the cargo.

2. Stop.

3. Deballast of clean ballast in cargo tanks.

4. Stop.

5. Resume loading cargo.

- Draft, trim, and deadweight must be kept within the operating and acceptance parameter requirements stated in MARPOL.

- The propeller must be fully submerged at all times.

- The Export Tanker must be operating with dedicated clean ballast tanks in accordance with all provisions of the MARPOL Convention and amendments.

- The discharge of ballast from cargo tanks must be carried out in daylight unless there is adequate lighting to illuminate the sea area near the ballast discharge point so that

the quality of the ballast being discharged to the sea can be constantly monitored. The Mooring Master's decision as to whether there is sufficient lighting is final.

- Oil discharge monitoring equipment (ODME) to provide parts per million (ppm) readout (maximum instantaneous allowance 15 ppm)

- After completion of deballasting operations, the Mooring Master or independent surveyor must witness the closing and sealing of the Pump Room Cargo System sea suction and over boards.

- The quantity of slops is to be resurveyed and witnessed by the independent cargo surveyor and government representative.

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## OPERATIONS

### 4.8 Cargo Documentation

#### Introduction



This section provides Export Tanker Masters with guidance to the Yoho FSO Facility requirements relating to cargo documentation and its completion.

From arrival of the Export Tanker at the Yoho FSO Facility Area, records are generated for final document processing before the Export Tanker leaves the Yoho FSO Facility Area. The Mooring Master must advise the Export Tanker Master when documents are completed satisfactorily.

Note: The documentation requirements described in this chapter are only for the Yoho FSO Facility. The Export Tanker Owners or Charterers may have additional or different specific requirements regarding documentation. These are not covered in this section.

#### 4.8.1 General Documentation Documentation General

- Completed copies of the following documents comprise part of the Yoho FSO Facility document set and copies will be retained by the Mooring Master:
  - Notice Of Readiness
  
  - Export Tanker Safety And Pollution Mitigation Checklist
  - Export Cargo Emergency Stop Report
  - Cargo Information And Requirements Form
  - Pre-Mooring Checklist
  - Any Notes of Protest
  - Cargo documents in the following list
- The Mooring Master will prepare cargo documentation for signing. After the documents have been produced, signed, and stamped appropriately by the Export Tanker Master and the Mooring Master, sufficient photocopies will be produced for distribution to the Export Tanker Master, Surveyors, Customs, and the Agent.



#### 4.8.2 Documents, Reports, Samples Cargo Documentation

#### 4.0 OPERATIONS

##### The Mooring Master or Yoho FSO Facility

Representative must prepare cargo documentation to include the following documents in compliance with the documentation instructions provided by the shipper:

- Bills of Lading
- Certificate of Origin
- Quality and Quantity Certificate
- Timesheet
- Cargo and Ullage Report
- Receipt for Samples of Crude
- Receipt for Documents
- List detailing the distribution of documents
- Certificate of Inspection of Tanks (if performed)
- Manifest
- Laboratory analysis report of in line samples taken from the Yoho FSO Facility export lines

Documents normally must be prepared and presented to the Export Tanker Master within two hours after hose disconnection.

##### Cargo/Ullage Report

The Yoho FSO Facility and Export Tanker must produce for the loading operation Ullage Reports containing gauging details for each cargo tank including ullages, temperatures, on-board quantity (OBQ), and free water quantities both before and after cargo transfer operations signed by the Export Tanker OIC and an independent surveyor.

Copies of the Export Tanker Ullage Reports and the preloading OBQ reports form part of the cargo documentation and must be given to the Mooring Master.

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## OPERATIONS

### 4.8.2 Documents, Reports, Samples

#### Cargo Samples

### 4.8.3 Load Figures Quantities Required

On completion of loading, cargo samples must be distributed as per the charter party agreement.

The Yoho FSO Facility must send composite cargo samples in sealed cans to the Export Tanker for delivery to the consignee.

The independent surveyor must obtain the composite cargo samples in sealed cans from the Export Tanker. The samples will be retained as required.

An independent surveyor (or the Mooring Master if a surveyor is not present) carries out the witnessing of the drawing, bottling, and sealing of samples.

Additional samples may be required at receiver's request.

The Mooring Master will require the following Export Tanker cargo loaded figures:

- Gross Barrels
- Net Barrels
- Gross Metric Tons
- Net Metric Tons
- Gross Long Tons
- Net Long Tons



- Increase in free water found in tanks loaded at this Terminal
- Bill of Lading figures must be calculated based on the quantities derived from the Yoho FSO Facility meter system or secondary system.
- The Export Tanker and Yoho FSO Facility figures must be calculated and compared with the meter.
- The normal expected tolerance is 0.25% Discrepancies greater than 0.25% between Export Tanker net cargo figure loaded onboard corrected for experience factor and Bill of Lading gross figure must be investigated and may require a regauge operation to be conducted to establish the cause of the difference.

Bill of Landing Figures

#### 4.8.4 Additional Duties

Mooring Master's  
Additional Responsibilities  
for Documentation

#### 4.0 OPERATIONS

- In the absence of a third-party independent cargo surveyor onboard the Export Tanker, the Mooring Master or Assistants must witness the taking of ullages, temperatures, and water dips of the cargo tanks onboard the Export Tanker prior to and after cargo loading and deballasting operations. These measurements are to be recorded on a Ullage Report and must be included with the cargo documentation.
- If the Ullage Reports from the Yoho FSO Facility are not available before the Export Tanker departs from the Yoho FSO Facility, the Mooring Master must transmit the reports by fax or e-mail to the Export Tanker. Notes of Protest, if any, should be handed to the Mooring Master or Yoho FSO Facility Representative. The Mooring Master or Yoho FSO Facility Representative is not authorized to accept such letters and can only endorse a Notes of Protest with the



words "acknowledge receipt without prejudice." The Mooring Master's signature only confirms receipt and does not confirm any agreement with text contained within Notes of Protest.

Notes of Protest

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## 5.0 UNMOORING/DEPARTURE

This chapter contains the following information:

- Hose Disconnection

## UNMOORING/DEPARTURE

### 5.1 Hose Disconnection

Hose Disconnection

#### 5.1.1 Unmooring

Prior to unmooring

The following list provides Export Tanker Masters with the hose disconnection requirements for departure.

When loading is complete, the Mooring Master or his or her Assistant:

- Coordinates, supervises, and witnesses the following-operations:
  - Draining
  - Valve closures
  - Final hose disconnection
- Advises the Export Tanker officer of the need to supervise the crew in disconnecting the loading hose.



Before unmooring, the following preparations must be made:

- Export Tanker Master must confirm that Export Tanker is ready in all respects to leave the berth.
  - All propulsion, steering and control systems, winches, and windlasses are tested operational and have full power available.
  - The manifolds must be securely blanked.
  - Crew must be standing by on the bow with an Export Tanker Officer ready to unmoor. The AMM normally coordinates and advises unmooring operation on the bow.
  - Measurements of the Export Tanker and Yoho FSO Facility tanks are completed. (This may be concluded after unmooring)
  - Satisfactory completion of Predeparture Checklist.
- Reference: See Section 4.1.2, "Predeparture Checklist."

- Unmooring commences after hose disconnection and when hoses are in the water and clear.

## 5.0 UNMOORING/DEPARTURE

### 5-1

- Unmooring sequence
  - The export hoses must be secured clear of the operational area.
  - The hawser pickup rope slack is taken up
  - The towing power of the Hold back tug is reduced to minimum, and the weight is allowed to come off the mooring hawser. It may be necessary to use the main engine for this purpose.
  - When the weight comes off the hawsers, chafe chains must be released from bow stoppers.
  - Hawsers and pickup rope are carefully walked back together to reduce the chance of them crossing as

the Export Tanker moves astern and clears the Yoho FSO Facility.

- Care shall be taken to ensure that mooring hawser and pickup rope are not dropped over the hose string

- Hold back tug power is increased to pull the Export Tanker clear of the Yoho FSO Facility. The Export Tanker engines may be used astern to assist.

- Anchor securing must not be removed until the Export Tanker is well clear of the Yoho FSO Facility and when advised by the Mooring Master.

- Distance from the Yoho FSO Facility is to be closely monitored during the entire unmooring operation and reported independently to Mooring Master and Export Tanker Master by the AMM and by the Officer on the bow respectively.

- The Hold back tug assists the Export Tanker in maneuvering clear of the Yoho FSO Facility and Yoho FSO Facility Restricted Zone before being let go.

- The Export Tanker must be kept underway in a safe position within the Yoho FSO Facility Restricted Area until cargo calculations and cargo documentation are completed.

- The Export Tanker normally does not anchor while awaiting completion of documentation, but if anchoring is necessary, the Export Tanker must leave the restricted area and proceed to the recommended anchorage area for anchoring.

- Prior to disembarking, the Mooring Master advises the Export Tanker Master on a safe departure course from the Yoho FSO Facility Restricted Area.

Unmooring

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5.1.1 Unmooring

UNMOORING/DEPARTURE



### 5.1.2 Predeparture Checklist Checklist

The Export Tanker Predeparture Checklist is included below. Upon completion, Export Tanker Masters and Mooring Masters must sign and date.

#### Item

Export Tanker

Master

Mooring Master Comments

1. Are unberthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?
- 2.. Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, Hold back tug, work boat, and Yoho FSO Facility?
3. Is agreed language of operation, English, being spoken?
4. Is Export Tanker upright with suitable trim?
5. Is an alternate anchorage or waiting area designated and agreed upon?
6. Has Export Tanker Master shared information with other relevant parties concerning the maneuvering characteristics of the Export Tanker equipment?
7. Do both parties know how many consecutive engine starts are available?
8. Are methods of departure, passage plan, and maximum speeds reviewed and agreed upon?
9. Are all departing personnel informed of Export Tanker departure?
10. Are location and method of transferring personnel from Export Tanker agreed upon and is equipment in place?
11. Are deck winches in good order with power on?
12. Is crew ready to carry out unmooring?
13. Are fore and aft fire wires retrieved inboard?
14. Is adequate lighting available?



## 5.0 UNMOORING/DEPARTURE

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### EXPORT TANKER DEPARTURE

#### 5.1.2 Predeparture Checklist

Item

Export Tanker

Master

Mooring Master Comments

15. Are bridge and navigation equipment and machinery operational?
16. Is main engine tested ahead and astern?
17. Is a proficient helmsman on the wheel?
18. Are all cargo tanks secured with gauging and sa YOHO Safety Credo

- All accidents and injuries are preventable.
- Each of us has a personal responsibility for our safety and the safety of others, both on and off the job.
- No business objective is so important that it will be pursued at the sacrifice of safety.
- A job is well done only if it is done safely.

INTRODUCTION



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Please see the back of this manual for all forms and checklists.



## 1.0 ARRIVALS

This manual is for the use of Nigerian Government officials, Mobil Producing Nigeria (MPN) Yoho FSO Facility Staff, Masters, and Crew of Export Tankers visiting the facility, Masters and Crew of hold back tugs, and Mooring Masters involved in the export of Yoho crude oil.

- Mooring Master On Board/Mooring
- Export Tanker Pre-Mooring Checklist

Arrivals chapter includes:

- Communications
- Arrival Notifications
- Export Tanker Approach

Checklist to complete:



## ARRIVALS

### 1.1 Communications Normal Operations

The table below provides communication information used during normal operations.

#### Item Description

Name YOHO FSO Facility

Call Sign C6NI4

Position Latitude 4° 01.8' N, Long 7° 31.3' E

Operations calling YOHO FSO Facility ("Control Room") ("Mooring Master")

VHF operating channels Channel 16 or Channel 70, 24 hours per day

Helideck homing beacon 119.1 kHz: Call Sign "C6NI4"

FSO Facility Postal Address

YOHO FSO Facility c/o Cameroon Oil Transportation

c/o QIT Terminal

Ideno

Eket

Nigeria

FSO Facility Fax +871 330 936315

FSO Facility Telephone +871 330 936315

#### 1.1.1 General Communication Requirements

##### General Requirements

This section of the manual provides information about communications requirements during normal export operations.

##### Language

All communications between the Export Tanker and other stations within the MPN Yoho FSO Facility area are conducted in English.

## 1.0 ARRIVALS

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## ARRIVALS

### 1.1 Communications Safe Communications

#### Equipment

Effective and efficient communications are essential to safe operations. Breakdowns in communications both by radio at a distance and interpersonal communications face-to-face can and do lead to accidents and / or incidents. Every care is taken to ensure that communication equipment is in good working order and that all spoken communications are acknowledged, received and understood. All orders and instructions must be repeated back so that the person giving the order or instruction knows that the intent and meaning are fully understood by the person receiving the order or instruction.

All portable communications systems in use must be certified intrinsically safe and must comply fully with applicable safety requirements.

#### Transmissions

#### Use and Testing of Dedicated Channel

High frequency and medium frequency (HF/MF) radio transmissions are not permitted within the FSO Facility Restricted Areas. Low power satellite communications are permitted.

One dedicated channel of voice communication between the FSO Facility and the Export Tanker must be agreed upon, maintained, and continuously monitored at all times while the Export Tanker is in the FSO



Facility Area.

All stations taking part in operations must test and establish clear communication on these channels.



## 1.1.2 Other Communication Requirements

### Communications Notifications

The Export Tanker should send all communications directly to the Yoho FSO Facility and a copy to MPN.

### FSO Facility Approaches

When within 50 nautical miles of the Yoho FSO Facility, the Export Tanker maintains a listening watch on the FSO Facility VHF Operating Channels.

### Tanker Arrival Information

## 1.0 ARRIVALS

### Mooring Master Transmissions

To receive current information, the Export Tanker should attempt to establish verbal communication with the FSO Facility as early as possible. This information flow includes, but is not limited to,:

- Mooring prospects: Export Tankers that do not berth immediately are directed to the Anchorage or Waiting Area.
- Berthing time.
- Weather conditions and forecast conditions.
- Mooring Master or FSO Facility Representative boarding time.

The Export Tanker also confirms:

- The amount of ballast and time for deballasting.
- That no defects or problems exist that may affect Export Tanker operations while approaching, mooring, and loading at the Yoho FSO Facility.

The Mooring Master and his or her Assistants have portable VHF and UHF transceiver units. These units



are used for communication  
Tanker, FSO Facility, Field Vessels, and work boats.

between the Export

When the Export Tanker is within the Yoho FSO Facility Area, all verbal communications relative to loading the Export Tanker are routed through the Mooring Master. The Mooring Master or FSO Facility Representative may delegate to make direct verbal communications with the Yoho FSO Facility Control Room for specified periods of time.

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## ARRIVALS

### 1.1 Communications

#### 1.1.2 Other Communication Requirements

##### Communications Failure

In the event of radio communications failure, all mooring, unmooring, and cargo operations must be suspended until satisfactory communications are restored.

##### Radio Silence

Radio silence is rarely requested, but at times it may be required within the FSO Facility Safety Zone. If required, all export and transfer operations are suspended until the period of radio silence is declared over.

### 1.2 Arrival Notifications

#### ETAs

Export Tankers must send an initial Estimated Time of Arrival (ETA) message via email to the FSO Facility when they start on passage to the FSO Facility.

A series of ETAs must be sent as listed below:

- Start on passage
- 72 hours before arrival
- 48 hours before arrival
- 24 hours before arrival
- 6 hours before arrival
- Updates when in VHF range
- Additional notification must be given if the Export Tanker ETA varies from the original ETA by four hours or more

The following exceptions apply to the above rules:



- If the sea passage from the to the Yoho FSO Facility is less than 72 hours, the first ETA must be given immediately after leaving port. Subsequent ETAs must be given at the time intervals specified above.
- Should the ETA change by one hour or more following the 24-hour notice, the Export Tanker must notify the Yoho FSO Facility of the revised ETA.

Export Tanker's last port



## 1.2 Arrival Notifications 72 Hour Questionnaire

On receipt of the 72-hour ETA notice, the Terminal sends the Tanker Master the 72-Hour Vessel Questionnaire for completion and a timely reply.

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

FROM: Vessel Master  
TO: Offshore Installation Manager

1. Provide the name of the Tanker Master.
2. Provide the name and contact details of the vessel in-country agents.
3. Provide the vessel name, flag, and call sign.
4. Provide name and address of Owner and Operators.
5. Provide the voyage number when leaving the Terminal.
6. Provide the summer deadweight, length over-all, and beam.
7. Provide the previous name and date of vessel build.
8. Provide the name of the last port of call and of the next destination.
9. Provide the ETA to the Terminal Waiting Zone.
10. Provide the destination or place for orders of the cargo.
11. Provide the net standard volume in barrels at 60°F to be loaded.
12. Provide the cargo nomination quantity and loading window.
13. Provide the quantity or quality of slop on board. Is the load on the top procedure to be followed?
14. Provide the quantity of clean ballasting or segregated ballast on arrival.
15. Can loading and deballasting be carried out concurrently? If not, state reasons.
16. What is the deballasting time?
17. Provide the quantity of cargo on board.
18. Specify the H<sub>2</sub>S concentration in vapor spaces in parts per million (ppm) for all cargo tanks and identify the measurement device used to measure the H<sub>2</sub>S concentration. (The Master is to advise of any changes during the regular ETA message notification.)
19. Advise whether you have received any instructions regarding insertions from Owners or Charterers or special remarks to be added to Commercial Lifting Documents.
20. Confirm that heating coils (if fitted) and tanks are sound and not leaking.
21. Provide the loading rate during and after deballasting in barrels per hour



(bbls/hr) and confirm that the manifold is fitted with two  
16-150 ANSI (for  
example, ASA) flange.

22. Confirm that the bow fair leads and bow stoppers are suitable to accept 76millimeter chafing chains.  
Provide the number and the distance between the  
fair leads and the chain stoppers.

1.0 ARRIVALS

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## ARRIVALS

### 1.2 Arrival Notifications

#### 72 Hour Questionnaire ((Continued))

23. What is the safe working load of the derricks or cranes? Are there cleats, eyes, and bits available in the manifold area for securing vessel rail hoses in line with Oil Companies International Marine Forum (OCIMF) recommendations?
24. Confirm that cargo and slop tanks are under inert gas on arrival (below 8% O<sub>2</sub> content by volume).
25. Provide the vessel experience factor for the previous 10 voyages.
26. Provide the crew list and crew health status.
27. Provide the export tanker telephone numbers, fax numbers, e-mail address, and Inmarsat numbers.
28. Confirm that the export tanker is in possession of valid SOLAS, Safety Management and Document of Compliance (International Safety Management [ISM] Code) Certificates.
29. Provide the estimated draft forward and aft on arrival and departure and the distance from bridge front to bow.
30. Provide the distance from the bow to the cargo manifold connection.
31. Advise whether the export tanker has any reportable sickness on board or whether the Master advises a clean bill of health.
32. Is the vessel in compliance with International Ship and Port Security (ISPS) requirements?



## 1.2 Arrival Notifications

### Notification of Readiness (NOR)

## 1.0 ARRIVALS

The laytime shall begin (regardless of the availability of the loading berth) six hours after the presentation of the Notice of Readiness (NOR) on the agreed arrival date to the FSO Facility or Mooring Master or at the commencement of loading, whichever occurs earlier.

When the Export Tanker is moored, the Mooring Master signs the NOR to acknowledge its receipt. This receipt does not constitute an acceptance of the NOR or an agreement that the Export Tanker is in all respects ready to load.

If the Master of the Export Tanker or their agent presents the NOR prior to the agreed arrival date, then the laytime shall not commence before 06:00 hours [Local Time] on the agreed arrival date or at the commencement of loading, whichever is earlier.

If the Export Tanker arrives after the agreed arrival date, then the FSO Facility authorizes the Export Tanker to berth as soon as possible. Laytime begins only upon commencement of loading but not so that it interferes with the loading or projected loading of any Export Tanker that has arrived or is expected to arrive at its agreed arrival date.

Export Tankers must vacate the berth as soon as it is safe to do so after loading is complete and upon the disconnection of hoses, provided that the Export Tanker remains in the vicinity of the FSO Facility to await documents.

The Master is advised to purge all vessel cargo tanks, nominated and non-nominated, to ensure that H<sub>2</sub>S levels are less than 10 ppm measured in vapor prior to



arrival at the FSO Facility. The  
verify that H2S levels are below 10 ppm prior to the  
vessel being accepted for berthing at the FSO Facility.  
All times required for purging cargo tanks to meet this  
requirement are for the owner's account.

**Mooring Master must**

1-7

H2S Terminal Requirements



## ARRIVALS

### 1.2 Arrival Notifications

#### 1.2.1 Personnel Boarding

##### Personnel

The Export Tanker must be prepared to accept onboard the following personnel:

- 2 MPN [Mobil Producing Nigeria Berthing Masters]
- 1 GAC [Agent]
- 2 Customs
- 2 Immigration
- 1 Public Health
- 1 NPD [Nigeria Petroleum Directorate]
- 1 DSS
- 2 Independent Cargo Inspectors
- 1 MMS (Minerals Management Service)
- 1 Nigerian National Petroleum Corporation (NNPC)

In addition, any persons required by the Yoho FSO Facility, Owner, or Charterer may be invited to board the Export Tanker provided that the Export Tanker life saving capacity is sufficient.

Several of the above personnel will remain on board the Export Tanker throughout the export. The Export Tanker Master is required to provide all Personnel who remain onboard with reasonable accommodation.

The actual list of the boarding personnel is communicated to the Export Tanker Master upon their arrival in the waiting area.

**! IMPORTANT:** Personnel going to or returning from the Export Tanker should not bring gratuitous goods onto any MPN transports or facilities. MPN reserves the right to inspect personal effects prior to boarding MPN transports in accordance with MPN standard policies, and



will confiscate any contraband

discovered.



## ARRIVALS

### 1.2.2 Pre-Mooring

#### Required Boarding Equipment

Export Tankers should rig their pilot boarding equipment in compliance with the diagram shown below. They should also have a responsible officer and other boarding personnel available to ensure safe boarding of the FSO Facility Mooring Master.

Required boarding arrangements for pilot in accordance with I.M.O. requirements and I.M.P.A. recommendations.

### 1.0 ARRIVALS

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## ARRIVALS

### 1.2.2 Pre-Mooring Continued Other Pilot Boarding Methods

Pilot boarding methods and restrictions for each are listed below.

#### Personnel basket

- On Export Tankers with suitable cranes, the Mooring Master may request to board by personnel basket provided by the FSO Facility.  
Note: This method must be used only with the approval of the Export Tanker Master.

#### Pilot and Combination Ladder

- Before arrival at the boarding position, the Export Tanker must have in place a combination ladder arrangement that complies with the requirements detailed in this section of the manual.
- A means for lifting hand baggage onboard must be in position for immediate use.  
Note: This arrangement is not required if helicopter boarding is confirmed.

#### Helicopter

The Mooring Party may board the Export Tanker by helicopter if an agreement is reached among the Mooring Master, the Export Tanker Master, and the helicopter operator. The following limitations are considered:

- Cloud ceiling and visibility.
- If the helicopter has no winch facility, the helicopter



must land on the deck.

- The marked Helicopter Landing area may be required to have collapsible shipside rails, which must be lowered for the operation.
- Adequate Export Tanker crew must be available to standby as a fire and rescue party.
- The helicopter operator must approve of the landing area aiming circle, clear zone, and maneuvering zone dimensions.
- All helicopter operations are carried out under the guidelines contained in the publication "Guide to Helicopter and Ship Operations" (International Chamber of Shipping [ICS]).
- Helicopter personnel transfers must not take place inside the FSO Facility Restricted Zone.



## 1.0 ARRIVALS

### 1.3 Export Tanker Approach

#### Normal Approach

The information below shows the normal operation expectations that occur after mooring to the Marine Terminal. This information is provided for guidance only. It is subject to change and is subject to the judgment and decision of the Marine Terminal Mooring Master.

#### Anchorage or Waiting Area

If the Export Tanker is not scheduled to berth on arrival or the FSO Facility is closed due to adverse weather conditions, the Export Tanker Master is advised by radio and is asked to proceed to the Anchorage or Waiting Area.

#### Permission to Enter

Export Tanker must first obtain permission from the Marine Terminal by radio to enter the Marine Terminal Area.

The Mooring Master gives the Export Tanker Master a boarding position in terms of bearing and distance from the Marine Terminal.

#### Mooring Master and Pilot Boarding Area



## ARRIVALS

### 1.3 Export Tanker Approach Compulsory Pilotage

#### Hose Equipment Box

Compulsory pilotage Pilotage is compulsory within the FSO Facility Area.

Export Tankers must not enter the FSO Facility Restricted Area until one of the following conditions is met:

- The Mooring Master is onboard.
- Permission is granted by the FSO Supervisor for the Export Tanker to enter the Restricted Area.

The Assistance Vessel presents a container of equipment for connecting floating hoses. The assisting Vessel Crew with the Mooring Master or his or her assistants in attendance places the container on board close to the loading manifold before approach operations commence.

#### Securing Anchors

#### Manifold Preparations

Prior to approaching the FSO Facility or passing over pipelines adjacent or near to the FSO Facility, the Export Tanker Master must ensure that the anchors and cables are secured to eliminate the possibility of an anchor dropping accidentally.

The following items must be made ready:

- Two 16-inch by 150 ANSI presentation flanges, on the



port side manifold to receive

- A suitable assortment of slings, chain blocks, and tools to assist in hose connection
- Drip containers and absorbent material

the FSO Facility hoses

## ARRIVALS

### 1.3 Export Tanker Approach Hydrocarbon Gas

### 1.0 ARRIVALS Hold Back Tug Connection

To avoid sources of hydrocarbon gas:

- All cargo, ballast, and bunker openings must be closed before the Export Tanker enters the FSO Facility Area or before the hold back tug comes alongside.
  - The Export Tanker Master must confirm when it is safe to permit the hold back tug or any other vessels alongside the ship, including the pilot boarding vessel.
- The following requirements must be met for hold backtug connection:

- Making fast the hold back tug must be conducted under the direct guidance and coordination of the Mooring Master after they board. An Export Tanker officer must be present during the operation.
- A mooring line and chain stopper must be ready aft to pick up the towing wire from the holdback tug.
- A sharp knife or axe should be available.
- With the Export Tanker stopped in the water, the:
  - Hold back tug backs up to the stern of the Export Tanker.
  - Eye of the mooring line passes by the heaving line to the work deck of the hold back tug.
  - Hold back tug crew shackles the eye of the towing wire to the eye of the mooring line.
  - Mooring line is then brought onboard.
  - Towing wire is secured with a chain stopper.
  - Eye of the towing wire is placed over one of the stern



bitts of the Export Tanker.  
are

(Confirm SWL of the bits

adequate for the operation.)

-Chain stopper is released.

• The hold back tug Master then pays out the towing  
wire to the required distance.

Note: During hold back tug connection and at all

times once the hold back tug is connected, all nonessential personnel should be clear of the area.

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## ARRIVALS

### 1.3 Export Tanker Approach Bow Mooring Preparations

#### Assistance Vessels

Under normal operational circumstances the following preparations must be met for bow mooring:

The Export Tanker must be moored with two 76-mm chafing chains and two hawsers of 24-inch circumference:

- Bow stoppers must be checked for proper grease, free movement, undamaged locking pins, and pawl prior to commencing mooring operations.
- A heaving line, spare rope messenger, crowbar, sledge hammer, and sharp knife or axe must be available at the bow.
- Two messengers must be prerigged, led through the bow stoppers and bow fairleads, and led outboard clear of obstructions to the shoulder or to where the parallel body begins to avoid the danger of the work boat contacting the bow.
- A shackle must be fitted at the end of each messenger to facilitate connection to the pickup line.
- For a less hazardous and smoother mooring operation, the pickup line can be stowed directly onto the stowage drums (rather than the warping drums) to receive approximately:
  - 110 meters of 1-inch diameter pickup line
  - 110 meters of 10-inch diameter messenger for each mooring hawser.



Note: Panamax size vessels may occasionally visit the terminal, these are considered as abnormal operations and the Yoho FSO Facility will make special arrangements to berth them at the Facility.

Assistance vessels are at the disposal of the Export Tanker throughout the Export Tanker approaching maneuvers and during its presence at the FSO Facility. The Mooring Master directs the assistance vessels, and the vessels request actions or assistance from the Mooring Master.

The number of assistance vessels varies according to:

- Export Tanker displacement and deadweight.
- Meteorological and sea conditions.



#### 1.4 Mooring Master On Board/Mooring Holdback Tug Fast and General Operational Safety Inspection

After boarding, the Mooring Master advises the Export Tanker crew to pick up and secure the hold back tugs' tow wires. After a briefing, the Mooring Master or his or her Assistants direct the hold back tug to be made fast.

The Mooring Master or his or her Assistants then conduct a General Operational Safety Inspection of the Export Tanker before final approach. The inspection includes, but is not limited to, the following items:

- Bow mooring arrangements and equipment
- Anchor and cables and their security
- Cargo loading manifold
- Cranes or derricks and associated gear
- Poop deck arrangements
- Cargo control room
- Any other area that the initial inspection may indicate
- Oxygen and H<sub>2</sub>S content of the atmosphere in the cargo tanks
- Tanker Master-reported status of the following items:
  - Main engines
  - Rudder
  - Auxiliary equipment
  - Operational
  - Control equipment

Reference: See Export Tanker Premooring

Checklist.

The Mooring Master immediately advises the Export Tanker Master and the FSO Supervisor if the Export



Tanker is found unacceptable  
or loading.

for FSO Facility berthing

1.0 ARRIVALS  
1-15



## ARRIVALS

### 1.4 Mooring Master On Board/Mooring Export Tanker Pre-mooring Checklist

The Export Tanker Pre-Mooring Checklist is included below. Upon completion, Masters and Mooring Masters may sign and date this list.

#### Item Master Mooring Master Comments

1

Are berthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?

2

Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, hold back tug, work boat, and FSO Facility?

3 Is English, the agreed language of operation, being spoken?

4 Is Export Tanker upright with suitable trim?

5 Is an alternate anchorage designated and agreed upon?

6

Have limiting environmental criteria for the following operations been established and agreed upon?

- Approach/connect
- Cessation of cargo operations
- Disconnect.

7

Has Export Tanker Master shared information with other relevant parties concerning the maneuvering characteristics of the Export Tanker and shipboard equipment?

8 Do both parties know how many consecutive engine starts are available?

9

Are methods of approach, passage plan, maximum



speeds, and mooring  
agreed upon?

procedures reviewed and

10 Are weather forecasts obtained, and will they be updated on a regular basis during the operation?

11 Is a bridge and anchor watch established?

12 Are bow stoppers, leads, and lines inspected and satisfactory?

13 Are deck winches in good order with power on?



#### 1.4 Mooring Master On Board/Mooring Export Tanker Pre-mooring Checklist

##### Item Master Mooring

##### Master Comments

- 15 Is crew ready to secure hold back tug and carry out mooring?
- 16 Have fore and aft fire wires been inspected and deemed ready for deployment?
- 17 Are poop deck power, mooring lines, and chain stoppers ready?
- 18 Is manifold lifting gear suitably rigged for use and located on the port side?
- 19 Are manifold reducers in place and fully bolted?
- 20 Is hose securing equipment rigged at applicable manifold?
- 21 Is adequate lighting available?
- 22 Are bridge and navigation equipment and machinery operational?
- 23 Is Main Engine tested astern?
- 24 Is a proficient helmsman on the wheel?
- 25 Is at least one cargo tank checked having an acceptable O<sub>2</sub> level (<8.0%) recorded?
- 26 Has at least one cargo tank been checked having an acceptable H<sub>2</sub>S level (<10.0 PPM) recorded?
- 27  
Have support vessel Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?
- 28  
Is safe working load (SWL) established for towing bitts and leads to be used? Is this information relayed to the hold back tug Master?

Masters Signature

Mooring Masters Signature

Date/Time

Motor Tanker (MT)

ARRIVALS

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## ARRIVALS

### 1.4 Mooring Master On Board/Mooring Final Approach and Mooring

#### Distance from the Single Point Mooring (SPM)

The Export Tanker is considered on final approach when it is one mile out from the FSO Facility.

The following duties, subject to the prevailing environmental conditions, are performed for the Export Tanker approach to the FSO Facility:

- Before mooring, the cargo hose is secured clear of the mooring area or is held clear by a support vessel.
- When the Export Tanker is approximately 300 meters from the stern of the FSO Facility, the first messenger line is made ready to bring the pickup messenger onboard as follows:
  - A work boat brings a pickup line to the bow of the Export Tanker and connects the line to the tanker messenger.
  - The pickup rope is heaved on board until the chafe chain is through the bow stopper.
  - Once the chafe chain is in the correct position and secured in the bow stopper, the load is then transferred to the stopper by slacking back on the messenger.
  - The line boat passes the second pickup rope to the Export Tanker, and the second chafe chain is heaved on board and secured in the stopper, ensuring even tension on both mooring hawsers.
- The Export Tanker approach speed and heading are controlled so that line tension is minimal until both



hawser assembly chains are secured.  
Settling the Export Tanker Once Removed

The distance from the stern of the FSO Facility is closely monitored during the final approach and throughout the mooring operation.

The Mooring Master or his or her assistants and the Export Tankers Officer on the bow should each independently report distance off to the Mooring Master and to the Export Tanker Master respectively.

Once the Export Tanker Master and Mooring Master are satisfied that the Export Tanker is securely moored, the following activities may occur:

- The hold back tug adjusts the towline to an appropriate length, depending upon the prevailing weather and current conditions.

#### 1.4 Mooring Master On Board/Mooring

##### 1.0 ARRIVALS

- The hold back tug commences towing at the power and heading as determined by the Mooring Master.
- The hawser load monitoring equipment receives hawser tension readings.
- The Export Tanker deck officer and AMM may leave the bow.

The Export Tanker main engines must be at a state of constant readiness. The mooring hawsers, fitted with an emergency hawser disconnection system, are under the direct control of the FSO Facility Loading Operator.

#### Mooring Master and Assistants Roles Once Moored

After mooring, the Mooring Master and his or her Assistants remain on board in the capacity of Loading Master and Assistant Loading Master.

#### Monitoring of the Mooring Hawsers

**Mooring Master and Assistants roles once moored**  
After mooring, the Mooring Master and his or her Assistants remain on board in the capacity of Loading Master and Assistant Loading Master.

**Monitoring of the mooring hawsers** The Export Tanker Master is responsible for providing constant monitoring of the moorings in the following manner:

- One crewmember must be equipped with portable radio communication with the Export Tanker Central



Control Room (CCR) and must  
of the Export Tanker at all times to monitor the  
condition and direction of the mooring hawsers and  
distance from the stern of the FSO Facility.

- Duty crew members must be directed to check their portable radios at intervals not exceeding 30 minutes by reporting to the CCR.
- Spare radios and batteries must be made available.
- Abnormal or adverse conditions must be reported immediately to the Mooring Master or his or her Assistants.

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be stationed at the bow



## 2.0 GENERAL INFORMATION

This chapter describes the Mobil Producing Nigeria (MPN) Yoho FSO Facility information including location, general weather conditions, and miscellaneous country requirements.

General Information chapter includes:

- General Information
- FSO Facility Locations
- Restricted Areas and Exclusion Zones
- Miscellaneous Information



## GENERAL INFORMATION

### 2.1 General Requirements Requirements

### 2.0 GENERAL INFORMATION

The following general requirements apply to the Yoho FSO Facility:

- MPN must approve any vessel nominated to load at the Yoho FSO Facility for each loading. MPN has the right to reject any Export Tanker in its absolute discretion.
- Prior to loading at the Yoho FSO Facility, Export Tanker Owners must agree to be bound strictly and fully by the FSO Facility Regulations, conditions of use, and legal indemnities set out herein and by any exceptions to safety measures that MPN decides to make under specific circumstances.
- Upon arrival of the Mooring Master or FSO Facility Representative on the vessel, Export Tanker Masters are required to sign on behalf of the Export Tanker Owner an acknowledgement of receipt of the FSO Facility Information and Safety Regulations, an agreement that binds them to these regulations and FSO Facility-specific manuals.
- The Mooring Master or FSO Facility Representative may refuse, suspend, or delay berthing or loading, or may unberth any export tanker when either conditions or the export tanker does not comply with Yoho FSO Facility Information and Safety Regulations and procedures. If the Master and the Mooring Master or FSO Facility Representative cannot agree to a procedure by which the export tanker can meet satisfactory operational conditions, immediate contact with both Yoho FSO Facility and the Charterer of the vessel must be made so that corrections can be rectified.



• If for any reason the above  
accomplished, the provisions of this article remain fully  
binding.

formality is not

3-1



## GENERAL INFORMATION

### 2.2 FSO Facility Locations

#### Yoho Field

#### FSO Facility Description

Yoho FSO Facility Bow turret moored FSO with a center point position at 4° 01' 8" N 7° 31' 3" E and tandem Tanker offloading operations

Waiting Area or Anchorage Area South Anchorage 3° 59' 0" N 7° 34' 0" E

Service vessels Mariners are cautioned that Mobile Offshore Drilling Unit (MODUs), buoys, anchor moorings and service vessels may be found working in the Yoho Field area. Some of this equipment may not be illuminated.

### 2.3 Restricted Areas and Exclusion Zones

#### Regulations

The following restricted areas and exclusion zone regulations apply to the Yoho FSO Facility:

- Restricted areas and exclusion zones prohibited to navigation and fishing activities protect Yoho FSO Facility installations.
- Restricted areas extend in a .75-mile radius from each installation.
- Exclusion zones extend in a .75-mile radius from each installation.
- Access to the prohibited zones is restricted exclusively to service vessels either working for or authorized by the Yoho Field OIM or Yoho FSO Facility FSO Supervisor.

Reference: Insert of chart of restricted and exclusion zones may be used.



## 2.4 Miscellaneous Information

### Introduction

The following table provides miscellaneous information about the Yoho FSO Facility:

### Terms Informtion

Local time The local time is Greenwich mean time (GMT) -1 hour.

### Meteorology

(as an indication only)

The rainy season predominates April through September.

The dry season lasts from September through April.

### Visibility

During heavy rain and harmattan, visibility may be limited to half a nautical mile.

### Squalls

Squalls frequently occur in the area and may occur at any time of year.

### Currents

Since the Yoho FSO Facility is located in relatively shallow water, the ocean circulation currents have very little influence on the local currents. Recent measurements in shallow water indicate that the largest current velocities are in the east and west directions.

### Rip Tides

Rip tide activity frequently occurs in the area around the FSO Facility Export Tanker Master, Officers and crew are advised to be aware these normally occur around 4 days after a full moon. Officers and crew are advised to monitor the radar for evidence of approaching rip tide activity.

### Bunkers and potable water

There are no facilities to accommodate bunkers or drinking water at the Yoho FSO Facility.

Provisions and stores There are no facilities to accommodate provisions or stores at the Yoho FSO Facility.

Repairs—Tooling No facilities exist at the Yoho FSO Facility for repair. Masters of export tankers are further reminded that main engines must be available for use at all times when berthed at the Yoho FSO Facility.

Boarding formalities The Vessel Master may be granted free pratique (clearance given an incoming ship by the health authority of a port) by radio.

The immigration, health, customs, and harbor authorities may arrive with the



Mooring Master on the vessel.

Medical care While there are no medical facilities available on the Yoho FSO Facility, emergency medical evacuation to Yoho may be organized by MPN at the expense of the vessel. The Transportation mode depends on logistic planning and availability and is decided by MPN.

The shipping agent of the vessel officially makes requests to MPN for medical evacuation. The shipping agent is responsible for all logistic and medical arrangements for the evacuees upon arrival on shore Nigeria.

Transport connections  
with Yoho

No crew change facilities are available at the Yoho FSO Facility. Use of the Yoho FSO Facility transport facilities is restricted to MPN personnel and staff only.

## 2.0 GENRAL INFORMATION

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### 3.0 MOORING/SAFETY & POLLUTION

In this chapter:

- Moored
- Safety and Pollution
- Export tanker Safety and Pollution Mitigation Checklist

Checklist to complete:

- Export Tanker Safety and Pollution Mitigation Checklist



## MOORING/SAFETY & POLLUTION

### 3.1 Moored

#### Normal Operations

This section covers the normal operation expectations once mooring is completed to the Yoho FSO Facility. This information is provided for guidance only. It is subject to change and is subject to the judgement and decision of the Yoho FSO Facility Mooring Master.

### 3.0 MOORING/SAFETY & POLLUTION

#### Readiness to Maneuver

#### Signals

- All equipment and machinery essential for the safe maneuvering of the Export Tanker must be maintained in a state of immediate readiness while moored.
- Any malfunctions or failures of the Export Tanker's propulsion or control systems must be immediately brought to the attention of the Mooring Master.
- Equipment and machinery must not be immobilized for repair while within the limits of the Yoho FSO Facility Restricted Area.
- The Export Tanker is not to be operated in the unmanned machinery space (UMS) mode at any time while in the restricted area.
- For Export Tankers of their length, applicable navigation lights, sounds, and signals must be displayed in full compliance with the latest edition of the International Regulations for Preventing Collisions at Sea.
- Applicable flags and their nighttime equivalent light must be displayed where they can best be seen. This includes display of the international code signal B, H, and Q as appropriate.



• Export Tankers must display  
all times during their stay at the Yoho FSO Facility.  
3-1

the Nigeria national flag at



## MOORING/SAFETY & POLLUTION

### 3.1 Moored

#### Hose Connection

The Export Tanker crew, under the guidance and coordination of the Mooring Master or his or her Assistants, conducts cargo hose connection operations. The normal connecting sequence is described below in the following steps:

1. An Export Tanker Officer designates the manifold connections to use.
2. When the Export Tanker is secure and settled at the mooring, a field support vessel (work boat or supply vessel) brings the cargo hoses to the port side of the Export Tanker ready for connection to the Export Tanker manifold.
3. The lifting wire of the derrick or crane should be lowered and connected to the upper ring of the lifting chain of the forward hose.
  - The barbell ends of the cargo transfer hose are hoisted until sufficient hose is above the hose saddle to reach the manifold.
  - Care must be taken to prevent kinking or damage to the cargo hoses. A minimum radius of 3.5 meters for any bend in the hose is recommended.
  - The pelican hook of the snubbing chain is connected and secured.
  - The weight is transferred to the snubbing chain. The hose is then lowered and located for connection to the manifold.
  - The Mooring Master confirms with the Yoho FSO Facility that the hoses are not under pressure.
  - The hose end butterfly valve is confirmed closed by the Mooring Master, and the blank flange is removed. The hose is connected to the designated manifold and is secured by using all bolts where directed, and the cam locks.
4. Repeat all of step three for the aft hose.



5. The export hoses must be up by the Export Tanker derrick or crane during the export operation to ensure that they are not damaged by contact with the hose saddle.

6. The Mooring Master or his or her Assistants inspect the hoses for any kinks or damage, they open the hose end butterfly valves.

**! WARNING:** Connecting hoses is a potentially dangerous operation. Only competent and experienced crew and crane drivers should be assigned to connecting duties. The Export Tanker's crew must be under the direct supervision of a duly qualified officer at all times.

supported on strops held



## Care of Hoses

### Monitoring the Cargo Hoses at the Manifold Area

**! IMPORTANT:** Care should be taken during the hose handling operation to avoid serious damage to the hoses and associated equipment. If any action taken by the Export Tanker Master, or crew causes or contributes to damage to the loading system, the Export Tanker Master, Owners, or Charterers are held accountable for the cost of rectification of such damage, including, but not limited to, consequential damages.

A crewmember who is equipped with a portable radio and is in communication with the Export Tanker CCR must be stationed at the manifold area throughout export operations.

This crewmember monitors the hoses and hose securing arrangement and reports on the following conditions:

- Hose or connection leakage
- Damage to or possible failure of the hoses
- Leakage or damage of the hose string over the Export Tanker's side and in the water

Manifold duty crewmembers are responsible for the following actions:

- Be in radio communication with the Export Tanker Watch Officer or CCR (or both) at all times.
- Immediately report any noted abnormal or adverse conditions to the Mooring Master or his or her Assistants.
- Check their portable radios at 30-minute intervals.
- Report the radio checks to the CCR.



3.0 MOORING/SAFETY &  
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POLLUTION



## MOORING/SAFETY & POLLUTION

### 3.1 Moored

#### Emergency Unmooring

#### Emergency Unmooring Preparedness

The Mooring Master or his or her Assistants may decide after consulting the Export Tanker Master and FSO Supervisor to unmoor the Export Tanker at any time it is necessary for the safety of personnel, the Export Tanker, or the Yoho FSO Facility.

During loading operations, the Export Tanker is held clear of the Yoho FSO Facility by the hold back tug. If due to adverse weather or current (or both), or any other circumstance, the hold back tug cannot prevent the Export Tanker closing on the Yoho FSO Facility. The Export Tanker main engine must be in a state of constant readiness and immediately available for use as required to assist the hold back tug. Cargo loading must be stopped, and the manifold and hose end valves closed.

When the Export Tanker is steadied, preparations for disconnecting the hoses may commence. When the hoses are disconnected, the Export Tanker is then unmoored in a controlled manner if necessary. Both hoses are equipped with Gall Thompson breakaway couplings to protect the hoses, Export Tanker, and Yoho FSO Facility in the event of an uncontrolled breakout.



## 3.2 Safety and Pollution

### Introduction

This chapter, including the Export Tanker Safety and Pollution Mitigation Checklist, covers MPN Yoho FSO Facility specific requirements that must be carried out prior to starting cargo transfer from the Yoho FSO Facility to the Export Tanker.

These requirements remain in force throughout all operations until the Export Tanker leaves the Yoho FSO Facility Area.

### Export Tanker

#### Emergency Organization

MPN recognizes that visiting Export Tankers have standard procedures that must be followed in the event of emergencies such as fire on board. The Master of the Export Tanker should provide the Yoho FSO Facility Mooring Master with a copy of the Export Tanker Emergency Organization and any contingency plans.

### 3.2.1 Safety

#### Operational Requirement

The following information describes Yoho FSO Facility requirements for conducting safe operations throughout the stay of the Export Tanker in the Yoho FSO Facility Area.

**! IMPORTANT:** The Export Tanker Officer in Charge (OIC) of cargo operations must complete the Export Tanker Safety and Pollution Mitigation Checklist (located in Section 3.3.1, "Safety and Pollution Mitigation Checklist" of this chapter) with the Yoho FSO Facility Mooring Master. The checklist sets specific Yoho FSO Facility safety and pollution mitigation requirements and must be completed with reference to the accompanying guidelines.



3.0 MOORING/SAFETY &  
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POLLUTION



## MOORING/SAFETY & POLLUTION

### 3.2.1 Safety

#### Export Tanker Master

#### Yoho FSO Facility Mooring Master

The Master remains at all times wholly and fully responsible for his or her vessel and its officers and crew.

#### International Safety Guide for Oil Tankers and Terminals (ISGOTT)

#### Fire

The Mooring Master is authorized to make the following decisions:

- Advise and request Export Tanker Masters to take any additional necessary measures to ensure safe operations and eliminate risks should the circumstances require.
- Suspend oil transfer operations if safety is compromised or a hazardous situation exists. Export Tanker operations are conducted in accordance the latest ISGOTT recommendations (a copy should be available on board the Export Tanker).

Should a fire occur on the Export Tanker, the Master or responsible officer:



- Sounds a continuous blast on
- Sounds the *General Alarm*.
- Warns the Engine Room to be ready for immediate maneuvers.
- Informs the FSO Facility.
- Ceases all loading operations once the following phases have occurred:
  - Cargo is stopped
  - Manifolds are shut
  - If required, preparations are made to disconnect

the whistle.

hoses and vacate the berth



### 3.2.1 Safety

Yoho FSO Facility

Emergency Procedures

MedEvac

### 3.0 MOORING/SAFETY & POLLUTION

Yoho FSO Facility emergency procedures In the event of an emergency occurring at the Yoho FSO Facility, the principal point of contact for the Export Tanker is the Mooring Master who has a set of Yoho FSO Facility Emergency Procedures. The Yoho FSO Facility Emergency Procedures contain detailed actions, procedures, and communications for any Export Tanker emergency.

Emergency Readiness  
on the Export Tanker

If any person on board the Export Tanker needs medical attention, the Export Tanker Master should inform the Mooring Master:

- The Mooring Master endeavors to make arrangements for transportation to see local medical personnel.
- The Export Tanker Master (through the Export Tanker appointed agent or representative) must arrange all in-country medical and logistical requirements.
- If a person requires repatriation following medevac, arrangements should be made through the Export Tanker appointed agent or representative.

The Yoho FSO Facility will assist Export Tanker Masters where and whenever possible if a medevac situation occurs.



Prior to commencing any cargo operations, the Master of the Export Tanker must do the following:

operations, the Master

- Confirm the crew's readiness and proficiency in emergency, safety, fire fighting, antipollution, and other related procedures.
- Ensure that all activities carried out by the crew are done so safely and efficiently.

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## MOORING/SAFETY & POLLUTION

### 3.2.2 Pollution Prevention and Mitigation Requirements Operational Requirement

#### Spill Response Readiness

The following information describes Yoho FSO Facility requirements for conducting pollution-free operations throughout the stay of the Export Tanker in the Yoho FSO Facility Area.

**! IMPORTANT:** Export Tanker Masters should note that all possible measures to prevent pollution must be carried out and maintained. In the event that a pollution incident does occur, prompt and efficient action including raising the alarm, initiating an Export Cargo Emergency Stop, containment, and reporting must be carried out.

**! IMPORTANT:** The Export Tanker Officer in Charge (OIC) of cargo operations must complete the Export Tanker Safety and Pollution Mitigation Checklist (located in Section 2.3.1, "Safety and Pollution Mitigation Checklist" of this chapter) with the Yoho FSO Facility Mooring Master. The checklist sets specific Yoho FSO Facility safety and pollution mitigation requirements and must be completed with reference to the accompanying guidelines.

Spill response readiness requires that:

- Export Tanker antipollution equipment must be readily available to deal with a Tier One level pollution incident.
- Emergency response and antipollution equipment is adequately checked and is maintained ready for immediate use.



• Export Tanker crews are familiar with the use of all spill prevention and pollution mitigation equipment.

familiar with the use of all



### 3.2.2 Pollution Prevention and Mitigation Requirements

## 3.0 MOORING/SAFETY & POLLUTION

### Export Cargo Emergency Stop

Reporting requirements at the  
Yoho FSO Facility

If oil spillage occurs during loading or deballasting  
operations:

- All such operations must cease immediately.
- Action must be taken to control and contain the spillage.

Reference: See Chapter 4, "Operations" of this manual for Export Cargo Emergency Stop procedures.

Any spillage or leakage must be reported immediately  
to the Mooring Master.

It is essential that a pollution incident be reported  
immediately so that the earliest activation of the MPN  
Spill Response Procedures, which are in the possession of the Mooring Master, can be carried out.

Note: This does not relieve the Export Tanker  
Master of their responsibilities to activate and initiate  
their emergency response plans and procedures.

Yoho FSO Loading During  
Cargo Transfer

Loading at the Yoho FSO Facility is a continuous operation. Reporting of a pollution occurrence should be clear and concise to avoid confusion and the activation of incorrect cargo emergency stop procedures.

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## MOORING/SAFETY & POLLUTION

### 3.2.2 Pollution Prevention and Mitigation Requirements Leaking of Oil From Export Tanker

If at any time oil is observed leaking from an Export Tanker either on deck or to the sea, all cargo operations must stop immediately. In addition:

- The Export Tanker Cargo Officer must immediately stop all ballast operations.
- Operations can only resume when the cause of leakage is definitely established and positively stopped so that it cannot recur.
- The Export Tanker may be required to leave the Yoho FSO Facility Area.

If an oil leak source is due to structural or mechanical damage or failure:

- The FSO Supervisor may refuse to resume loading the Export Tanker until repairs are carried out to the satisfaction of the FSO Supervisor and the Yoho Field OIM.
- Careful monitoring of the sea around the Export Tanker is carried out and includes the area around the stern. Export Tanker Masters must ensure that no leakage occurs from stern seal arrangements.

If the leakage of oil is due to equipment failure:

- Repairs and tests must be carried out.
- Equipment must prove to be operational before loading can resume.

After the incident, a joint investigation of the incident and a survey of the Export Tanker by the Export Tanker Master, the Mooring Master, and other Yoho FSO Facility personnel may be conducted.



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### 3.3 Export Tanker Safety and Pollution Mitigation Checklist Operational Requirement

The Yoho FSO Facility Mooring Master and the Export Tanker Officer in Charge (OIC) of cargo operations must complete the Export Tanker Safety and Pollution Mitigation Checklist before cargo operations can commence.

#### 3.3.1 Export Tanker Safety Checklist (Also placed in back folder for copy distribution)

##### Normal Operations

-This checklist represents the main device of the Yoho FSO Facility for ensuring safety and pollution-free operations. The letters M, R, A, and P in the column labeled Code indicate the following:

M Requires monitoring throughout the transfer operation.

R Indicates items to be re-checked at intervals not exceeding that agreed upon in the declaration.

A

Any procedures and agreements should be in writing in the remark column of this Checklist or other mutually

acceptable form. In either case the signature of both parties is required.

P

In the case of a negative answer, the operation should not be carried out without the permission of the Yoho FSO Facility.

##### Item Export FSO

Tanker Facility Code\* Remarks

1 Is the ship securely moored? M

2 Are emergency towing wires correctly positioned? R

3 Is the Export Tanker safely accessible? M

4 Is the Export Tanker ready to move under its own power? PR

5

Is there an effective deck watch in attendance on board with adequate supervision?

MR

6

Is the agreed Export Tanker to Yoho FSO Facility and ship -to-ship communication system operative?

MA



7 Has the emergency signal to Yoho FSO Facility been explained and understood?

A

8 Are the procedures for cargo handling information and ballast handling agreed upon?

AR

9 Are hazards associated with toxic substances in the cargo being handled, identified, and understood?

10 Has the Export Cargo Emergency Stop been agreed upon? A

11

Are fire hoses and fire fighting equipment on board the Export Tanker positioned and ready for immediate use?

R

12 Are cargo hoses properly rigged for the service intended?

13

Are Export Tanker scuppers effectively plugged and dri trays in position?

RM

14

Are unused cargo and bunker connections properly secured with blank flanges fully bolted?

### 3.0 MOORING/SAFETY & POLLUTION

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be used Export Tanker to



## MOORING/SAFETY & POLLUTION

### 3.3.1 Export Tanker Safety and Pollution Mitigation Checklist, continued

#### Item Export FSO

#### Tanker Facility Code\* Remarks

15

Are sea and overboard discharge valves closed and visibly secured when not in use?

16 Are all cargo and bunker tank lids closed?

17 Is the agreed tank venting system being used? AR

18

Is the operation of the pressure valves (PV) or high velocity vents verified by using the checklift facility where fitted?

19 Are hand torches of an approved type?

20 Are portable VHF/UHF transceivers of an approved type?

21

Are the Export Tanker's main radio transmitter aerials earthed and radars switched off?

Note: Radars may be required at the Mooring Masters discretion for weather monitoring.

R

22

Are electric cables to portable electrical equipment disconnected from power?

R

23

Are all external doors and ports leading to the accommodation closed?

MR

24 Are window-type air conditioning units disconnected?

25

Are air conditioning intakes, which may permit the entry of cargo vapors, closed?

R

26

Are the requirements for use of galley equipment and cooking appliances being observed?

R

27 Are smoking regulations being observed? MR

28 Are naked light regulations being observed? MR

29 Is there provision for an emergency escape?

30

Are sufficient personnel on board to deal with an emergency?

R

31

Will sufficient personnel remain on board to deal with an emergency throughout the Export Tanker's stay at the Yoho FSO Facility?

32

Are measures been taken to ensure sufficient pump room ventilation?

MR

33

Have requirements for closed loading operations been agreed upon? Is the Export Tanker capable of closed loading?

MR

34

Are Export Tanker fire control plans located externally? If so, state location.

35

Is adequate deck illumination provided for Export Tanker operations conducted between sunset and sunrise?

36

Is an all-round red light or the International Code flag "B" exhibited?

37

Will repair work be carried out while the Export Tanker is secured to the Yoho FSO Facility?

38

Will a watch be maintained for movement of hold-back tugs, workboats, and other craft?

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### 3.3.1 Export Tanker Safety and Pollution Mitigation Checklist, continued

Item Export FSO

Tanker Facility Code\* Remarks

39 Is it been confirmed that swimming in the sea is not permitted?

40 Is it confirmed that fishing is not permitted?

41 Is Export Tanker IGS (Inert Gas System) fully operational?

42 Are Export Tanker deck seals in good working order? R

43 Are Export Tanker liquid levels in P/V breakers correct? R

44

If in operation, what is the perecnt of Export Tanker Oxygen at plant production?

45

Are all Export Tanker cargo tank atmospheres at positive pressure with an oxygen content of 8% or less?

P

46

Are all Export Tanker individual tank inert gas and vent valves (if fitted) correctly set and locked?

R

### 3.3.2 Declaration

The following responsible officers and representatives jointly checked (where appropriate) the items on the relevant checklists, and satisfied themselves that the entries made are correct to the best of their knowledge and that the necessary repetitive checks were carried out as necessary.

Yoho FSO Facility Export Tanker Receiver Date and Time Completed

Signature Position Signature Rank/Position

Condition check logs: Log of repeated checks to ensure all conditions of the Export Tanker and the Yoho FSO Facility Safety Checklist are maintained are listed below.

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments



3.0 MOORING/SAFETY & POLLUTION  
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## MOORING/SAFETY & POLLUTION

### 3.3.3 Export Tanker Safety Requirements

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### 3.3.3 Export Tanker Safety Requirements

For the quick reference sheets shown below, please refer to the back of this manual.

## 3.0 MOORING/SAFETY & POLLUTION

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#### 4.0 OPERATIONS

This chapter contains the following information:

- Pre-Loading
- Operating Parameters
- Hydro-Meteorological Hazard Warnings
- Export Cargo Emergency Stop
- Loading
- During the Load
- Ballast Operations
- Cargo Documentation



## OPERATIONS

### 4.1 Pre-Loading Preloading Conference

Before the start of loading operations, the Mooring Master, FSO Supervisor, Export Tanker Master, and other key personnel conduct a preload conference. The conference includes discussion and agreement of a number of items and procedures to follow throughout the cargo loading operations.

The conference also includes a discussion of procedures relating to any ballasting or deballasting operations.

### Export Tanker Safety And Pollution Mitigation Checklist

## 4.0 OPERATIONS

**! IMPORTANT:** Any issues raised by completion of the Export Tanker Safety and Pollution Mitigation Checklist must be discussed and a resolution agreed upon between the Mooring Master and Export Tanker OIC.

### Cargo Quantity and Specification

The Mooring Master's responsibilities include:

- Comparing the Export Tanker cargo requirement with the nominated cargo quantity.
- Advising the Export Tanker OIC of the expected cargo specification—approximate cargo density (American Petroleum Institute [API]), loading temperature, and any known or anticipated amounts of water in the cargo.

Yoho FSO Facility



## Cargo Export Plan

The Mooring Master informs the Export Tanker OIC of the following:

- Plans or requests that affect Export Tanker loading
- Communications procedures including confirmation of the verbal and sound signal for emergency stop
- Maximum loading rates available
- Maximum pressure available at the manifold connection
- Standby time for normal pump stop or slow down
- Communications for cargo export operations including Export Cargo Emergency Stop procedures
- Any other specific requirements

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## OPERATIONS

### 4.1 Pre-Loading

#### Export Tanker Loading Plan

#### Loading Rates

The OIC should inform the Mooring Master of the following situations:

- Plans or requests that affect Export Tanker loading
- Maximum allowable:
  - Loading and topping off rates
  - Line pressure during loading
- Quantity, quality, and disposition of:
  - Ballast
  - Slops
- Quality of inert gas and tank atmosphere
- Arrival and departure:
  - Revised deadweight and displacement
  - Fuel and water
- Details of any equipment deficiencies that may affect the Export Tanker operations or performance
- If the vessel is part loaded:
  - Cargo grade
  - Volumes
  - Stowage

Loading rates Loading rates are set by the following procedure:

1. The Mooring Master advises the OIC of the maximum loading rate available.
2. The Yoho FSO Facility, after consultation with the Mooring Master, requests a loading rate above 40,000 barrels per hour (bbls/hr) that is mutually agreed between the Export Tanker OIC and the Yoho FSO Facility CCR.
3. If the Export Tanker cannot accept a loading rate



above 40,000 bbls/hr,  
capacity of the floating storage and offloading unit  
(FSO), the vessel would be unacceptable at the  
Yoho FSO Facility. The Mooring Master may then  
take actions as defined in this manual to deem the  
Export Tanker unacceptable to operate at the Yoho  
FSO Facility.

regardless of the pumping



#### 4.1 Pre-Loading Cargo Information

Prior to the start of cargo operations the Mooring Master provides specific cargo information as indicated in the table below.

##### Term Description

Technical Name Yoho Crude

Code: PIN Product Identification Number (where applicable).

Code: UN United Nation number.

##### Flashpoint

Displayed in °C (where applicable).

For this guideline, two broad categories

of flammable liquids are defined (using the closed cup testing method):

- Non-volatile flammable liquids with a flashpoint of 60°C or above
- Volatile flammable liquids with a flashpoint below 60°C.

True Vapor Pressure True Vapor Pressure of the cargo, if required.

Precautions Precautions such as H<sub>2</sub>S content.

##### Material Safety

Data Sheet A Material Safety Data Sheet will be provided to the Export Tanker

Temperature Loading temperature.

Maximum pressure The maximum allowable pressure in the hoses.

Limitations Any other limitations, which may influence transfer operations.

#### 4.0 OPERATIONS

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## OPERATIONS

### 4.2 Operating Parameters General Parameters

The following table shows general Export Tanker operating parameter information. In the event that a parameter is exceeded, the Mooring Master decides whether to start, continue, or abort an operation.

This information is provided for guidance only. It is subject to change and is subject to the judgment and decision of the Yoho FSO Facility Mooring Master.

Item	Parameter	Comment
	Sustained maximum wind speed	25 knots
	Sustained maximum sea and swell height	3 meters
	Visibility	1/4 miles
		One mile
	Hawser tension	No more than 120 tons
	Export Tanker deadweight tons	Maximum 310,000 tons
	Export Tanker deadweight tons	Maximum 320,000 tons
		Export Tanker must never be < 30% of Summer Dwt
	Maximum Draft allowed	25 meters
	Maximum trim	Not greater than 0.015 length. Propeller to remain immersed at all times.
	Hose lifting equipment	15 tons This is minimum safe working load (SWL)
	Hose connection	2 x 16 in (ANSI 150)
		• Manifold as per Oil Companies
	International Forum recommendations	• Hoses are connected to port side manifold
	Bow chain stoppers	



Chain diameter 76 mm

Minimum 200 ton SWL

- Per OCIMF recommendations
- Must have two
- The Yoho FSO Facility has the ability to add 54 mm chains for smaller vessels

Poop Deck Bits SWL Suitable SWL Min 120 ton SWL.

Cargo tanks atmosphere Inserted to less than 8% O2 Before mooring operations start

Cargo tank H2S content 10 ppm or below Before mooring operations start

Minimum Bulk Loading rate 40,000 bbls/hour

Maximum loading rate 50,000 bbls/hour

Normal Yoho FSO Facility

notice required for stop loading 10 minutes For normal operations

Time required to stop cargo

after Cargo Export

Emergency Stop demand

1 minute For Emergency Cargo Stop



### 4.3 Hydro-Meteorological Hazard Warnings Threats to Operation

The Mooring Master continuously assesses hydrometeorological conditions and makes decisions regarding the start, continuation, or cessation of operations. Such decisions are made in full consultation of the Export Tanker Master who retains the right to order a cessation of any operation. The following warnings indicate conditions that pose regular threats to operations. Readiness to take mitigating action must be maintained at all times. The Mooring Master or Export Tanker Master may at any time decide to take such action as necessary to protect the Yoho FSO Facility and the Export Tanker during any operation. The Mooring Master or Export Tanker Master may request a stop of cargo and a disconnection of export tanker hoses and hawser due to any change of weather or operational parameter at their discretion.

**! WARNING:** Line squalls can occur at any time of the year but are more likely to occur during the rainy season between April and September. Reduced visibility and torrential rain often accompany these squalls. The wind can increase to 60+ knots and blow from any direction. As the squall approaches and passes, wind shift can be sudden.

**! WARNING:** During periods of local squalls and at any other time, a high incidence of electrical storms can occur. Lightning often strikes the water surface at or near the Export Tanker.

**! WARNING:** Local direction and rate of current is often variable and is not predictable. Sudden changes of current direction and rate may be experienced at any time. This may delay mooring and unmooring operations.



! WARNING: Rip tides (soliton occur in this area of operations. On detection, cargo operations may be suspended and action taken to disconnect hoses and move the Export Tanker clear of the Yoho FSO Facility until the phenomena has subsided.

waves) occasionally

#### 4.0 OPERATIONS

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## OPERATIONS

### 4.3 Hydro-Meteorological Hazard Warnings, continued High Hawser Loads

#### Tandem Mooring Sectors

If due to conditions, including deteriorating weather, squall events, high swells, or other conditions such that the vessel experiences high hawser loads (in excess of 125 tons), the transfer operations must be suspended and preparations made to leave the berth including:

- Ship's engines placed on stand-by
- Bridge manned and steering gear on
- Export Tanker oriented to best heading by use of tugs
- Hoses made ready for disconnection

If conditions continue or are expected to worsen and a second pull in excess of 125 tons occurs, the Export Tanker must vacate the berth immediately.

45°

45°

10°

10°

The above diagram indicates the sectors in which the Export Tanker should remain while station keeping.

Position outside the green sector prompts immediate

halting of cargo transfer and readiness for hose disconnection and departure if position is unable to be safely regained or entry is made to the red zone.

When deciding to halt transfer and prepare for departure, the rate of heading change and the ability to control the rate of turn must be taken into account.



#### 4.4 Export Cargo Emergency Stop

##### Introduction

This section provides Export Tanker Masters with guidance to the MPN Yoho FSO Facility Export Cargo Emergency Stop procedures and expectations.

Information on action taken at the Yoho FSO Facility is also included to provide Export Tanker Masters a complete picture of the chain of events that Export Cargo Emergency

#### 4.0 OPERATIONS

Stop initiation causes.

##### General

##### Export Tanker Initiation of an Export Tanker Emergency Stop

Emergency Stop of Export Tanker operations can be ordered by the Yoho FSO Facility FSO Supervisor, Mooring Master, Mooring Masters Assistants, Yoho FSO Facility Loading Operator or, Export Tanker Master, Chief Officer, Duty Cargo Officer of Export Tanker, or Master or crew of the Work Boat or hold back tug.

Export Cargo Emergency Stop procedures must be initiated automatically if an emergency alarm is sounded.

Reference: Section 1.1.2,

##### "Other Communications Requirements"

The Mooring Master may direct the Yoho FSO Facility to stop cargo operations and to prepare for emergency hose and hawser release.



The aim of the Export Cargo to prevent or minimize damage to personnel, property, and the environment.

Emergency Stop system is

This information is provided for guidance only, is subject to change, and is subject to the judgment and decision of the Mooring Master.

Any emergency situation such as fire, explosion, significant leakage or spillage of oil, failure of strategic equipment, or other event likely to endanger the Yoho FSO Facility, an Export Tanker or other vessel, or their equipment or personnel, is justification for ordering an Export Cargo Emergency Stop.

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## OPERATIONS

### 4.4.1 Export Cargo Emergency Stop Procedure

The following table shows action to take after initiation of an Export Cargo Emergency Stop demand.

Initiated from: Action requiredby: Action required  
Export Tanker

If for any reason the Export Tanker requires an Export Cargo Emergency Stop,

1. The Yoho FSO Facility will be called on the agreed voice communication channel with the following message:

"YOHO FSO FACILITY CONTROL ROOM"  
"THIS IS EXPORT TANKER {NAME}"  
"STOP. STOP. STOP."

Onboard the  
Export Tanker  
Yoho FSO  
Facility

2. The Yoho FSO Facility will respond with:  
"STOP. STOP. STOP."

The Yoho FSO Facility must operate the cargo pump Export Cargo Emergency Stop procedure and advise the Export Tanker when the pumps are stopped.

Export Tanker

**! IMPORTANT:** If radio communication fails, continuous sounding of the Export Tankers whistle will initiate an Export Cargo Emergency Stop.

YOHO FSO  
FACILITY or  
Export Tanker  
Export Tanker  
,

When an Export Cargo Emergency Stop demand is initiated by the Yoho FSO Facility or the Export Tanker, the Export Tanker must:

1 Close the following valves:



-As soon as all liquid flow has transfer manifold valves.

ceased, cargo

-Cargo hose butterfly valves.

2 Order the following groups to action:

-Fire control and other emergency teams to stations.

-Order hold back tugs and work boat to standby for action, per Mooring Master.

3 Prepare to disconnect and blank off cargo hoses.

4 Order the following groups to standby:

-Engine room, to receive status updates.

-Bow mooring crew, for mooring hawser release.

5 Continually monitor the emergency channel of communications.

6 Advise Yoho FSO Facility if any outside assistance is required.

#### 4.4.1 Export Cargo Emergency Stop Procedure

Initiated from: Action required by: Action required

Export Tanker Export Tanker

If the Export Tanker initiated the Export Cargo Emergency Stop demand, the following additional actions should be carried out:

- Ensure that all cargo transfer operations are stopped.
- Advise Yoho FSO Facility of status and cause of the emergency.
- Advise Yoho FSO Facility whether it intends to disconnect cargo transfer hose and moorings for emergency departure.

Yoho FSO Facility Yoho FSO

Facility

CCR Operator

When an Export Cargo Emergency Stop demand is initiated by Marine Terminal, the Marine Terminal CCR Operator will:

- Secure cargo pumps
- Close cargo transfer discharge valves
- Order fire and other emergency teams to stations
- Advise shore Production Supervisors that an emergency exists which may require shut down of production operations
- Order mooring crew to stations on standby status

Export Tanker Yoho FSO

Facility

If an Export Cargo Emergency Stop demand was initiated on the Export Tanker, the Yoho FSO Facility must continually monitor radio traffic from the Export Tanker to determine further course of action.

Yoho FSO Facility Yoho FSO

Facility

If an Export Cargo Emergency Stop demand was initiated at the Yoho FSO Facility, the Yoho FSO Facility must advise the Export Tanker with status of the emergency and any recommended actions.



## 4.0 OPERATIONS



## OPERATIONS

### 4.4.2 After Export Cargo Emergency Stop Situation Secure

#### Emergency Unmooring

When the emergency situation is secure, the initiator of the Export Cargo Emergency Stop should notify all stations accordingly and operations must be resumed only when safe.

Details of the occurrence are to be entered on the Export Cargo Emergency Stop report form provided in Appendix B, and the cause is to be investigated.

Crew response and performance should be evaluated to determine the necessity for additional training, drills, or equipment.

**! IMPORTANT:** Operations are not to resume until it is determined that it is safe to do so. Operations can resume only with FSO Supervisor authorization and Mooring Master and Export Tanker Master agreement as shown on the Export Cargo Emergency Stop Form.

In the event of the Export Tanker moving into a dangerous position relative to the FSO, due to whatever cause, or in response to an emergency situation, the Mooring Master can request that the Yoho FSO Facility stop cargo operations and ask the Export Tanker Master to prepare the Export Tanker to leave the mooring. An emergency disconnection of the Export Tanker from the Yoho FSO Facility must be carried out if considered necessary.



The primary aim of the ensure, if possible, that if the Export Tanker must vacate the berth in an emergency, the departure is as controlled as possible as for a normal departure.

Mooring Master must be to

In the event that a controlled disconnect and release of the moorings is not possible, the Export Tanker Master should be guided by the Mooring Master's advice.

Note: The Mooring Master must have available a set of Emergency Procedure Action Checklists that detail actions, procedures, and communications relating to emergencies concerning the Export Tanker.

Note: In the event of an emergency, the primary point of contact is the Yoho FSO Facility Central Control Room.



#### 4.5 Loading Requirements

On completion of the preload conference, the Mooring Master and Export Tanker OIC can agree to commence loading operations. The information below describes requirements for the

#### 4.0 OPERATIONS start of loading operations.

#### Hoses Connected and Manifold Operation

#### Start Loading

The Export Tanker OIC indicates readiness to commence loading when satisfied with the following operations:

- Cargo hoses are correctly connected.
  - Cargo system is ready for loading operations.
- On receiving instructions from the Mooring Master, the manifold valves can be opened.
- Once fully open, the Export Tanker cargo manifold valves:
    - Must remain open until the Mooring Master gives instructions to close them.
    - Should be fitted with a restraining device to prevent them from closing accidentally.
  - During commencement of loading and until the full loading rate is achieved, the Mooring Master or his or her Assistant, accompanied by an Export Tanker officer, remains at the manifold.
  - When the Export Tanker confirms that its lines, tank valves, and manifold valves are open, the Mooring Master requests that the Yoho FSO Facility Central Control Room (CCR) start the loading pumps at the



mutually agreed starting rate

(slow rate).

- The Export Tanker observes the flow of oil into the designated start tanks, checks that the oil is flowing into the correct tanks, and checks that all valves, venting, and other systems are correctly aligned and that there is no leakage.

- During the period of slow loading and building up to full rate, the area around the floating hose must be under constant observation.

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## OPERATIONS

### 4.5 Loading

- Once all the systems are checked and verified and there are no reports of sea pollution, extra tanks are opened and the rate increased to the agreed maximum.
- The Mooring Master instructs the Yoho FSO Facility CCR to increase the loading rate to the agreed maximum only by request of the Export Tanker OIC.
- The Mooring Master or AMM and Export Tanker Officer on deck must make a further over side visual check around the Export Tanker, all floating hose strings, and a check around the entire visible sea surface area for any sign of oil leakage.

### 4.6 During the Loading

After loading commences, vigilance must be maintained by all concerned with the loading operation. Prestart checks must be repeated and safe pollution-free conditions maintained.

During the load many other operations may start and stop. The information below describes Yoho FSO Facility requirements that must be met during the load. The requirements are not exhaustive, and if the Export Tanker OIC or Cargo Officer requires further clarification, the Mooring Master or AMM must be consulted immediately.

The Export Tanker Cargo Officer can ask the Mooring Master or his or her Assistant to request a reduction in loading rate if required before topping off a tank or at any time during the loading operations. The agreed normal standby notice period for the Yoho FSO Facility must be observed for normal rate reduction requests. Observance of this requirement prevents the Yoho FSO Facility from having to implement a Cargo Emergency Stop.

The Export Tanker CCR is to be manned at all times and under the control of an Export Tanker Officer. An efficient deck watch is to be maintained so that the



mooring assembly, the loading  
the manifold are under constant observation.

hose, tank deck, and

#### 4.6 During the Loading Valve Closure During Loading and Pressure Surges

#### Comparison of Hourly Loading Rates

The operation of valves on the Export Tanker is carried out with due regard to the effect upon the flow and loading rate.

- It is extremely dangerous to close any valves against incoming cargo as this can create excessive pressure or surges that may damage hoses, piping, or other facilities and cause pollution. Caution should be taken by the Export Tanker OIC when closing valves to ensure other valves are open.
- Export Tanker valves that reduce the flow rate must not be operated without prior consultation with the Mooring Master and without notifying the Yoho FSO Facility.
- Export Tanker Masters are held responsible for any damage or pollution resulting from failure to observe these precautions.

#### 4.0 OPERATIONS

- The Yoho FSO Facility, the Export Tanker CCR, and the Mooring Master or Assistants confer on an hourly basis and note the following:
  - Cargo loading rates
  - Quantities transferred
  - Balance of the cargo required
  - Estimated time of completion
  - Any other relevant matters
- Careful note should be taken of these comparisons as the compared figures can indicate a problem or miscalculation.

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## OPERATIONS

### 4.6 During the Loading Completion of Loading

- At least 30 minutes before the loading of cargo is completed, the Mooring Master is advised and told the amount of cargo required to complete loading.
- The Export Tanker advises the Mooring Master when to stop cargo loading unless the maximum nominated quantity has been delivered by the meter, at which time the Yoho FSO Facility will stop the cargo transfer.
- When the Yoho FSO Facility CCR confirms that the loading pumps are stopped:
  - Export Tanker valves and lines to the last tank being loaded must be left open.

-The Mooring Master will advise the Export tanker OIC when the manifold valves can be shut.

-When the manifold valves are closed, the Export tanker OIC can instruct other Export Tanker valves to be closed.

-The loading hose-end butterfly valves can be shut.

**! IMPORTANT:** The Export Tanker Master is responsible for:



- Ensuring that the nominated cargo is loaded.
- That the Export Tanker is not overloaded.
- Any oil spills caused by failure to stop at the required quantity are cleaned up.

quantity of

#### 4.6 During the Loading Cargo Measurement and Sampling

#### 4.0 OPERATIONS

- The Export Tanker Crew, an Independent Cargo Surveyor, and a Government Surveyor perform cargo measurement, measurement verification, and sampling.
- Any delay due to the independent surveyor's survey does not count as laytime.
- The Export Tanker figures are to be provided to the Mooring Master as soon as possible after the completion of loading:
  - If the Export Tanker and Yoho FSO Facilityy Cargo figures differ by greater than 0.25%, the Export Tanker may be requested to regauge and recalculate the cargo figures.
  - The Mooring Master does not witness or check these figures unless there is no independent surveyor available.
  - If after both the Export Tanker and Yoho FSO Facility have rechecked their figures and the difference still exists, a Letter of Protest is issued.

The carrying out of tank inspections, gauging, and taking water dips and temperatures must be performed in compliance with the recommendations of ISGOTT.

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## OPERATIONS

### 4.7 Ballast Operations Requirements

Export Tanker Masters should note that there are no dirty ballast facilities at the Yoho FSO Facility.

The information below provides Export Tanker Masters with the Yoho FSO Facility requirements for Export Tanker ballast operations.

#### Dirty Ballast

#### Segregated Ballast Tank (SBT) Operations

- Export Tankers must arrive with clean or segregated ballast suitable for discharging directly to sea in accordance with standards set by International Conventions.
  - Export Tankers arriving with ballast that is unsuitable for discharge to sea must be rejected for loading.
  - Any Export Tanker rejected because of contaminated ballast or sea pollution automatically invalidates its Notice of Readiness and loses any priority of loading.
  - Export Tankers discharging contaminated ballast overboard are subject to the antipollution laws of Nigeria.
  - Any ballast discharge to sea must have an oil content not greater than 15 PPM.
- ! WARNING:** Export Tanker Masters are warned that penalties for pollution are severe.

When the Export Tanker is loading, SBT operations may commence and be carried out concurrently with



loading. The SBT ballast must  
contamination prior to discharge. Oil discharge monitoring  
equipment should be in use where fitted.

be checked for

## 4.7 Ballast Operations

### Cargo Tank Ballast

## 4.0 OPERATIONS

- The Yoho FSO Facility does not normally permit simultaneous cargo loading and deballasting of Export Tankers operating with clean ballast.
- If an Export Tanker arrives with clean ballast that is not part of a segregated ballast system and wishes to discharge such ballast to the sea, the following requirements and conditions must be met:
  - Permission for this type of operation may be granted in exceptional circumstances, but only at the Mooring Master's discretion and after a review of the Export Tanker operating procedures.
  - The Export Tanker Master must confirm that there is a full segregation between the ballast and cargo system at all times. Segregation must include a minimum of two valves.
    - Normal procedure for the Export Tanker is to:
      1. Partly load the cargo.
      2. Stop.
      3. Deballast of clean ballast in cargo tanks.
      4. Stop.
      5. Resume loading cargo.
  - Draft, trim, and deadweight must be kept within the operating and acceptance parameter requirements stated in MARPOL.
  - The propeller must be fully submerged at all times.
  - The Export Tanker must be operating with dedicated clean ballast tanks in accordance with all provisions of the MARPOL Convention and amendments.
  - The discharge of ballast from cargo tanks must be carried out in daylight unless there is adequate lighting to illuminate the sea area near the ballast discharge point so that the quality of the ballast being discharged to the sea can be constantly monitored. The Mooring Master's decision as to whether there is sufficient lighting is final.



- Oil discharge monitoring equipment (ODME) to provide

parts per million (ppm) readout (maximum instantaneous allowance 15 ppm)

- After completion of deballasting operations, the Mooring Master or independent surveyor must witness the closing and sealing of the Pump Room Cargo System sea suction and over boards.

- The quantity of slops is to be resurveyed and witnessed by the independent cargo surveyor and government representative.

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## OPERATIONS

### 4.8 Cargo Documentation

#### Introduction

This section provides Export Tanker Masters with guidance to the Yoho FSO Facility requirements relating to cargo documentation and its completion.

From arrival of the Export Tanker at the Yoho FSO Facility Area, records are generated for final document processing before the Export Tanker leaves the Yoho FSO Facility Area. The Mooring Master must advise the Export Tanker Master when documents are completed satisfactorily.

Note: The documentation requirements described in this chapter are only for the Yoho FSO Facility. The Export Tanker Owners or Charterers may have additional or different specific requirements regarding documentation. These are not covered in this section.

#### 4.8.1 General Documentation

##### Documentation General

- Completed copies of the following documents comprise part of the Yoho FSO Facility document set and copies will be retained by the Mooring Master:
  - Notice Of Readiness
  
  - Export Tanker Safety And Pollution Mitigation Checklist
  - Export Cargo Emergency Stop Report
  - Cargo Information And Requirements Form
  - Pre-Mooring Checklist
  - Any Notes of Protest
  - Cargo documents in the following list
- The Mooring Master will prepare cargo documentation for signing. After the documents have been produced, signed, and stamped appropriately by the Export Tanker Master and the Mooring Master, sufficient photocopies will be produced for distribution to the Export Tanker Master, Surveyors, Customs, and the Agent.



#### 4.8.2 Documents, Reports, Samples Cargo Documentation

### 4.0 OPERATIONS

#### The Mooring Master or Yoho FSO Facility

Representative must prepare cargo documentation to include the following documents in compliance with the documentation instructions provided by the shipper:

- Bills of Lading
- Certificate of Origin
- Quality and Quantity Certificate
- Timesheet
- Cargo and Ullage Report
- Receipt for Samples of Crude
- Receipt for Documents
- List detailing the distribution of documents
- Certificate of Inspection of Tanks (if performed)
- Manifest
- Laboratory analysis report of in line samples taken from the Yoho FSO Facility export lines

Documents normally must be prepared and presented to the Export Tanker Master within two hours after hose disconnection.

#### Cargo/Ullage Report

The Yoho FSO Facility and Export Tanker must produce for the loading operation Ullage Reports containing gauging details for each cargo tank including ullages, temperatures, on-board quantity (OBQ), and free water quantities both before and after cargo transfer operations signed by the Export Tanker OIC and an independent surveyor.

Copies of the Export Tanker Ullage Reports and the preloading OBQ reports form part of the cargo documentation and must be given to the Mooring Master.



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## OPERATIONS

### 4.8.2 Documents, Reports, Samples

#### Cargo Samples

### 4.8.3 Load Figures Quantities Required

On completion of loading, cargo samples must be distributed as per the charter party agreement.

The Yoho FSO Facility must send composite cargo samples in sealed cans to the Export Tanker for delivery to the consignee.

The independent surveyor must obtain the composite cargo samples in sealed cans from the Export Tanker. The samples will be retained as required.

An independent surveyor (or the Mooring Master if a surveyor is not present) carries out the witnessing of the drawing, bottling, and sealing of samples.

Additional samples may be required at receiver's request.

The Mooring Master will require the following Export Tanker cargo loaded figures:

- Gross Barrels
- Net Barrels
- Gross Metric Tons
- Net Metric Tons
- Gross Long Tons
- Net Long Tons
- Increase in free water found in tanks loaded at this Terminal



- Bill of Lading figures must be quantities derived from the Yoho FSO Facility meter system or secondary system.
- The Export Tanker and Yoho FSO Facility figures must be calculated and compared with the meter.
- The normal expected tolerance is 0.25% Discrepancies greater than 0.25% between Export Tanker net cargo figure loaded onboard corrected for experience factor and Bill of Lading gross figure must be investigated and may require a regauge operation to be conducted to establish the cause of the difference.

Bill of Landing Figures

calculated based on the

#### 4.8.4 Additional Duties

##### Mooring Master's Additional Responsibilities for Documentation

#### 4.0 OPERATIONS

- In the absence of a third-party independent cargo surveyor onboard the Export Tanker, the Mooring Master or Assistants must witness the taking of ullages, temperatures, and water dips of the cargo tanks onboard the Export Tanker prior to and after cargo loading and deballasting operations. These measurements are to be recorded on a Ullage Report and must be included with the cargo documentation.
- If the Ullage Reports from the Yoho FSO Facility are not available before the Export Tanker departs from the Yoho FSO Facility, the Mooring Master must transmit the reports by fax or e-mail to the Export Tanker. Notes of Protest, if any, should be handed to the Mooring Master or Yoho FSO Facility Representative. The Mooring Master or Yoho FSO Facility Representative is not authorized to accept such letters and can only endorse a Notes of Protest with the words "acknowledge receipt without prejudice." The Mooring Master's signature only confirms receipt and does not confirm any agreement with text contained within Notes of Protest.

#### Notes of Protest



## 5.0 UNMOORING/DEPARTURE

This chapter contains the following information:

- Hose Disconnection



## UNMOORING/DEPARTURE

### 5.1 Hose Disconnection Hose Disconnection

#### 5.1.1 Unmooring Prior to unmooring

The following list provides Export Tanker Masters with the hose disconnection requirements for departure. When loading is complete, the Mooring Master or his or her Assistant:

- Coordinates, supervises, and witnesses the following-operations:
  - Draining
  - Valve closures
  - Final hose disconnection
- Advises the Export Tanker officer of the need to supervise the crew in disconnecting the loading hose. Before unmooring, the following preparations must be made:
  - Export Tanker Master must confirm that Export Tanker is ready in all respects to leave the berth.
  - All propulsion, steering and control systems, winches, and windlasses are tested operational and have full power available.
  - The manifolds must be securely blanked.
  - Crew must be standing by on the bow with an Export Tanker Officer ready to unmoor. The AMM normally coordinates and advises unmooring operation on the bow.
  - Measurements of the Export Tanker and Yoho FSO Facility tanks are completed. (This may be concluded



after unmooring)

- Satisfactory completion of Predeparture Checklist.

Reference: See Section 4.1.2,

"Predeparture Checklist."

- Unmooring commences after hose disconnection and when hoses are in the water and clear.

5.0 UNMOORING/DEPARTURE

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- Unmooring sequence
  - The export hoses must be secured clear of the operational area.
  - The hawser pickup rope slack is taken up
  - The towing power of the Hold back tug is reduced to minimum, and the weight is allowed to come off the mooring hawser. It may be necessary to use the main engine for this purpose.
  - When the weight comes off the hawsers, chafe chains must be released from bow stoppers.
  - Hawsers and pickup rope are carefully walked back together to reduce the chance of them crossing as the Export Tanker moves astern and clears the Yoho FSO Facility.
  - Care shall be taken to ensure that mooring hawser and pickup rope are not dropped over the hose string
  - Hold back tug power is increased to pull the Export Tanker clear of the Yoho FSO Facility. The Export Tanker engines may be used astern to assist.
  - Anchor securing must not be removed until the Export Tanker is well clear of the Yoho FSO Facility and when advised by the Mooring Master.
  - Distance from the Yoho FSO Facility is to be closely monitored during the entire unmooring operation and reported independently to Mooring Master and Export Tanker Master by the AMM and by the Officer on the bow respectively.
  - The Hold back tug assists the Export Tanker in maneuvering clear of the Yoho FSO Facility and Yoho FSO Facility Restricted Zone before being let go.
  - The Export Tanker must be kept underway in a safe position within the Yoho FSO Facility Restricted Area until cargo calculations and cargo documentation are completed.
  - The Export Tanker normally does not anchor while



awaiting completion of documentation, but if anchoring is necessary, the Export Tanker must leave the restricted area and proceed to the recommended anchorage area for anchoring.

— Prior to disembarking, the Mooring Master advises the Export Tanker Master on a safe departure course from the Yoho FSO Facility Restricted Area.

Unmooring

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5.1.1 Unmooring

UNMOORING/DEPARTURE



### 5.1.2 Predeparture Checklist Checklist

The Export Tanker Predeparture Checklist is included below. Upon completion, Export Tanker Masters and Mooring Masters must sign and date.

#### Item

Export Tanker

Master

Mooring Master Comments

1. Are unberthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?
2. Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, Hold back tug, work boat, and Yoho FSO Facility?
3. Is agreed language of operation, English, being spoken?
4. Is Export Tanker upright with suitable trim?
5. Is an alternate anchorage or waiting area designated and agreed upon?
6. Has Export Tanker Master shared information with other relevant parties concerning the maneuvering characteristics of the Export Tanker equipment?
7. Do both parties know how many consecutive engine starts are available?
8. Are methods of departure, passage plan, and maximum speeds reviewed and agreed upon?
9. Are all departing personnel informed of Export Tanker departure?
10. Are location and method of transferring personnel from Export Tanker agreed upon and is equipment in place?
11. Are deck winches in good order with power on?
12. Is crew ready to carry out unmooring?
13. Are fore and aft fire wires retrieved inboard?
14. Is adequate lighting available?



5.0  
5-3

UNMOORING/DEPARTURE



## EXPORT TANKER DEPARTURE

### 5.1.2 Predeparture Checklist

Item

Export Tanker

Master

Mooring Master Comments

15. Are bridge and navigation equipment and machinery operational?

16. Is main engine tested ahead and astern?

17. Is a proficient helmsman on the wheel?

18. Are all cargo tanks secured with gauging and sampling activities completed?

19. Are manifold blanks secured in place?

20. Have support work boat Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?

Masters Signature

Mooring Masters Signature

Date/Time

Motor Tanker (MT)

### 5.1.3 Departure Departure

- On completion of cargo documentation and when the Mooring Master is satisfied that the Export Tanker is clear of the Yoho FSO Facility area, the Mooring Master must arrange for the work boat to disembark the boarding party and to offload the hose connection equipment basket.
- Under certain circumstances with agreement between the Mooring Master and Export Tanker Master, the boarding party may disembark from the Export Tanker by use of a Personnel Transfer Basket using Export Tanker crane.
- Under certain circumstances, with agreement among the Mooring Master, Export Tanker Master, and helicopter operator, the boarding party may disembark by helicopter.

### 5.0 UNMOORING/DEPARTURE

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## 6.0 TERMS & CONDITIONS

This chapter contains the following information:

- Regulatory Compliance
- Export Cargo Emergency Stop Report
- Export Tanker Terms and Conditions Overview
- Towage Contract
- Masters Letter of Acknowledgement

Checklist or Form to complete:

- Emergency Stop Report (if needed)
- Masters Letter of Acknowledgement



## TERMS & CONDITIONS

### 6.1 Regulatory Compliance Introduction

This section provides Export Tanker Masters with information that assists them in complying with regulations that govern operations at the Yoho FSO Facility.

#### 6.1.1 Rejection of Vessel Export Tanker Rejection

### 6.0 TERMS & CONDITIONS Mooring Masters Continued Assessment

The Yoho FSO Facility reserves the right to decline to moor any Export Tanker even though mooring may be open to other vessels. Combinations of weather and current conditions, size, trim, and handling qualities can affect the decision to berth at the Yoho FSO Facility. Should an Export Tanker be rejected for any reason, the Mooring Master must supply Export Tanker Master and owners or charterers with written reasons for the rejection.

- The Mooring Master is authorized to confirm continued eligibility of an Export Tanker to remain at the Yoho FSO Facility.
- The right is reserved at all times to direct an Export Tanker to leave the Yoho FSO Facility Area if the Mooring Master determines that the continued presence of a vessel poses a threat to the Yoho FSO Facility, to safety, or to the environment.

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## TERMS & CONDITIONS

### 6.1.1 Rejection of Vessel Responsibility

#### Governing Law

- Export Tanker Masters of Export Tankers calling at the Yoho FSO Facility are solely responsible on behalf of the owners or charterers for the safety, navigation, and operation of their vessels.
- Nothing contained in the Yoho FSO Facility Information and Safety Regulations Manual relieves Export Tanker Masters of their responsibility from observing normal precautions to prevent:
  - Fire
  - Oil spill
  - Tank overpressurization or vacuum
  - Environmental pollution
  - Damage to the Mooring System
  - Damage to the Loading Hose System
  - Damage to the Yoho FSO Facility
- The Export Tanker Master remains at all times wholly and fully responsible for their vessel and for its officers and crew.

#### Government Officials

The Yoho FSO Facility is located within the jurisdiction of Nigeria.

- Nigeria Government officials will be included in the boarding party. These include at least one:
  - Customs Officer
  - Ministry of Mines Official



- The officials remain onboard operations.

throughout export

- The boarding party may include trainees.



## 6.0 TERMS & CONDITIONS

### Port Service

#### Anti-Pollution Regulation

The Export Tanker Owner or Operator must have arranged local agency services. Representative of the agency must board with boarding party. Yoho FSO Facility and its personnel do not perform any vessel agency functions.

- It is the responsibility of the Export Tanker Master to prevent any kind of pollution. This includes crude oil, bunkers, bilge water, dirty ballast, plastics, garbage, or any other matter that results in the pollution of sea or atmosphere. The Export Tanker Master must ensure that all applicable International Convention for Prevention of Pollution from Ships (MARPOL) and Nigerian government regulations are observed.
- Export Tankers must have in place a Shipboard Oil Pollution Emergency Plan (SOPEP) approved by the flag state and have records to substantiate that the personnel onboard received training in responding to emergency situations.

Penalties for  
pollution of the sea

Any fines imposed for such pollution are for the Export Tanker's account.

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## TERMS & CONDITIONS

### 6.1.1 Rejection of Vessel, continued International, National and COTCO Requirements

#### Marine Terminal Hours of Operations

Yoho FSO Facility operates in accordance with, but not limited to,:

- The rules, regulations, and recommendations of international maritime bodies including International Maritime Organization (IMO), MARPOL, Safety of Life at Sea Convention (SOLAS), and the Oil Companies International Forum.

- Applicable Nigerian laws and regulations including The Convention of Establishment, The Authorization of Transportation by Pipeline, and The Pipeline Law.

- Applicable classification society standards and rules.
- Recognized industry standards and recommendations.

The Yoho FSO Facility normally operates on a continuous basis.

- Export Tankers are loaded at any hour, weather and other circumstances permitting, at the full discretion of the Yoho FSO Facility Mooring Master and FSO Supervisor.

- Mooring operations normally are conducted only during daylight hours. On a case-by-case basis, night time berthing operations may be conducted at the Yoho FSO Facility. Such operations will only be conducted with the full agreement of the Export Tanker Master, Yoho FSO Facility FSO Supervisor, and Mooring Master.

- Vessels can unmoor at any time of day or night.



• Export Tankers should arrive prior to 16:00 local time (LMT), 15:00 Greenwich mean time (GMT). This ensures that mooring can be completed during daylight hours.

at the Yoho FSO Facility



## 6.0 TERMS & CONDITIONS

### Yoho FSO Facility Closure

#### Provision of Mooring Masters, pilotage

- Any decision regarding opening and closing of the Yoho FSO Facility is made solely at the discretion of the Mooring Master who provides the Export Tanker Master with a written notice of times during which the Yoho FSO Facility is closed.
- Vessels required to leave the Yoho FSO Facility area during periods of closure must keep in contact with the Yoho FSO Facility via VHF so that they are readily available when the Yoho FSO Facility reopens.
- Notices of Readiness will not be received during periods when the Yoho FSO Facility is closed. Closure could be due to adverse weather or current conditions or other operational reasons that prevent Export Tankers from mooring or remaining safely moored.
- The Yoho FSO Facility reserves the right to reject a particular Export Tanker even though the Yoho FSO Facility may be open to other Export Tankers. The justification for any such decision must be formally communicated to the Export Tanker Master.
- All berthing, mooring, and unmooring operations within the Yoho FSO Facility areas are to be conducted with a Mooring Master onboard. The Mooring Master advises the Export Tanker Master on maneuvering and on mooring and unmooring operations.
- Either or both the Mooring Master or his or her Assistant must be on duty at all times during the Export Tanker stay at the Yoho FSO Facility berth.
- The Export Tanker Master at all times remains in command of their Export Tanker and is fully responsible for the safety of life, vessel, environment, and of third-party property.



- With the Export Tanker Mooring Master's advice takes the form of direct instructions that the Export Tanker Master monitors.
- If the Export Tanker Master does not agree with a Mooring Master's directions or actions, they may question or countermand such directions or actions at any time.

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Master's agreement, the



## TERMS & CONDITIONS

6.1.1 Rejection of Vessel, continued  
Provision of Mooring  
Masters, accommodation

Independent Cargo  
Surveyors And  
Government Representatives

The Mooring Master and any Yoho FSO Facility personnel remaining on the Export Tanker during loading must be provided with food and accommodation of the standard usually provided for Export Tanker officers.

- The Export Tanker Officer in Charge (OIC) must inform any independent cargo surveyor or Nigerian Government representative of cargo plan information including stowage, preload survey requirements, and anticipated quantities.
- The OIC must ensure that surveyors and Nigerian Government representatives are properly accommodated and that all reasonable requests are honored.
- If the OIC has any doubts, or if a problem or misunderstanding occurs, the OIC must inform the Mooring Master who endeavors to resolve any situation to the satisfaction of all concerned.



## 6.0 TERMS & CONDITIONS

### Drugs and Alcohol

#### Removal of Wrecks and Obstructions

- As part of the prequalification screening requirements that allow the Export Tanker to operate at the Yoho FSO Facility, the owners or operators of the Export Tanker should have in effect a drug and alcohol abuse policy. The Owner's or Operator's drug and alcohol abuse policy must meet or exceed the standards specified in the Oil Companies International Forum Guidelines for the Control of Drugs and Alcohol Onboard Ship.
- The Master of each Export Tanker must ensure that no drugs (other than those in the medical locker) are onboard and that no alcohol is used or is available for use while the Tanker is present in the Yoho FSO Facility area.
- All personnel onboard Export Tankers located within the Yoho FSO Facility Area must comply with the Export Tanker Owners and Operators Substance Abuse and Drug and Alcohol Use Policy, a copy of which must be posted onboard.
- Export Tanker personnel are reminded that while in the Yoho FSO Facility all personnel should have a zero blood alcohol level.

MPN is empowered to act as the Export Tanker Agent for any vessel or part thereof that becomes an obstruction in any part of the Yoho FSO Facility area, or in the approaches to the Yoho FSO Facility area. In this capacity, MPN may take any steps deemed necessary to remove the obstruction without notice to the owners of the Export Tanker.



All expenses for such removal  
Export Tanker causing the obstruction or by those  
owning it at the time of the incident. MPN is entitled to  
reimbursement by them for any expenses incurred.

must be borne by the

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## TERMS & CONDITIONS

### 6.2 Emergency Stop Report Introduction

This section contains an example of the Export Cargo Emergency Stop Report form that must be completed when an export cargo emergency stop is initiated. The form must in all cases be completed by the Mooring Master and Export Tanker Master, and as appropriate by Yoho FSO Facility personnel or Export Tanker personnel.

(Also placed in back folder for copy distribution.)

6.2.1 Export Cargo Emergency Stop Report (Also placed in back folder for copy distribution)



## 6.3 Marine Terminal Terms and Conditions Overview

### Introduction

This section provides Export Tanker Masters with Terms And Conditions For The Use Of the Yoho FSO Facility.

### Disclaimer

Those consulting the Yoho FSO Facility Information and Safety Regulations Manual and Terms and Conditions of Use are advised to satisfy themselves thoroughly as to the information, procedures, and guidelines as they apply to the matters in which they are interested.

Any user of the information and rules should be aware of the potential for error in the information in view of both its scope and the passage of time. Moreover, no one should use the information contained in the MPN Yoho FSO Facility Information and Safety Regulations Manual and Terms and Conditions of Use without independent validation. Any person who uses or relies upon the information and guidelines contained herein does so at their own risk.

MPN, its affiliates, and parent companies expressly disclaim all liability or responsibility for errors, omissions, or inaccuracies, or for any misapplication or misinterpretation of any of the procedures, guidelines, or information, or any consequences thereof. No expressed or implied warranties of any type whatsoever are made with regard to the use or application of the Yoho FSO Facility Information and Safety Regulations Manual and Terms and Conditions of Use.

The Yoho FSO Facility Information and Safety Regulations Manual does not replace or modify any official publications covering the waters, areas, or subjects to which they pertain, and is provided subject to



those conditions set out in the Information and Safety Regulations Manual and Terms and Conditions of User included herein. Reference should be made to the appropriate official navigational publications and charts for purpose of obtaining navigational information.

Yoho FSO Facility

## 6.0 TERMS & CONDITIONS

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## TERMS & CONDITIONS

### 6.3 Marine Terminal Terms and Conditions Overview, continued Provision of services

#### Mooring Masters

All services, facilities and assistance provided by or on behalf of MPN, its parent companies, subsidiaries, or affiliates, or its or their servants, agents, or contractors, their parent companies, subsidiaries, or affiliates, or its or their servants, agents, or contractors whether or not any charge is made by MPN therefore, are provided subject to all applicable laws and regulations including but not limited to bylaws and harbour regulations, safety regulations, and towage conditions for the time being in force.

Services of the Mooring Master are provided on the express understanding and condition that when any Mooring Master furnished by MPN goes on board an Export Tanker for the purpose of assisting such Export Tanker, they become for such purposes the servant of the Owners or Charterers of the Export Tanker; and MPN, shall in no way be liable for any damage or personal injury including death of any nature whatsoever, incurred by any person whomsoever, in any way connected with, contributed by, or resulting from the advice or assistance given or for any action taken by such Mooring Master, whether negligent or otherwise, while on board or in the vicinity of such assisted Export Tanker.

Similarly, the services of mooring launches and mooring personnel, if any, and the furnishing of mooring lines and hose connection gear are under the supervision and control of the Mooring Master, and MPN, even if negligent, shall in no way be liable for any damage or personal injury, including death of any



nature whatsoever incurred by  
any way connected with, contributed to, or  
resulting from the performance of these additional  
services or the furnishing of equipment, whether or not  
any of such are utilized by any Export Tanker.

any person whomsoever, in

Yoho FSO Facility Personnel



## 6.0 TERMS & CONDITIONS

### Yoho FSO Facility Personnel

continued

#### MPN Property

In addition, neither MPN in whatever capacity it may be acting shall be in any way whatsoever responsible for or liable for any contribution with respect to any loss, personal injury, including death, damage, or delay, from whatsoever cause, including the negligence of MPN or its servants, coventurers, agents, contractors arising whether directly or indirectly in consequence of any assistance, advice, or instructions whatsoever given or tendered in respect of any Vessel, whether by way of Hold back tugs, pilotage, or berthing services, the provision of navigation facilities, including buoys or other channel markings, or otherwise howsoever. In all circumstances the Master of any Vessel shall remain solely responsible on behalf of their Owners for safety and proper navigation of their Vessel.

While MPN exercises due care to ensure that the mooring, premises, facilities, property, gear, craft, and equipment provided by MPN are safe and suitable for Vessels permitted or invited to use them, no guarantee, express or implied, of such safety and suitability is given by MPN that such mooring, premises, facilities, property, gear, craft, and equipment are devoid of defects or are fit for the service or use to which it is put, and every Vessel shall be and remain at the sole risk of the Owners and Master thereof; and MPN, shall not be held responsible (or liable for any contribution) with respect to any loss, personal injury including death, damage, or delays whatsoever that may be sustained whether directly or indirectly by or occur to any Vessel or to its Owners or its crew or cargo or for



any part thereof (whether such cargo is on board or in the course of loading) by whomsoever and by whatsoever cause such as loss, injury, damage, or delay is occasioned, and whether or not it is caused, occasioned, or contributed to in whole or in part to any act, neglect, omission, or default on the part of MPN, or by fault or defect in any berth, premises, facilities, property, gear, craft, or equipment of any sort of MPN.

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## TERMS & CONDITIONS

### 6.3 Marine Terminal Terms and Conditions Overview, continued Labor Disputes

#### Damage and Injury

Neither will MPN be responsible for any loss, damage, or delay directly or indirectly caused or contributed to or arising from strikes, lock-outs, or labor disputes or disturbances whether MPN is party thereto or not.

If in connection with or by reason of the use by any Vessel of any berth, or of part of the Companies premises, or of any gear or equipment provided by or on behalf of MPN, or of any craft, or of any other facilities or property, of any sort whatsoever, belonging to or provided by on behalf of MPN, any damage or injury is caused to such mooring, premises, gear or equipment, craft, or other facility or property, or any third party, or any Vessel its Owners and crew, from whatsoever cause such damage may arise, and irrespective of whether or not such damage has been caused, occasioned, or contributed to, in whole or in part, by the negligence of MPN, and irrespective of whether there has been any neglect or default on the part of the Vessel or the Owner(s), in any such event the Vessel and the Owners shall hold MPN harmless from and indemnified without limitation against all such damage and injury and against loss sustained by MPN consequent thereon.



Action, liabilities, claims,  
damages, cost, awards

and expenses

Applicable Law

The Vessel and its Owners shall hold MPN harmless from and indemnified without limitation against the following whether or not caused, contributed to, or due in

whole or in part to any act, neglect, omission, or default on the part of MPN:

- All and any action, liabilities, claims, damages, cost, awards, and expenses arising whether directly or indirectly out of any loss, damage, personal injury, including death or delay of whatsoever nature occasioned to any third party or any Vessel, its Owners and crew, including the vessel and Owners and crew, including but not limited to that caused or contributed to, whether directly or indirectly, by the Vessel or any part thereof or by any substance or material leaking or escaping therefrom or by the Master or crew or by any other servant or agent of the Owners.
- All or any damage, personal injury, including death, delay, or loss of whatsoever nature, occasioned to MPN arising out of any cause whatsoever including but not limited to that caused or contributed to, whether directly or indirectly, by the Vessel or any part thereof or by any substance or material leaking or escaping therefrom or by its Master or crew or by any other servant or agent of the Owners.

#### 6.0 TERMS & CONDITIONS

Applicable law These terms and conditions shall be construed according to the Laws of Nigeria.

Dispute Resolution



Any claims for injuries or damages or other disputes arising as a result of use of the Yoho FSO Facility or with respect to the Yoho FSO Facility Information and Safety Regulations shall be settled by arbitration in accordance with the International Chamber of Commerce (ICC) Rules in effect on the date hereof, which rules are deemed to be incorporated by reference herein. The ICC shall appoint the arbitrators. The place of arbitration shall be London, England, and the arbitration shall be conducted in the English language and shall be administered by the ICC. Related arbitration proceedings (related by common questions of law or fact) with other parties bound by the ICC Rules may be consolidated into a single arbitration proceeding.

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## TERMS & CONDITIONS

### 6.3 Marine Terminal Terms and Conditions Overview, continued Pollution

#### Parties to agreement

Vessels shall be entered under International Tanker Owners Pollution Federation Limited (ITOPF). For any oil pollution caused by the Vessel, its Master, or crew, the Vessel and its Owners shall protect, defend, indemnify, and hold harmless MPN from and against any loss, damage, liability, suit, claim, or expense arising therefrom.

It is hereby expressly agreed that no servant or agent of COTCO shall be under any liability whatsoever for any loss, damage, or delay of whatsoever kind arising or resulting directly or indirectly from any act neglect or default on its part while acting in the course of or in connection with its employment and, without prejudice to the generality of the foregoing provisions in this clause, every exemption, limitation, condition and liberty herein contained and every right, exemption from liability, defense and immunity of whatsoever nature applicable to COTCO or to which COTCO is entitled hereunder shall also be available, and shall extend to protect every such servant or agent of COTCO acting as aforesaid, and for the purpose of all the foregoing provisions of this clause COTCO is or shall be deemed to be acting as agent or trustee on behalf of and for the benefit of all persons who are or might be its servants or agents from time to time and all such persons shall to this extent be or be deemed to be parties to this agreement.



## 6.4 Towage Contract Introduction

This section provides a detailed description of the towage contract for Export Tankers when operating at the Yoho FSO Facility.

### Provision of towage to Export Tanker

#### U.K. STANDARD CONDITIONS FOR TOWAGE AND OTHER SERVICES (Revised 1986)

1.

(a) The agreement between the Tug owner and the Hirer is and shall at all times be subject to and include each and all of the conditions hereinafter set out.

(b) for the purposes of these conditions.

(i) "towing" is any operation in connection with the holding, pushing, pulling, moving, escorting, or guiding of or standing by the Hirer's vessel, and the expressions "to tow," "being towed," and "towage" shall be defined likewise.

(ii) "vessel" shall include any vessel, craft, or object of whatsoever nature (whether or not coming within the usual meaning of the word "vessel") which the Tug owner agrees to tow or to which the Tug owner agrees at the request, express or implied, of the Hirer, to render any service of whatsoever nature other than towing.

(iii) "tender" shall include any vessel, craft or object of whatsoever nature which is not a tug but which is provided by the Tug owner for the performance of any towage or other service.

(iv) The expression "whilst towing" shall cover the period commencing when the tug or tender is in a position to receive orders direct from the Hirer's vessel to commence holding, pushing, pulling, moving, escorting, guiding, or standing by the vessel or to pick up ropes, wires, or lines, or when the towing line has been passed to or by the tug or tender, whichever is the sooner, and ending when the final orders from the Hirer's vessel to cease holding, pushing, pulling, moving, escorting, guiding, or standing by the vessel or to cast off ropes, wires, or lines have been carried out, or the towing line has been finally slipped, whichever is the later, and the tug or tender is safely clear of the vessel.

(v) Any service of whatsoever nature to be performed by the Tug owner other than towing shall be deemed to cover the period commencing when the tug or tender is placed physically at the disposal of the Hirer at the place designated by the Hirer, or if such be at a vessel, when the tug or tender is in a position to receive and forthwith carry out orders to come alongside and shall continue until the employment for which the tug or tender has been engaged is ended. If the service is to be ended at



or off a vessel, the period of service shall end when the tug or tender is safely clear of the vessel, or if it is ended elsewhere, then when any persons or property of whatsoever description have been landed or discharged from the tug or tender and/or the service for which the tug or tender has been required is ended.

#### 6.0 TERMS & CONDITIONS

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## TERMS & CONDITIONS

### 6.4 Towage Contract, continued

(vi) The word "tug" shall include "tugs," the word "tender" shall include "tenders," the word "vessel" shall include "vessels," the word "Tug owner" shall include "Tug owners," and the word "Hirer" shall include "Hirers."

(vii) The expression "Tug owner" shall include any person or body (other than the Hirer or the owner of the vessel on whose behalf the Hirer contracts as provided in Clause 2 hereof) who is a party to this agreement whether or not he in fact owns any tug or tender, and the expression "other Tug owner" contained in Clause 5 hereof shall be construed likewise.

2. If at the time of making this agreement or of performing the towage or of rendering any service other than towing at the request, express or implied, of the Hirer, the Hirer is not the Owner of the vessel referred to herein as "the Hirer's vessel," the Hirer expressly represents that he is authorized to make and does make this agreement for and on behalf of the owner of the said vessel subject to each and all of these conditions and agrees that both the Hirer and the Owner are bound jointly and severally by these conditions.

3. Whilst towing or whilst at the request, express or implied, of the Hirer, rendering any service other than towing, the master and crew of the tug or tender shall be deemed to be the servants of the Hirer and under the control of the Hirer and/or his servants and/or his agents, and anyone on board the Hirer's vessel who may be employed and/or paid by the Tug owner shall likewise be deemed to be the servant of the Hirer and the Hirer shall accordingly be vicariously liable for any act or omission by any such person so deemed to be the servant of the Hirer.

4. Whilst towing or whilst at the request, either expressed or implied, of the Hirer rendering any service of whatsoever nature other than towing:

(a) The Tug owner shall not (except as provided in Clauses 4 (c) and (e) hereof) be responsible for or be liable for

(i) damage of any description done by or to the tug or tender or done by or to the Hirer's vessel, or done by or to any cargo or other thing on board or being loaded on board or intended to be loaded on board the Hirer's vessel or the tug or tender, or to or by any other object or property;

or

(ii) loss of the tug or tender or the Hirer's vessel or of any cargo or other thing on board or being loaded on board or intended to be loaded on board the Hirer's vessel or the tug or tender or any other object or property;



or

(iii) any claim by a person not a party to this agreement for loss or damage of any description whatsoever; arising from any cause whatsoever, including (without prejudice to the generality of the foregoing) negligence at any time of the Tug owner, his servants or agents, unseaworthiness, unfitness, or breakdown of the tug or tender, its machinery, boilers, towing gear, equipment, lines, ropes or wires, lack of fuel, stores, speed, or otherwise and



(b) The Hirer shall (except as provided in Clauses 4(c) and (e)) be responsible for, pay for, and indemnify the Tug owner against and in respect of any loss or damage and any claims of whatsoever nature or howsoever arising or caused, whether covered by the provisions of Clause 4(a) hereof or not, suffered by or made against the Tug owner and which shall include, without prejudice to the generality of the foregoing, any loss of or damage to the tug or tender or any property of the Tug owner even if the same arises from or is caused by the negligence of the Tug owner, his servants, or agents.

(c) The provisions of Clauses 4(a) and 4(b) hereof shall not be applicable in respect of any claims which arise in any of the following circumstances:

(i) All claims which the Hirer shall prove to have resulted directly and solely from the personal failure of the Tug owner to exercise reasonable care to make the tug or tender seaworthy for navigation at the commencement of the towing or other service. For the purpose of this Clause the Tug owner's personal responsibility for exercising reasonable care shall be construed as relating only to the person or persons

having the ultimate control and chief management of the Tug owner's business and to any servant (excluding the officers and crew of any tug or tender) to whom the Tug owner has specifically delegated the particular duty of exercising reasonable care and shall not include any other servant of the Tug owner or any agent or independent contractor employed by the Tug owner.

(ii) All claims which arise when the tug or tender, although towing or rendering some service other than towing, is not in a position of proximity or risk to or from the Hirer's vessel or any other craft attending the Hirer's vessel and is detached from and safely clear of any ropes, lines, wire cables or moorings associated with the Hirer's vessel. Provided always that, notwithstanding the foregoing, the provisions of Clauses 4(a) and 4(b) shall be fully applicable in respect of all claims which arise at any time when the tug or tender is at the request, whether expressed or implied, of the Hirer, his servants or his agents, carrying persons or property of whatsoever description (in addition to the Officers and crew and usual equipment of the tug or tender) and which are wholly or partly caused by, or arise out of the presence on board of such persons or property or which arise at any time when the tug or tender is proceeding to or from the Hirer's vessel in hazardous conditions or circumstances.

(d) Notwithstanding anything hereinbefore contained, the Tug owner shall under no circumstances whatsoever be responsible for or be liable for any loss or damage caused by or contributing to or arising out of any delay or detention of the Hirer's vessel or of the cargo on board or being loaded on board or intended to be loaded on board the Hirers' vessel or of any other object or property or of any person, or any consequence thereof, whether or not the same shall be caused or arise whilst towing or whilst at the request, either express or implied, of the Hirer rendering any service of whatsoever nature other



than towing or at any other  
during, or after the making of this  
agreement.

time whether before,

(e) Notwithstanding anything contained in Clauses 4(a) and (b) hereof, the liability of the Tug owner or death or personal injury resulting from negligence is not excluded or restricted thereby.

#### 6.0 TERMS & CONDITIONS

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## TERMS & CONDITIONS

### 6.4 Towage Contract, continued

5. The Tug owner shall at any time be entitled to substitute one or more tugs or tenders for any other tug or tender or tugs or tenders. The Tug owner shall at any time (whether before or after the making of this agreement between him and the Hirer) be entitled to contract with any other Tug owner (hereinafter referred to as "the other Tug owner") to hire the other Tug owner's tug or tender and in any such event it is hereby agreed that the Tug owner is acting (or is deemed to have acted) as the agent for the Hirer, notwithstanding that the Tug owner may in addition, if authorized whether expressly or impliedly by or on behalf of the other Tug owner, act as agent for the other Tug owner at any time and for any purpose including the making of any agreement with the Hirer. In any event should the Tug owner as agent for the Hirer contract with the other Tug owner for any purpose as aforesaid it is hereby agreed that such contract is and shall at all times be subject to the provisions of these conditions so that the other Tug owner is bound by the same and may as a principal sue the Hirer thereon and shall have the full benefit of these conditions in every respect expressed or implied herein.

6. Nothing contained in these conditions shall limit, prejudice, or preclude in any way any legal rights which the Tug owner may have against the Hirer, including but not limited to any rights which the Tug owner or his servants or agents may have to claim salvage remuneration or special compensation for any extraordinary services rendered to vessels or anything aboard vessels by any tug or tender. Furthermore, nothing contained in these conditions shall limit, prejudice, or preclude in any way any right which the Tug owner may have to limit his liability.

7. The Tug owner will not in any event be responsible or liable for the consequences of war, riots, civil commotions, acts of terrorism or sabotage, strikes, lockouts, disputes, stoppages, or labor disturbances (whether he be a party thereto or not) or anything done in contemplation or furtherance thereof or delays of any description, howsoever caused or arising, including by the negligence of the Tug owner or his servants or agents.

8. The Hirer of the tug or tender engaged subject to these conditions undertakes not to take or cause to be taken any proceedings against any servant or agent of the Tug owner or other Tug owner, whether or not the tug or tender substituted or hired or the contract or any part thereof has been sublet to the owner of the tug or tender, in respect of any negligence or breach of duty or other wrongful act on the part of such servant or agent which, but for this present provision, it would be competent for the Hirer so to do and the owners of such tug or tender shall hold this undertaking for the benefit of their servants and agents.



9.

(a) The agreement between the Tug owner and the Hirer is and shall be governed by English Law, and the Tug owner and the Hirer hereby accept, subject to the proviso contained in sub-clause (b) hereof, the exclusive jurisdiction of the English Courts (save where the registered office of the Tug owner is situated in Scotland when the agreement is and shall be governed by Scottish Law and the Tug owner and the Hirer hereby shall accept the exclusive jurisdiction of the Scottish Courts).

(b) No suit shall be brought in any jurisdiction other than that provided in sub-clause (a) hereof save that either the Tug owner or the Hirer shall have the option to bring proceedings in rem to obtain the arrest of or other similar remedy against any vessel or property owned by the other party hereto in any jurisdiction where such vessel or property may be found.



## 6.0 TERMS & CONDITIONS

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### Introduction

This section provides a detailed description of the Export Tanker Masters Letter of Acknowledgement for towage and service provided by MPN to their vessel at the MPN Yoho FSO Facility.

Please refer to the back of this manual for all forms and checklists.

### 6.5 Masters Letter of Acknowledgement



## Export Tanker Pre-Mooring Checklist

The Export Tanker Pre-Mooring Checklist is included below. Upon completion, Export Tanker Masters and Mooring Masters must sign and date.

Item Tanker

Master

MooringMaster Comments

1

Are berthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?

2

Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, hold back tug, work boat, and FSO Facility?

3 Is English, the agreed language of operation, being spoken?

4 Is Export Tanker upright with suitable trim?

5 Is an alternate anchorage designated and agreed upon?

6

Have limiting environmental criteria for the following operations been established and agreed upon?

- Approach/connect
- Cessation of cargo operations
- Disconnect.

7

Has Export Tanker Master shared information with other relevant parties concerning the maneuvering characteristics of the Export Tanker and shipboard equipment?

8 Do both parties know how many consecutive engine starts are available?

9 Are methods of approach, passage plan, maximum speeds, and mooring procedures reviewed and agreed upon?

10 Are weather forecasts obtained, and will they be updated on a regular basis during the operation?

11 Is a bridge and anchor watch established?

12 Are bow stoppers, leads, and lines inspected and satisfactory?



- 13 Are deck winches in good order with power on?
- 14 Are deck winches in good order with power on?
- 15 Is crew ready to secure hold back tug and carry out mooring?
- 16 Have fore and aft fire wires been inspected and deemed ready for deployment?
- 17 Are poop deck power, mooring lines, and chain stoppers ready?
- 18 Is manifold lifting gear suitably rigged for use and located on the port side?
- 20 Is hose securing equipment rigged at applicable manifold?
- 21 Is adequate lighting available?
- 22 Are bridge and navigation equipment and machinery operational?
- 23 Is Main Engine tested astern?
- 24 Is a proficient helmsman on the wheel?
- 25 Is at least one cargo tank checked having an acceptable O<sub>2</sub> level (<8.0%) recorded?
- 26 Has at least one cargo tank been checked having an acceptable H<sub>2</sub>S level (<10.0 PPM) recorded?
- 27 Have support vessel Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?
- 28
- Is safe working load (SWL) established for towing bitts and leads to be used? Is this information relayed to the hold back tug Master?

YOHO FSO Facility

Export Tanker Master Signature:

Mooring Master Signature:

Date and Time

Motor Tanker (MT)



## Export Tanker Safety Checklist, 1/2

This checklist represents the main device of the Yoho FSO Facility for ensuring safety and pollution-free operations. The letters M, R, A, and P in the column labeled Code indicate the following:

M Requires monitoring throughout the transfer operation.

R Indicates items to be re-checked at intervals not exceeding that agreed upon in the declaration.

A Any procedures and agreements should be in writing in the remark column of this Checklist or other mutually

acceptable form. In either case the signature of both parties is required.

P In the case of a negative answer, the operation should not be carried out without the permission of the Yoho FSO Facility.

### Item Export FSO

Tanker Facility Code\* Remarks

1 Is the ship securely moored? M

2 Are emergency towing wires correctly positioned? R

3 Is the Export Tanker safely accessible? M

4 Is the Export Tanker ready to move under its own power? PR

5

Is there an effective deck watch in attendance on board with adequate supervision?

MR

6

Is the agreed Export Tanker to Yoho FSO Facility and ship -to-ship communication system operative?

MA

7

Has the emergency signal to be used Export Tanker to Yoho FSO Facility been explained and understood?

A

8

Are the procedures for cargo handling information and ballast handling agreed upon?

AR

9

Are hazards associated with toxic substances in the cargo being handled, identified, and understood?

10 Has the Export Cargo  
agreed upon? A

Emergency Stop been

11

Are fire hoses and fire fighting equipment on board  
the Export Tanker positioned and ready for immediate use?

R

12 Are cargo hoses properly rigged for the service intended?

13

Are Export Tanker scuppers effectively plugged and dri  
trays in position?

RM

14

Are unused cargo and bunker connections properly  
secured with blank flanges fully bolted?

15 Are sea and overboard discharge valves closed and visibly  
secured when not in use?

16 Are all cargo and bunker tank lids closed?

17 Is the agreed tank venting system being used? AR

18 Is the operation of the pressure valves (PV) or high velocity  
vents verified by using the checklift facility where fitted?

19 Are hand torches of an approved type?

20 Are portable VHF/UHF transceivers of an approved type?

21

Are the Export Tanker's main radio transmitter aerials earthed  
and radars switched off?

Note: Radars may be required at the Mooring Masters discretion for weather monitoring.

R

22 Are electric cables to portable electrical equipment  
disconnected from power?

R

23 Are all external doors and ports leading to  
the accommodation closed

24 Are window-type air conditioning units disconnected? R

25 Are air conditioning intakes, which may permit the  
entry of cargo vapors, closed?

R

26 Are the requirements for use of galley equipment  
and cooking appliances being observed?

MR



YOHO FSO Facility



## Export Tanker Safety Checklist, 2/2

### Item Export FSO

#### Tanker Facility Code\* Remarks

27 Are smoking regulations being observed? MR

28 Are naked light regulations being observed? MR

29 Is there provision for an emergency escape?

30

Are sufficient personnel on board to deal with an emergency?

R

Will sufficient personnel remain on board to deal with

31 an emergency throughout the Export Tanker's stay at the Yoho FSO Facility?

32

Are measures been taken to ensure sufficient pump room ventilation?

MR

33

Have requirements for closed loading operations been agreed upon? Is the Export Tanker capable of closed loading?

MR

34 Are Export Tanker fire control plans located externally?

If so, state location.

35 Is adequate deck illumination provided for Export Tanker operations conducted between sunset and sunrise?

36 Is an all-round red light or the International Code flag "B" exhibited?

A

37 Will repair work be carried out while the Export Tanker is secured to the Yoho FSO Facility?

R

38 Will a watch be maintained for movement of hold-back tugs, workboats, and other craft?

39 Is it been confirmed that swimming in the sea is not permitted?

RM



- 40 Is it confirmed that fishing is not permitted?
- 41 Is Export Tanker IGS (Inert Gas System) fully operational?
- 42 Are Export Tanker deck seals in good working order? R
- 43 Are Export Tanker liquid levels in P/V breakers correct? R
- 44 If in operation, what is the perecnt of Export Tanker Oxygen at plant production?
- 45 Are all Export Tanker cargo tank atmospheres at positive pressure with an oxygen content of 8% or less?  
P
- 46 Are all Export Tanker individual tank inert gas and vent valves (if fitted) correctly set and locked?  
R

#### Declaration

The following responsible officers and representatives jointly checked (where appropriate) the items on the relevant checklists, and satisfied themselves that the entries made are correct to the best of their knowledge and that the necessary repetitive checks were carried out as necessary.

Yoho FSO Facility Export Tanker Receiver Date and Time Completed  
Signature Position Signature

Condition check logs: Log of repeated checks to ensure all conditions of the Export Tanker and the Yoho FSO

Facility Safety Checklist are maintained are listed below.

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments

YOHO FSO FACILTIY



## Export Tanker Pre-Departure Checklist

The Export Tanker Pre-Departure Checklist is included below. Upon completion, Export Tanker Masters and Mooring Masters must sign and date.

Item Tanker

Master

Mooring Master Comments

1.

Are unberthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?

2..

Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, Hold back tug, work boat, and Yoho FSO Facility?

3. Is agreed language of operation, English, being spoken?

4. Is Export Tanker upright with suitable trim?

5. Is an alternate anchorage or waiting area designated and agreed upon?

6.

Has Export Tanker Master shared information with other relevant parties concerning the maneuvering characteristics of the Export Tanker equipment?

7. Do both parties know how many consecutive engine starts are available?

8. Are methods of departure, passage plan, and maximum speeds reviewed and agreed upon?

9. Are all departing personnel informed of Export Tanker departure?

10. Are location and method of transferring personnel from Export Tanker agreed upon and is equipment in place?

11. Are deck winches in good order with power on?

12. Is crew ready to carry out unmooring?

13. Are fore and aft fire wires retrieved inboard?

14. Is adequate lighting available?

15. Are bridge and navigation equipment and machinery operational?

16. Is main engine tested ahead and astern?

17. Is a proficient helmsman on the wheel?



18. Are all cargo tanks secured with gauging and sampling activities completed?

19. Are manifold blanks secured in place?

20. Have support work boat Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?

YOHO FSO Facility

Export Tanker Master Signature:

Mooring Master Signature:

Date and Time

Motor Tanker (MT)

sampling activities completed?

19. Are manifold blanks secured in place?

20. Have support work boat Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?

Masters Signature

Mooring Masters Signature

Date/Time

Motor Tanker (MT)

5.1.3 Departure

Departure

- On completion of cargo documentation and when the Mooring Master is satisfied that the Export Tanker is clear of the Yoho FSO Facility area, the Mooring Master must arrange for the work boat to disembark the boarding party and to offload the hose connection equipment basket.
- Under certain circumstances with agreement between the Mooring Master and Export Tanker Master, the boarding party may disembark from

the Export Tanker by use of a Personnel Transfer Basket using Export Tanker crane.

- Under certain circumstances, with agreement among the Mooring Master, Export Tanker Master, and helicopter operator, the boarding party may disembark by helicopter.

## 5.0 UNMOORING/DEPARTURE

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## 6.0 TERMS & CONDITIONS

This chapter contains the following information:

- Regulatory Compliance
- Export Cargo Emergency Stop Report
- Export Tanker Terms and Conditions Overview
- Towage Contract
- Masters Letter of Acknowledgement

Checklist or Form to complete:

- Emergency Stop Report (if needed)
- Masters Letter of Acknowledgement

## TERMS & CONDITIONS

### 6.1 Regulatory Compliance

#### Introduction

This section provides Export Tanker Masters with information that assists them in complying with regulations that govern operations at the Yoho FSO Facility.

#### 6.1.1 Rejection of Vessel

#### Export Tanker Rejection

## 6.0 TERMS & CONDITIONS

### Mooring Masters

#### Continued Assessment



The Yoho FSO Facility reserves the right to decline to moor any Export Tanker even though mooring may be open to other vessels. Combinations of weather and current conditions, size, trim, and handling qualities can affect the decision to berth at the Yoho FSO Facility. Should an Export Tanker be rejected for any reason, the Mooring Master must supply Export Tanker Master and owners or charterers with written reasons for the rejection.

- The Mooring Master is authorized to confirm continued eligibility of an Export Tanker to remain at the Yoho FSO Facility.
- The right is reserved at all times to direct an Export Tanker to leave the Yoho FSO Facility Area if the Mooring Master determines that the continued presence of a vessel poses a threat to the Yoho FSO Facility, to safety, or to the environment.

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## TERMS & CONDITIONS

### 6.1.1 Rejection of Vessel Responsibility

#### Governing Law

- Export Tanker Masters of Export Tankers calling at the Yoho FSO Facility are solely responsible on behalf of the owners or charterers for the safety, navigation, and operation of their vessels.
- Nothing contained in the Yoho FSO Facility Information and Safety Regulations Manual relieves Export Tanker Masters of their responsibility from observing normal precautions to prevent:



- Fire
  - Oil spill
  - Tank over pressurization or vacuum
  - Environmental pollution
  - Damage to the Mooring System
  - Damage to the Loading Hose System
  - Damage to the Yoho FSO Facility
  - The Export Tanker Master remains at all times wholly and fully responsible for their vessel and for its officers and crew.
- Government Officials

The Yoho FSO Facility is located within the jurisdiction of Nigeria.

- Nigeria Government officials will be included in the boarding party. These include at least one:
  - Customs Officer
  - Ministry of Mines Official
- The officials remain onboard throughout export operations.
- The boarding party may include trainees.

## 6.0 TERMS & CONDITIONS

### Port Service

#### Anti-Pollution Regulation

The Export Tanker Owner or Operator must have arranged local agency services. Representative of the agency must board with boarding party. Yoho FSO Facility and its personnel do not perform any vessel agency functions.

- It is the responsibility of the Export Tanker Master to prevent any kind of pollution. This includes crude oil,



bunkers, bilge water, dirty ballast, plastics, garbage, or any other matter that results in the pollution of sea or atmosphere. The Export Tanker Master must ensure that all applicable International Convention for Prevention of Pollution from Ships (MARPOL) and Nigerian government regulations are observed.

- Export Tankers must have in place a Shipboard Oil Pollution Emergency Plan (SOPEP) approved by the flag state and have records to substantiate that the personnel onboard received training in responding to emergency situations.

Penalties for pollution of the sea

Any fines imposed for such pollution are for the Export Tanker's account.

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## TERMS & CONDITIONS

### 6.1.1 Rejection of Vessel, continued International, National and COTCO Requirements

Marine Terminal  
Hours of Operations

Yoho FSO Facility operates in accordance with, but not limited to,:

- The rules, regulations, and recommendations of international maritime bodies including International Maritime Organization (IMO), MARPOL, Safety of Life at Sea Convention (SOLAS), and the Oil Companies International Forum.
- Applicable Nigerian laws and regulations including The



Convention of Establishment, The Authorization of Transportation by Pipeline, and The Pipeline Law.

- Applicable classification society standards and rules.
- Recognized industry standards and recommendations.

The Yoho FSO Facility normally operates on a continuous basis.

- Export Tankers are loaded at any hour, weather and other circumstances permitting, at the full discretion of the Yoho FSO Facility Mooring Master and FSO Supervisor.

- Mooring operations normally are conducted only during daylight hours. On a case-by-case basis, night time berthing operations may be conducted at the Yoho FSO Facility. Such operations will only be conducted with the full agreement of the Export Tanker Master, Yoho FSO Facility FSO Supervisor, and Mooring Master.

- Vessels can unmoor at any time of day or night.

- Export Tankers should arrive at the Yoho FSO Facility prior to 16:00 local time (LMT), 15:00 Greenwich mean time (GMT). This ensures that mooring can be completed during daylight hours.



## 6.0 TERMS & CONDITIONS

### Yoho FSO Facility Closure

#### Provision of Mooring Masters, pilotage

- Any decision regarding opening and closing of the Yoho FSO Facility is made solely at the discretion of the Mooring Master who provides the Export Tanker Master with a written notice of times during which the Yoho FSO Facility is closed.
- Vessels required to leave the Yoho FSO Facility area during periods of closure must keep in contact with the Yoho FSO Facility via VHF so that they are readily available when the Yoho FSO Facility reopens.
- Notices of Readiness will not be received during periods when the Yoho FSO Facility is closed. Closure could be due to adverse weather or current conditions or other operational reasons that prevent Export Tankers from mooring or remaining safely moored.
- The Yoho FSO Facility reserves the right to reject a particular Export Tanker even though the Yoho FSO Facility may be open to other Export Tankers. The justification for any such decision must be formally communicated to the Export Tanker Master.
- All berthing, mooring, and unmooring operations within the Yoho FSO Facility areas are to be conducted with a Mooring Master onboard. The Mooring Master advises the Export Tanker Master on maneuvering and on mooring and unmooring operations.
- Either or both the Mooring Master or his or her Assistant must be on duty at all times during the Export Tanker stay at the Yoho FSO Facility berth.
- The Export Tanker Master at all times remains in command of their Export Tanker and is fully responsible for the safety of life, vessel, environment, and of third-party property.



- With the Export Tanker Master's agreement, the Mooring Master's advice takes the form of direct instructions that the Export Tanker Master monitors.
- If the Export Tanker Master does not agree with a Mooring Master's directions or actions, they may question or countermand such directions or actions at any time.

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## TERMS & CONDITIONS

### 6.1.1 Rejection of Vessel, continued

Provision of Mooring  
Masters, accommodation

Independent Cargo  
Surveyors And  
Government Representatives

The Mooring Master and any Yoho FSO Facility personnel remaining on the Export Tanker during loading must be provided with food and accommodation of the standard usually provided for Export Tanker officers.

- The Export Tanker Officer in Charge (OIC) must inform any independent cargo surveyor or Nigerian Government representative of cargo plan information including stowage, preload survey requirements, and anticipated quantities.
- The OIC must ensure that surveyors and Nigerian Government representatives are properly accommodated and that all reasonable requests are honored.
- If the OIC has any doubts, or if a problem or misunderstanding occurs, the OIC must inform the Mooring Master who endeavors to resolve any situation to the satisfaction of all concerned.



## 6.0 TERMS & CONDITIONS

### Drugs and Alcohol

#### Removal of Wrecks and Obstructions

- As part of the prequalification screening requirements that allow the Export Tanker to operate at the Yoho FSO Facility, the owners or operators of the Export Tanker should have in effect a drug and alcohol abuse policy. The Owner's or Operator's drug and alcohol abuse policy must meet or exceed the standards specified in the Oil Companies International Forum Guidelines for the Control of Drugs and Alcohol Onboard Ship.
  - The Master of each Export Tanker must ensure that no drugs (other than those in the medical locker) are onboard and that no alcohol is used or is available for use while the Tanker is present in the Yoho FSO Facility area.
  - All personnel onboard Export Tankers located within the Yoho FSO Facility Area must comply with the Export Tanker Owners and Operators Substance Abuse and Drug and Alcohol Use Policy, a copy of which must be posted onboard.
  - Export Tanker personnel are reminded that while in the Yoho FSO Facility all personnel should have a zero blood alcohol level.
- MPN is empowered to act as the Export Tanker Agent for any vessel or part thereof that becomes an obstruction in any part of the Yoho FSO Facility area, or in the approaches to the Yoho FSO Facility area. In this capacity, MPN may take any steps deemed necessary to remove the obstruction without notice to the owners of the Export Tanker.



All expenses for such removal must be borne by the Export Tanker causing the obstruction or by those owning it at the time of the incident. MPN is entitled to reimbursement by them for any expenses incurred.

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## TERMS & CONDITIONS

### 6.2 Emergency Stop Report Introduction

This section contains an example of the Export Cargo Emergency Stop Report form that must be completed when an export cargo emergency stop is initiated. The form must in all cases be completed by the Mooring Master and Export Tanker Master, and as appropriate by Yoho FSO Facility personnel or Export Tanker personnel.

(Also placed in back folder for copy distribution.)

#### 6.2.1 Export Cargo Emergency Stop Report (Also placed in back folder for copy distribution)



## 6.3 Marine Terminal Terms and Conditions Overview

### Introduction

This section provides Export Tanker Masters with Terms And Conditions For The Use Of the Yoho FSO Facility.

### Disclaimer

Those consulting the Yoho FSO Facility Information and Safety Regulations Manual and Terms and Conditions of Use are advised to satisfy themselves thoroughly as to the information, procedures, and guidelines as they apply to the matters in which they are interested.

Any user of the information and rules should be aware of the potential for error in the information in view of both its scope and the passage of time. Moreover, no one should use the information contained in the MPN Yoho FSO Facility Information and Safety Regulations Manual and Terms and Conditions of Use without independent validation. Any person who uses or relies upon the information and guidelines contained herein does so at their own risk.

MPN, its affiliates, and parent companies expressly disclaim all liability or responsibility for errors, omissions, or inaccuracies, or for any misapplication or misinterpretation of any of the procedures, guidelines, or information, or any consequences thereof. No expressed or implied warranties of any type whatsoever are made with regard to the use or application of the Yoho FSO Facility Information and Safety Regulations Manual and Terms and Conditions of Use.

The Yoho FSO Facility Information and Safety Regulations Manual does not replace or modify any official publications covering the waters, areas, or subjects to which they pertain, and is provided subject to



those conditions set out in the Yoho FSO Facility Information and Safety Regulations Manual and Terms and Conditions of User included herein. Reference should be made to the appropriate official navigational publications and charts for purpose of obtaining navigational information.

## 6.0 TERMS & CONDITIONS 6-9

### TERMS & CONDITIONS

#### 6.3 Marine Terminal Terms and Conditions Overview, continued Provision of services

##### Mooring Masters

All services, facilities and assistance provided by or on behalf of MPN, its parent companies, subsidiaries, or affiliates, or its or their servants, agents, or contractors, their parent companies, subsidiaries, or affiliates, or its or their servants, agents, or contractors whether or not any charge is made by MPN therefore, are provided subject to all applicable laws and regulations including but not limited to bylaws and harbour regulations, safety regulations, and towage conditions for the time being in force.

Services of the Mooring Master are provided on the express understanding and condition that when any Mooring Master furnished by MPN goes on board an Export Tanker for the purpose of assisting such Export Tanker, they become for such purposes the servant of the Owners or Charterers of the Export Tanker; and MPN, shall in no way be liable for any damage or personal injury including death of any nature whatsoever,



incurred by any person whomsoever, in any way connected with, contributed by, or resulting from the advice or assistance given or for any action taken by such Mooring Master, whether negligent or otherwise, while on board or in the vicinity of such assisted Export Tanker.

Similarly, the services of mooring launches and mooring personnel, if any, and the furnishing of mooring lines and hose connection gear are under the supervision and control of the Mooring Master, and MPN, even if negligent, shall in no way be liable for any damage or personal injury, including death of any nature whatsoever incurred by any person whomsoever, in any way connected with, contributed to, or resulting from the performance of these additional services or the furnishing of equipment, whether or not any of such are utilized by any Export Tanker.

Yoho FSO Facility Personnel

## 6.0 TERMS & CONDITIONS

Yoho FSO Facility Personnel

### MPN Property

In addition, neither MPN in whatever capacity it may be acting shall be in any way whatsoever responsible for or liable for any contribution with respect to any loss, personal injury, including death, damage, or delay, from whatsoever cause, including the negligence of MPN or its servants, coventures, agents, contractors arising whether directly or indirectly in consequence of any assistance, advice, or instructions whatsoever given or tendered in respect of any Vessel, whether by way of Hold back tugs, pilotage, or berthing services, the provision of navigation facilities, including buoys or other channel markings, or otherwise howsoever. In all circumstances the Master of any Vessel shall remain solely responsible on behalf of their Owners for safety and proper navigation of their Vessel.



While MPN exercises due care to ensure that the mooring, premises, facilities, property, gear, craft, and equipment provided by MPN are safe and suitable for Vessels permitted or invited to use them, no guarantee, express or implied, of such safety and suitability is given by MPN that such mooring, premises, facilities, property, gear, craft, and equipment are devoid of defects or are fit for the service or use to which it is put, and every Vessel shall be and remain at the sole risk of the Owners and Master thereof; and MPN, shall not be held responsible (or liable for any contribution) with respect to any loss, personal injury including death, damage, or delays whatsoever that may be sustained whether directly or indirectly by or occur to any Vessel or to its Owners or its crew or cargo or for any part thereof (whether such cargo is on board or in the course of loading) by whomsoever and by whatsoever cause such as loss, injury, damage, or delay is occasioned, and whether or not it is caused, occasioned, or contributed to in whole or in part to any act, neglect, omission, or default on the part of MPN, or by fault or defect in any berth, premises, facilities, property, gear, craft, or equipment of any sort of MPN.

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## TERMS & CONDITIONS

### 6.3 Marine Terminal Terms and Conditions Overview, continued Labour Disputes

#### Damage and Injury

Neither will MPN be responsible for any loss, damage, or delay directly or indirectly caused or contributed to or arising from strikes, lock-outs, or labor disputes or disturbances whether MPN is party thereto or not.



If in connection with or by reason of the use by any Vessel of any berth, or of part of the Companies premises, or of any gear or equipment provided by or on behalf of MPN, or of any craft, or of any other facilities or property, of any sort whatsoever, belonging to or provided by on behalf of MPN, any damage or injury is caused to such mooring, premises, gear or equipment, craft, or other facility or property, or any third party, or any Vessel its Owners and crew, from whatsoever cause such damage may arise, and irrespective of whether or not such damage has been caused, occasioned, or contributed to, in whole or in part, by the negligence of MPN, and irrespective of whether there has been any neglect or default on the part of the Vessel or the Owner(s), in any such event the Vessel and the Owners shall hold MPN harmless from and indemnified without limitation against all such damage and injury and against loss sustained by MPN consequent thereon.

Action, liabilities, claims,  
damages, cost, awards

and expenses

Applicable Law

The Vessel and its Owners shall hold MPN harmless from and indemnified without limitation against the following whether or not caused, contributed to, or due in whole or in part to any act, neglect, omission, or default on the part of MPN:

- All and any action, liabilities, claims, damages, cost, awards, and expenses arising whether directly or indirectly out of any loss, damage, personal injury, including death or delay of whatsoever nature occasioned to any third party or any Vessel, its Owners and crew, including the vessel and Owners and crew,



including but not limited to that caused or contributed to, whether directly or indirectly, by the Vessel or any part thereof or by any substance or material leaking or escaping therefrom or by the Master or crew or by any other servant or agent of the Owners.

• All or any damage, personal injury, including death, delay, or loss of whatsoever nature, occasioned to MPN arising out of any cause whatsoever including but not limited to that caused or contributed to, whether directly or indirectly, by the Vessel or any part thereof or by any substance or material leaking or escaping therefrom or by its Master or crew or by any other servant or agent of the Owners.

#### 6.0 TERMS & CONDITIONS

Applicable law These terms and conditions shall be construed according to the Laws of Nigeria.

#### Dispute Resolution

Any claims for injuries or damages or other disputes arising as a result of use of the Yoho FSO Facility or with respect to the Yoho FSO Facility Information and Safety Regulations shall be settled by arbitration in accordance with the International Chamber of Commerce (ICC) Rules in effect on the date hereof, which rules are deemed to be incorporated by reference herein. The ICC shall appoint the arbitrators. The

place of arbitration shall be London, England, and the arbitration shall be conducted in the English language and shall be administered by the ICC. Related arbitration proceedings (related by common questions of law

or fact) with other parties bound by the ICC Rules may be consolidated into a single arbitration proceeding.



## TERMS & CONDITIONS

### 6.3 Marine Terminal Terms and Conditions Overview, continued Pollution

#### Parties to agreement

Vessels shall be entered under International Tanker Owners Pollution Federation Limited (ITOPF). For any oil pollution caused by the Vessel, its Master, or crew, the Vessel and its Owners shall protect, defend, indemnify, and hold harmless MPN from and against any loss, damage, liability, suit, claim, or expense arising therefrom.

It is hereby expressly agreed that no servant or agent of COTCO shall be under any liability whatsoever for any loss, damage, or delay of whatsoever kind arising or resulting directly or indirectly from any act neglect or default on its part while acting in the course of or in connection with its employment and, without prejudice to the generality of the foregoing provisions in this clause, every exemption, limitation, condition and liberty herein contained and every right, exemption from liability, defense and immunity of whatsoever nature applicable to COTCO or to which COTCO is entitled hereunder shall also be available, and shall extend to protect every such servant or agent of COTCO acting as aforesaid, and for the purpose of all the foregoing provisions of this clause COTCO is or shall be deemed to be acting as agent or trustee on behalf of and for the benefit of all persons who are or might be its servants or agents from time to time and all such persons shall to this extent be or be deemed to be parties to this agreement.



## 6.4 Towage Contract Introduction

This section provides a detailed description of the towage contract for Export Tankers when operating at the Yoho FSO Facility.

### Provision of towage to Export Tanker

#### U.K. STANDARD CONDITIONS FOR TOWAGE AND OTHER SERVICES (Revised 1986)

1.

(a) The agreement between the Tug owner and the Hirer is and shall at all times be subject to and include each and all of the conditions hereinafter set out.

(b) for the purposes of these conditions.

(i) "towing" is any operation in connection with the holding, pushing, pulling, moving, escorting, or guiding of or standing by the Hirer's vessel, and the expressions "to tow," "being towed," and "towage" shall be defined likewise.

(ii) "vessel" shall include any vessel, craft, or object of whatsoever nature (whether or not coming within the usual meaning of the word "vessel") which the Tug owner agrees to tow or to which the Tug owner agrees at the request, express or implied, of the Hirer, to render any service of whatsoever nature other than towing.

(iii) "tender" shall include any vessel, craft or object of whatsoever nature which is not a tug but which is provided by the Tug owner for the performance of any towage or other service.

(iv) The expression "whilst towing" shall cover the period commencing when the tug or tender is in a position to receive orders direct from the Hirer's vessel to commence holding, pushing, pulling, moving, escorting, guiding, or standing by the vessel or to pick up ropes, wires, or lines, or when the towing line has been passed to or by the tug or tender, whichever is the sooner, and ending when the final orders from the Hirer's vessel to cease holding, pushing, pulling, moving, escorting, guiding, or standing by the vessel or to cast off ropes, wires, or lines have been carried out, or the towing line has been finally slipped, whichever is the later, and the tug or tender is safely clear of the vessel.

(v) Any service of whatsoever nature to be performed by the Tug owner other than towing shall be deemed to cover the period commencing when the tug or tender is placed physically at the disposal of the Hirer at the place designated by the Hirer, or if such be at a vessel, when the tug or tender is in a position to receive and forthwith carry out orders to come alongside and shall continue until the employment for which the tug or tender has been engaged is ended. If the service is to be ended at



or off a vessel, the period of service shall end when the tug or tender is safely clear of the vessel, or if it is ended elsewhere, then when any persons or property of whatsoever description have been landed or discharged from the tug or tender and/or the service for which the tug or tender has been required is ended.

## 6.0 TERMS & CONDITIONS

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### TERMS & CONDITIONS

#### 6.4 Towage Contract, continued

(vi) The word "tug" shall include "tugs," the word "tender" shall include "tenders," the word "vessel" shall include "vessels," the word "Tug owner" shall include "Tug owners," and the word "Hirer" shall include "Hirers."

(vii) The expression "Tug owner" shall include any person or body (other than the Hirer or the owner of the vessel on whose behalf the Hirer contracts as provided in Clause 2 hereof) who is a party to this agreement whether or not he in fact owns any tug or tender, and the expression "other Tug owner" contained in Clause 5 hereof shall be construed likewise.

2. If at the time of making this agreement or of performing the towage or of rendering any service other than towing at the request, express or implied, of the Hirer, the Hirer is not the Owner of the vessel referred to herein as "the Hirer's vessel," the Hirer expressly represents that he is authorized to make and does make this agreement for and on behalf of the owner of the said vessel subject to each and all of these conditions and agrees that both the Hirer and the Owner are bound jointly and severally by these conditions.

3. Whilst towing or whilst at the request, express or implied, of the Hirer, rendering any service other than towing, the master and crew of the tug or tender shall be deemed to be the servants of the Hirer and under the control of the Hirer and/or his servants and/or his agents, and anyone on board the Hirer's vessel who may be employed and/or paid by the Tug owner shall likewise be deemed to be the servant of the Hirer and the Hirer shall accordingly be vicariously liable for any act or omission by any such person so deemed to be the servant of the Hirer.

4. Whilst towing or whilst at the request, either expressed or implied, of the Hirer rendering any service of whatsoever nature other than towing:

(a) The Tug owner shall not (except as provided in Clauses 4 (c) and (e) hereof) be responsible for or be liable for

(i) damage of any description done by or to the tug or tender or done by or to the Hirer's vessel, or done by or to any cargo or other thing on board or being loaded on



board or intended to be loaded on board the Hirer's vessel or the tug or tender, or to or by any other object or property;  
or

(ii) loss of the tug or tender or the Hirer's vessel or of any cargo or other thing on board or being loaded on board or intended to be loaded on board the Hirer's vessel or the tug or tender or any other object or property;  
or

(iii) any claim by a person not a party to this agreement for loss or damage of any description whatsoever; arising from any cause whatsoever, including (without prejudice to the generality of the foregoing) negligence at any time of the Tug owner, his servants or agents, un-seaworthiness, unfitness, or breakdown of the tug or tender, its machinery, boilers, towing gear, equipment, lines, ropes or wires, lack of fuel, stores, speed, or otherwise and

(b) The Hirer shall (except as provided in Clauses 4(c) and (e)) be responsible for, pay for, and indemnify the Tug owner against and in respect of any loss or damage and any claims of whatsoever nature or howsoever arising or caused, whether covered by the provisions of Clause 4(a) hereof or not, suffered by or made against the Tug owner and which shall include, without prejudice to the generality of the foregoing, any loss of or damage to the tug or tender or any property of the Tug owner even if the same arises from or is caused by the negligence of the Tug owner, his servants, or agents.

(c) The provisions of Clauses 4(a) and 4(b) hereof shall not be applicable in respect of any claims which arise in any of the following circumstances:

(i) All claims which the Hirer shall prove to have resulted directly and solely from the personal failure of the Tug owner to exercise reasonable care to make the tug or tender seaworthy for navigation at the commencement of the towing or other service. For the purpose of this Clause the Tug owner's personal responsibility for exercising reasonable care shall be construed as relating only to the person or persons

having the ultimate control and chief management of the Tug owner's business and to any servant (excluding the officers and crew of any tug or tender) to whom the Tug owner has specifically delegated the particular duty of exercising reasonable care and shall not include any other servant of the Tug owner or any agent or independent contractor employed by the Tug owner.

(ii) All claims which arise when the tug or tender, although towing or rendering some service other than towing, is not in a position of proximity or risk to or from the Hirer's vessel or any other craft attending the Hirer's vessel and is detached from



and safely clear of any ropes, lines, wire cables or moorings associated with the Hirer's vessel. Provided always that, notwithstanding the foregoing, the provisions of Clauses 4(a) and 4(b) shall be fully applicable in respect of all claims which arise at any time when the tug or tender is at the request, whether expressed or implied, of the Hirer, his servants or his agents, carrying persons or property of whatsoever description (in addition to the Officers and crew and usual equipment of the tug or tender) and which are wholly or partly caused by, or arise out of the presence on board of such persons or property or which arise at any time when the tug or tender is proceeding to or from the Hirer's vessel in hazardous conditions or circumstances.

(d) Notwithstanding anything hereinbefore contained, the Tug owner shall under no circumstances whatsoever be responsible for or be liable for any loss or damage caused by or contributing to or arising out of any delay or detention of the Hirer's vessel or of the cargo on board or being loaded on board or intended to be loaded on board the Hirers' vessel or of any other object or property or of any person, or any consequence thereof, whether or not the same shall be caused or arise whilst towing or whilst at the request, either express or implied, of the Hirer rendering any service of whatsoever nature other than towing or at any other time whether before, during, or after the making of this agreement.

(e) Notwithstanding anything contained in Clauses 4(a) and (b) hereof, the liability of the Tug owner or death or personal injury resulting from negligence is not excluded or restricted thereby.

## 6.0 TERMS & CONDITIONS

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### TERMS & CONDITIONS

#### 6.4 Towage Contract, continued

5. The Tug owner shall at any time be entitled to substitute one or more tugs or tenders for any other tug or tender or tugs or tenders. The Tug owner shall at any time (whether before or after the making of this agreement between him and the Hirer) be entitled to contract with any other Tug owner (hereinafter referred to as "the other Tug owner") to hire the other Tug owner's tug or tender and in any such event it is hereby agreed that the Tug owner is acting (or is deemed to have acted) as the agent for the Hirer, notwithstanding that the Tug owner may in addition, if authorized whether expressly or impliedly by or on behalf of the other Tug owner, act as agent for the other Tug owner at any time and for any purpose including the making of any agreement with the Hirer. In any event should the Tug



owner as agent for the Hirer contract with the other Tug owner for any purpose as aforesaid it is hereby agreed that such contract is and shall at all times be subject to the provisions of these conditions so that the other Tug owner is bound by the same and may as a principal sue the Hirer thereon and shall have the full benefit of these conditions in every respect expressed or implied herein.

6. Nothing contained in these conditions shall limit, prejudice, or preclude in any way any legal rights which the Tug owner may have against the Hirer, including but not limited to any rights which the Tug owner or his servants or agents may have to claim salvage remuneration or special compensation for any extraordinary services rendered to vessels or anything aboard vessels by any tug or tender. Furthermore, nothing contained in these conditions shall limit, prejudice, or preclude in any way any right which the Tug owner may have to limit his liability.

7. The Tug owner will not in any event be responsible or liable for the consequences of war, riots, civil commotions, acts of terrorism or sabotage, strikes, lockouts, disputes, stoppages, or labor disturbances (whether he be a party thereto or not) or anything done in contemplation or furtherance thereof or delays of any description, howsoever caused or arising, including by the negligence of the Tug owner or his servants or agents.

8. The Hirer of the tug or tender engaged subject to these conditions undertakes not to take or cause to be taken any proceedings against any servant or agent of the Tug owner or other Tug owner, whether or not the tug or tender substituted or hired or the contract or any part thereof has been sublet to the owner of the tug or tender, in respect of any negligence or breach of duty or other wrongful act on the part of such servant or agent which, but for this present provision, it would be competent for the Hirer so to do and the owners of such tug or tender shall hold this undertaking for the benefit of their servants and agents.

9.

(a) The agreement between the Tug owner and the Hirer is and shall be governed by English Law, and the Tug owner and the Hirer hereby accept, subject to the proviso contained in sub-clause (b) hereof, the exclusive jurisdiction of the English Courts (save where the registered office of the Tug owner is situated in Scotland when the agreement is and shall be governed by Scottish Law and the Tug owner and the Hirer hereby shall accept the exclusive jurisdiction of the Scottish Courts).

(b) No suit shall be brought in any jurisdiction other than that provided in sub-clause (a) hereof save that either the Tug owner or the Hirer shall have the option to bring proceedings in rem to obtain the arrest of or other similar remedy against any vessel or property owned by the other party hereto in any jurisdiction where such vessel or property may be found.



## 6.0 TERMS & CONDITIONS

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### Introduction

This section provides a detailed description of the Export Tanker Masters Letter of Acknowledgement for towage and service provided by MPN to their vessel at the MPN Yoho FSO Facility.

Please refer to the back of this manual for all forms and checklists.

### 6.5 Masters Letter of Acknowledgement

#### Export Tanker Pre-Mooring Checklist

The Export Tanker Pre-Mooring Checklist is included below. Upon completion, Export Tanker Masters and Mooring Masters must sign and date.

#### Item Tanker

#### Master

#### Mooring Master Comments

1

Are berthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?

2

Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, hold back tug, work boat, and FSO Facility?

3 Is English, the agreed language of operation, being spoken?

4 Is Export Tanker upright with suitable trim?

5 Is an alternate anchorage designated and agreed upon?

6

Have limiting environmental criteria for the following operations been established and agreed upon?

- Approach/connect
- Cessation of cargo operations
- Disconnect.

7

Has Export Tanker Master shared information with other relevant parties concerning the maneuvering characteristics of



the Export Tanker and shipboard equipment?

8 Do both parties know how many consecutive engine starts are available?

9 Are methods of approach, passage plan, maximum speeds, and mooring procedures reviewed and agreed upon?

10 Are weather forecasts obtained, and will they be updated on a regular basis during the operation?

11 Is a bridge and anchor watch established?

12 Are bow stoppers, leads, and lines inspected and satisfactory?

13 Are deck winches in good order with power on?

14 Are deck winches in good order with power on?

15 Is crew ready to secure hold back tug and carry out mooring?

16 Have fore and aft fire wires been inspected and deemed ready for deployment?

17 Are poop deck power, mooring lines, and chain stoppers ready?

18 Is manifold lifting gear suitably rigged for use and located on the port side?

20 Is hose securing equipment rigged at applicable manifold?

21 Is adequate lighting available?

22 Are bridge and navigation equipment and machinery operational?

23 Is Main Engine tested astern?

24 Is a proficient helmsman on the wheel?

25 Is at least one cargo tank checked having an acceptable O<sub>2</sub> level (<8.0%) recorded?

26 Has at least one cargo tank been checked having an acceptable H<sub>2</sub>S level (<10.0 PPM) recorded?

27 Have support vessel Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?

28

Is safe working load (SWL) established for towing bits and leads to be used? Is this information relayed to the hold back tug Master?

YOHO FSO Facility

Export Tanker Master Signature:

Mooring Master Signature:

Date and Time



## Motor Tanker (MT)

### Export Tanker Safety Checklist, 1/2

This checklist represents the main device of the Yoho FSO Facility for ensuring safety and pollution-free operations. The letters M, R, A, and P in the column labeled Code indicate the following:

M Requires monitoring throughout the transfer operation.

R Indicates items to be re-checked at intervals not exceeding that agreed upon in the declaration.

A Any procedures and agreements should be in writing in the remark column of this Checklist or other mutually

acceptable form. In either case the signature of both parties is required.

P In the case of a negative answer, the operation should not be carried out without the permission of the Yoho FSO Facility.

#### Item Export FSO

##### Tanker Facility Code\* Remarks

1 Is the ship securely moored? M

2 Are emergency towing wires correctly positioned? R

3 Is the Export Tanker safely accessible? M

4 Is the Export Tanker ready to move under its own power? PR

5

Is there an effective deck watch in attendance on board with adequate supervision?

MR

6

Is the agreed Export Tanker to Yoho FSO Facility and ship -to-ship communication system operative?

MA

7

Has the emergency signal to be used Export Tanker to Yoho FSO Facility been explained and understood?

A

8

Are the procedures for cargo handling information and ballast handling agreed upon?

AR

9

Are hazards associated with toxic substances in the

cargo being handled, identified, and understood?

10 Has the Export Cargo Emergency Stop been agreed upon? A

11

Are fire hoses and fire fighting equipment on board the Export Tanker positioned and ready for immediate use?

R

12 Are cargo hoses properly rigged for the service intended?

13

Are Export Tanker scuppers effectively plugged and dri trays in position?

RM

14

Are unused cargo and bunker connections properly secured with blank flanges fully bolted?

15 Are sea and overboard discharge valves closed and visibly secured when not in use?

16 Are all cargo and bunker tank lids closed?

17 Is the agreed tank venting system being used? AR

18 Is the operation of the pressure valves (PV) or high velocity vents verified by using the check lift facility where fitted?

19 Are hand torches of an approved type?

20 Are portable VHF/UHF transceivers of an approved type?

21

Are the Export Tanker's main radio transmitter aerials earthed and radars switched off?

Note: Radars may be required at the Mooring Masters discretion for weather monitoring.

R

22 Are electric cables to portable electrical equipment disconnected from power?

R

23 Are all external doors and ports leading to the accommodation closed

24 Are window-type air conditioning units disconnected? R

25 Are air conditioning intakes, which may permit the entry of cargo vapours, closed?

R

26 Are the requirements for use of galley equipment and cooking appliances being observed?



MR

YOHO FSO Facility

Export Tanker Safety Checklist, 2/2

Item Export FSO

Tanker Facility Code\* Remarks

27 Are smoking regulations being observed? MR

28 Are naked light regulations being observed? MR

29 Is there provision for an emergency escape?

30

Are sufficient personnel on board to deal with an emergency?

R

Will sufficient personnel remain on board to deal with

31 an emergency throughout the Export Tanker's stay at the Yoho FSO Facility?

32

Are measures been taken to ensure sufficient pump room ventilation?

MR

33

Have requirements for closed loading operations been agreed upon? Is the Export Tanker capable of closed loading?

MR

34 Are Export Tanker fire control plans located externally?

If so, state location.

35 Is adequate deck illumination provided for Export Tanker operations conducted between sunset and sunrise?

36 Is an all-round red light or the International Code flag "B" exhibited?

A

37 Will repair work be carried out while the Export Tanker is secured to the Yoho FSO Facility?

R

38 Will a watch be maintained for movement of hold-back tugs, workboats, and other craft?



39 Is it been confirmed that swimming in the sea is not permitted?

RM

40 Is it confirmed that fishing is not permitted?

41 Is Export Tanker IGS (Inert Gas System) fully operational?

42 Are Export Tanker deck seals in good working order? R

43 Are Export Tanker liquid levels in P/V breakers correct? R

44 If in operation, what is the perecnt of Export Tanker Oxygen at plant production?

45 Are all Export Tanker cargo tank atmospheres at positive pressure with an oxygen content of 8% or less?

P

46 Are all Export Tanker individual tank inert gas and vent valves (if fitted) correctly set and locked?

R

#### Declaration

The following responsible officers and representatives jointly checked (where appropriate) the items on the relevant checklists, and satisfied themselves that the entries made are correct to the best of their knowledge and that the necessary repetitive checks were carried out as necessary.

Yoho FSO Facility Export Tanker Receiver Date and Time Completed

Signature Position Signature

Condition check logs: Log of repeated checks to ensure all conditions of the Export Tanker and the Yoho FSO

Facility Safety Checklist are maintained are listed below.

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments

Time

Mooring Master Initial and Comments

Export Tanker Officer Initial and Comments

YOHO FSO FACILTIY



## Export Tanker Pre-Departure Checklist

The Export Tanker Pre-Departure Checklist is included below. Upon completion, Export Tanker Masters and Mooring Masters must sign and date.

Item Tanker

Master

Mooring Master Comments

1.

Are unberthing procedure and related contingency plans discussed and agreed upon with Export Tanker Master and key personnel?

2..

Are radio communication procedures in place and agreed upon for all operations that include the Export Tanker, Hold back tug, work boat, and Yoho FSO Facility?

3. Is agreed language of operation, English, being spoken?

4. Is Export Tanker upright with suitable trim?

5. Is an alternate anchorage or waiting area designated and agreed upon?

6.

Has Export Tanker Master shared information with other relevant parties concerning the maneuvering characteristics of the Export Tanker equipment?

7. Do both parties know how many consecutive engine starts are available?

8. Are methods of departure, passage plan, and maximum speeds reviewed and agreed upon?

9. Are all departing personnel informed of Export Tanker departure?

10. Are location and method of transferring personnel from Export Tanker agreed upon and is equipment in place?

11. Are deck winches in good order with power on?

12. Is crew ready to carry out unmooring?

13. Are fore and aft fire wires retrieved inboard?

14. Is adequate lighting available?

15. Are bridge and navigation equipment and machinery operational?

16. Is main engine tested ahead and astern?



17. Is a proficient helmsman on the wheel?
18. Are all cargo tanks secured with gauging and sampling activities completed?
19. Are manifold blanks secured in place?
20. Have support work boat Masters reported that all their operating systems (propulsion and power) are operational, tested, and set?

YOHO FSO Facility

Export Tanker Master Signature:

Mooring Master Signature:

Date and Time

Motor Tanker (MT)