

# Port of Jazan

## Bulk Plant

**General Rules & Information,  
Jazan Bulk Plant Terminal,  
Including Contents Page & Annex**



# Jazan Port for Bulk Plant Terminal

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# Jazan Port for Bulk Plant Terminal

## RULES REGULATIONS AND GENERAL INFORMATION

### 1 Port Description

#### 1.1 Saudi Aramco Terminal – Sea Boundaries/Exclusion Zones

The Saudi Aramco Bulk Plant comes within the Jazan Port Authority boundary and is not owned or controlled by Saudi Aramco. Within the boundary Saudi Aramco has an exclusion zone around two (2) single point moorings (SPMs) for Tankers.

#### 1.2 Marine Terminal Assistance Fees

The Owners, Operators and Charterers of any vessel calling at Jazan Bulk Plant Terminal shall be liable and shall reimburse Saudi Aramco promptly and in full for all applicable Jazan Bulk Plant Marine Terminal Assistance Fees.

### 2 Navigational Information

#### 2.1 Meteorology

##### 2.1.1 Climate

The prevailing wind is from west to north west. Winds of any strength tend to create short steep seas, which develop quickly. Westerly winds cause heavy seas and swells, which can last for a considerable period. For a more complete description of the winds of the Red Sea, refer to "Sailing Directions."

##### 2.1.2 Visibility

Visibility in this area is generally fair to good but at times dust is held in suspension in the atmosphere and visibility is reduced to a very short distance. This phenomenon is more deceptive than fog in that mariners are apt to believe visibility to be greater than it actually is.

##### 2.1.3 General Climate and Humidity

The climate of Jazan is comparatively hot for the Red Sea.

During the annual weather cycle, available data shows the most humid month to be January and the least humid month to be July. With an annual average percentage of humidity at 66%.

##### 2.1.4 Tidal Range and Flow

The datum used by Saudi Aramco is based on the Lowest Astronomical Tide (LAT). All depths are quoted in meters.

Locally the tidal range varies with approximate heights of 1.10 meters during spring tides and 0.50 meters at neap tides.

Heights above LAT; High Water springs = 1.45m, Low Water neaps = 0.04m

The tidal current is generally weak but can be up to 1.5 knots. Due to the configuration of the coastline, a system of tidal currents prevails with flood tide setting toward northwest and ebb setting toward southeast. More detailed descriptions of tides and currents in the locality can be found in “Sailing Directions.”

## 2.2 Charts and Publications

### 2.2.1 Charts

Charts are available in various forms, including paper-based and digital format, from worldwide hydrographic agencies. Vessels should always use the largest scale chart available, maintained in an up to date format with the latest corrections and Notices to Mariners applied.

### 2.2.2 Tide Tables/Tidal Stream Atlas

Tide Tables are published in various forms, including paper-based books and digital tables. When using tide tables for Saudi Arabian waters the validity of the data should be supplied by a trusted source for example Saudi Aramco or the UK Admiralty, and should be maintained in an up to date format with the latest corrections applied.

### 2.2.3 Pilot Books/Sailing Directions

Pilot Books/Sailing Directions are published in various forms, including paper-based books and digital tables. When using information for Saudi Arabian waters the validity of the data should be supplied by a trusted source for example Saudi Aramco or the UKHO and should be maintained in an up-to-date format with the latest corrections applied. Admiralty publication NP64 includes the Jazan area.

### 2.2.4 List of Lights/Fog Signals and List of Radio Signals

List of Lights/Fog Signals and List of Radio Signals are published in various forms, including paper-based books and digital tables. When using information for Saudi Arabian waters the validity of the data should be supplied by a trusted source for example Saudi Aramco or the UKHO and should be maintained in an up to date format with the latest corrections applied.

## 2.3 Navigational Information and Warnings

Navigational Information and Navigational Warnings are broadcast by NAVTEX and Jazan Port Control Center.

## 2.4 Buoys, Fairways and Channels

The shape and colors of the buoys in the terminal area and approaches comply with the I.A.L.A. System, Region A.

### 2.4.1 Main Arrival/Departure Channel

The channel, developed and approved by IMO MSC and NSCR sub-committee is 90 NM transit length and is designed to facilitate the safe passage of all vessels calling at the Bulk Plant SPM.

All vessels should navigate the channel with caution, especially at the entrance where there is a marked shoal of 13.9 meters.

Buoy ID	Description	Latitude	Longitude	Flashing Light Characteristics	Color
101	Safe Water Mark	16° 56.772' N	41° 17.365' E	White, ISO 10 S	Red, White
102	Stbd Lateral Mark	16° 56.709' N	41° 18.842' E	Green, FL (2) 5S	Green
103	Stbd Lateral Mark	16° 59.790' N	41° 20.557' E	Green, FL (2) 5S	Green
104	Iso. Danger Mark	16° 59.720' N	41° 19.282' E	White, FL (2) 8S	Red, Black
105	Port Lateral Mark	17° 01.206' N	41° 18.797' E	Red, FL (2) 5S	Red
106	Stbd Lateral Mark	17° 02.537' N	41° 22.340' E	Green, FL (2) 5S	Green
107	Port Lateral Mark	17° 05.413' N	41° 20.794' E	Red, FL (2) 5S	Red
108	Stbd Lateral Mark	17° 08.411' N	41° 24.400' E	Green, FL (2) 5S	Green
109	Port Lateral Mark	17° 10.400' N	41° 22.620' E	Red, FL (2) 5S	Red
110	Stbd Lateral Mark	17° 13.524' N	41° 34.567' E	Green, FL (2) 5S	Green
111	Port Lateral Mark	17° 14.705' N	41° 33.299' E	Red, FL (2) 5S	Red
112	N. Cardinal Mark	17° 17.407' N	41° 42.373' E	White, Q (Racon)	Black, Yellow
112A	Port Lateral Mark	17° 19.152' N	41° 40.448' E	Red, FL (2) 5S	Red
113	Port Lateral Mark	17° 15.449' N	41° 49.632' E	Red, FL (2) 5S	Red
114	Stbd Lateral Mark	17° 10.198' N	41° 50.998' E	Green, FL (2) 5S	Green
115	Safe Water Mark	17° 10.449' N	41° 53.635' E	White, ISO 10 S	Red, White
116	Stbd Lateral Mark	17° 06.498' N	41° 56.501' E	Green, FL (2) 5S	Green
117	Port Lateral Mark	17° 06.247' N	42° 03.822' E	Red, FL (2) 5S (Racon)	Red
118	Stbd Lateral Mark	17° 02.300' N	42° 02.102' E	Green, FL (2) 5S	Green
119	Stbd Lateral Mark	17° 00.484' N	42° 07.402' E	Green, FL (2) 5S	Green
120	S. Cardinal Mark	17° 04.599' N	42° 07.501' E	White, Q (6) +LFL 15s	Yellow, Black

Please be aware that the navigation marks N4 and Bn#2 are close to but not part of the main navigation channel.

Buoy ID	Description	Latitude	Longitude	Flashing Light Characteristics	Color
N4	S. Cardinal Mark	17° 06.0' N	41° 24.5' E	White, Q (6) +LFL 15s	Yellow, Black
Bn #2	Port Lateral Pillar	17° 16.8' N	41° 33.5' E	Red, FL (3) 12 sec (Racon N)	Red

Vessels transiting the main arrival/departure channel and proceeding to Jazan Bulk Plant are advised to leave the channel between Buoys 119/120 and proceed in the vicinity of Buoys N12 and N13 to approach Jazan Bulk Plant SPMs or Anchorage ‘B’.

Buoy ID	Description	Latitude	Longitude	Flashing Light Characteristics	Color
N12	Safe Water Mark	16° 58.15' N	42° 22.8' E	White, ISO 4 S	Red, White
N13	Safe Water Mark	16° 53.75' N	42° 26.1' E	White, Occ 4 S	Red, White

Note: from time to time navigational marks may be off station and/or unlit. Please check Notices to Mariners and Navigational Warnings for the most up to date information.

### 2.4.2 Channel to / from Bulk Plant

The inner channel and entrance to Jazan Commercial Port Harbor is 4.5 nautical miles in length, 200m wide and dredged to a depth of 13.5m. The channel is marked by light buoys “G1” to “G7.”

Jazan Port harbor entrance has two breakwaters, one to the south and one to the northwest. Leading lights are situated near the root of the south breakwater and with a bearing line 096.5° (T) are provided to the harbor.

Note: from time to time navigational marks may be off station and/or unlit. Please check Notices to Mariners and Navigational Warnings for the most up to date information.

## 2.5 Anchorage Areas

The Port of Jazan is an open roadstead, protection is afforded by shoals and land to an extent where vessels do not normally experience heavy movement.

Jazan has (2) anchorage areas “A” and “B,” which are north and south of the Jazan entrance channel, respectively. Vessels bound for Jazan Bulk Plant terminals should use “B” Anchorage, which is 3.5 miles (west-southwest) of Jazan Port entrance breakwater end.

Vessels directed to anchor prior to berthing should anchor in Jazan “B” Anchorage, in 18 meters depth water. Holding ground is good with a depth of 12 to 20 meters.

There is a relatively shallow patch of ground to the north west of “B” Anchorage, with a charted depth of 11.9 meters.

Newly arrived tankers should be warned to avoid this patch when proceeding to the anchorage or the SPM. The position of the shallow patch is: Lat. 16. 52.30’N Long. 42. 26.95’E, and is approximately one (1) cable in circumference.

## 2.6 Submerged Pipelines Restricted Area/Prohibited Area

### 2.6.1 Prohibited Entry

No vessel shall enter any restricted or prohibited area without a Pilot on board. Fishing vessels are prohibited from fishing and / or anchoring in these zones.

### **2.6.2 Use of Anchors Prohibited**

Under no circumstances shall anchors be used in these areas due to the existence of submerged pipelines.

## **3 Arrival Communications**

Refer to “Common Rules and Information” section 6.0 “Radio communications & messages,” and in particular the arrival telex information.

### **3.1 Required Arrival Information**

Vessels must advise their agent of the estimated and/or actual arrival time at Jazan “B” Anchorage. It is required that vessels provide a minimum of two notices of ETA information, at about 48 then at 24 hours steaming time, from Jazan where possible, or as soon as possible after leaving the previous port upon departure for Jazan, when there is less than 48 hours.

### **3.2 VHF Communications**

Jazan Bulk Plant Terminal maintains a listening watch on VHF channel 11, which is used as the calling channel to confirm as required vessel berthing or anchoring.

Prior to berthing the Saudi Aramco Harbor Pilot will contact the vessel on VHF channel 11 & 16.

### **3.3 Early Contact**

VHF contact with Jazan Port Control Center should be established as early as practicable and ideally within 100 nautical miles of the Port (subject to atmospheric conditions).

### **3.4 Arrival at the port**

Vessels should call Jazan Port Control on VHF channel 16 for instructions to proceed.

### **3.5 Anchoring after arrival**

On anchoring, the Master should call Saudi Aramco Jazan Harbor Pilots or Saudi Aramco Operations on VHF channel 11 giving the anchoring time and maintain monitoring of VHF channels 16 and 11 when anchored.

### **3.6 Maintaining Contact**

More assistance may be received through Jazan Port Control on VHF channel 16.

In addition, the following channels are available: 11, 16, 71, 72 and 73.



Use of VHF at the berths within Jazan Port to contact Port Control Center, Marine Terminal, Saudi Aramco Operations Dept., Pilots or Agents is permitted.

### 3.7 Notice of Readiness

Notice of Readiness should be addressed to Saudi Aramco, Jazan Bulk Plant.

For more information, see “Common Rules and Information” section 7.2 Notice of Readiness.

## 4 Arrival Procedures

### 4.1 Arrival Directions

All inbound vessels arriving at the entrance to the North Channel shall establish early radio contact with Jazan Port Control on VHF channels 16 and 11, and proceed as instructed.

### 4.2 Proceeding in the North Channel

All vessels will monitor VHF channels 16 and 11 during channel passage.

### 4.3 Proceeding to Anchorage

A vessel with no berthing instructions directed to anchor, or a vessel with instructions to proceed to Anchorage B should make for a position approximately 3.5 miles west-southwest of the Jazan Port entrance breakwater. After anchoring, the vessel should immediately advise Jazan Bulk Plant Terminal by VHF of anchoring time. Thereafter the vessel should monitor VHF channel 11 for further instructions.

### 4.4 Proceeding to Jazan Bulk Plant SPM

For vessels going to a Jazan Bulk Plant SPM berth and maneuvering from either the channel or from the anchorage, the Harbor Pilot will board close to Tanker Anchorage (B).

## 5 Traffic Movements and Maneuvering

All inbound vessels arriving at the entrance to the North Channel shall establish early radio contact with Jazan Port Control on VHF channel 16 and 11, and proceed as instructed.

Berthing at the SPMs will be planned by the Duty Harbor Pilot in coordination with Jazan Port Control and Jazan Bulk Plant.

## 6 Harbor Facilities

### 6.1 Bunkers

Not available at the Bulk Plant Terminal.

## 6.2 Fresh Water

Not available at the Bulk Plant Terminal.

## 6.3 Provisions

Ship chandlers are available for the supply of limited quantities of provisions.

They may be contacted through the ship's agent.

## 6.4 Medical and Hospital Services

Requirements for medical assistance or hospital services must be made through the ship's agent who can arrange treatment.

## 6.5 Airport

Nearest airport: King Abdullah Airport in Jazan City.

Airport facilities: Connecting flights to Jeddah, Riyadh and Dammam.

## 6.6 International Ship and Port Facility Security Officer

For - Jazan Bulk Plant

Contact the Assistant PFSO: Duty Harbor Master

Tel. +966 12 4275666

+966 12 4275561- 24hrs contact

+966 12 4275577- 24hrs contact

Fax. +966 12 4275668

## 6.7 Other Information

Saudi Aramco Ports and Terminals are part of a national network of Ports and Terminals that are governed through pertinent national legislation. Thus, Saudi Aramco Ports and Terminals request all ships calling at its Terminals to liaise with their respective shipping agent to arrange for all MARPOL reception requirements.

Contact the local shipping agent or Sailing Directions for any additional information.

## 7 Shipping Agent Contact Details

The following companies are available to act as ships agents at the Saudi Aramco Terminals.

Information contained in the below table may be altered by the organizations without notice or warning.

Jazan Shipping Agencies							
Agency	Services	Phone	Mobile 1	Mobile 2	24 Hours	Fax	E Mail
Yusuf Bin Ahmed Kanoo (S5 Agency world)	1	(012) 263-6171	(050) 6602257	(054) 8738053	-	(012) 263 3049	Jizan@kanooshipping.com saudiarabia@kanooshipping.com
Faisal M Higgi and Associates Co Ltd	1 2	(017) 317 1113	(050) 439 8008	-	-	(017) 322 6205	jizan@faisal-higgi.com
Sharaf Shipping Agency Co. Ltd	1	(017) 323 4812	(053) 142 7268	-	-	(017) 323 4814	redseaops@ssajeddah.com
Hasan Al Harbi Corporation (HASCO)	1	(017) 334 3030	(056) 824 2506	(050) 537 3931	-	(017) 322 8276	jazan@hasco.com.sa
Shipping Agencies are locally licensed to provide services for - 1. Maritime Support Services 2. Chandlery services 3. Bunker Services If dialing from an International destination: All landline / Mobile / Fax numbers must be preceded by Saudi Arabian country code. (00 966) or (+966) and then remove the first zero of the number. For example: Local (017) *** **** will become either 00 966 17 *** **** or +966 17 *** ****							

# Jazan Bulk Plant Terminal

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# Jazan Bulk Plant Terminal

## RULES REGULATIONS AND GENERAL INFORMATION

### 1 Port Location & Description

#### 1.1 Location of Terminal

The Saudi Aramco Jazan Bulk Plant Terminal comes within the Jazan Port Authority boundary and is not owned or controlled by Saudi Aramco.

#### 1.2 Marine Terminal Assistance Fees

The Owners, Operators and Charterers of any vessel calling at Jazan Bulk Plant Terminal shall be liable and shall reimburse Saudi Aramco promptly and in full for all applicable Jazan Bulk Plant Marine Terminal Assistance Fees.

#### 1.3 Description of Terminal

The Saudi Aramco Jazan Bulk Plant, Marine Terminal comes within the Jazan City Port Authority boundary. Within the boundary Saudi Aramco has an exclusion zone around two (2) single point moorings (SPMs) for Tankers.

Each is a CALM SPM Buoy suitable for Tankers between 10,000 and 50,000 MT DWT. Information on suitable parameters for using the SPMs are listed in the Universal Berth Parameters including:

Max. L.O.A.: 220 meters

Max. Beam: 35 meters

Anchoring or fishing within the designated areas are prohibited without prior permission from Jazan Port Authority.

##### 1.3.1 SPM buoy water Depth

SPM	Water Depth
1	17.70M
2	18.10M

##### 1.2.2 Cargo Hoses

Each SPM is fitted with one 16" diameter floating cargo hoses and one 17" circumference, double braided nylon, 55.4 meters (180ft) long mooring hawser.

The tail end hose presented to the ship is 16" fitted with 16" flat face blank flange, a lifting eye, and lifting and snubbing lines.

Each hose weighs approx. 3.5MT and is designed for;

- Maximum throughput 18,000 BPH
- Normal operating pressure 11 Bar
- Design pressure 15 Bar

### 1.2.3 Cargo Hose Strings

The SPM #1 hose string is 256.0 M (840 ft.) long and SPM #2 hose string is 246.0 M (805 ft.) long

In the exceptional case of an SPM being taken out of service for maintenance or otherwise the cargo hose string may be transferred and connected to the other SPM. The result is an SPM connected with 2 hose strings to ensure flexibility and continuity of cargo operations.

### 1.2.4 SPM Marking

The SPM buoys are fitted with radar reflectors and navigation lights.

The navigation lights switch on automatically during hours of darkness.

Light character 2 FL +1LFL 15-sec. Range 8 NM.

### 1.2.5 Cargo Hose connection

Cargo hose connections will be carried out by the ship's crew and supervised by the terminal representative.

## 2 Entering the Terminal

### 2.1 Maximum Drafts

Under normal operating conditions the maximum arrival draft is 11.80M, and a positive (+) height of tide above Lowest Astronomical Tide (LAT).

### 2.2 Ballast Condition

Under normal operating conditions all vessels should comply with the "Common Rules and Information" Section 11.2 Ballast Operations Draft and Trim.

### 2.3 Vessels arriving

For vessels proceeding to a Jazan Bulk Plant SPM berth and maneuvering from either the channel or from the anchorage, the Harbor Pilot will board close to Tanker Anchorage (B).

## 2.4 VHF Communications

Jazan Bulk Plant Terminal maintains a listening watch on VHF channel 11, which is used as the calling channel to confirm as required vessel berthing or anchoring.

Prior to berthing the Saudi Aramco Harbor Pilot will contact the vessel on VHF channel 11 & 16.

Vessels on SPM must maintain a listening watch on

- VHF channel 10 for SPM 1
- VHF channel 11 for SPM 2

And coordinate all operations with the onboard Saudi Aramco Harbor Pilot.

## 2.5 Anchoring and Restricted Areas

The Port of Jazan City is an open roadstead, protection is afforded by shoals and land to an extent where vessels do not normally experience heavy movement.

Jazan has (2) anchorage areas “A” and “B,” which are North and South of the Jazan entrance channel, respectively. Vessels bound for Jazan Bulk Plant terminals should use “B” anchorage, which is 3.5 miles (west-southwest) of Jazan Port entrance breakwater end.

Vessels directed to anchor prior to berthing should anchor in Jazan “B” Anchorage. Holding ground is good with depth of 12 to 20 meters.

There is a relatively shallow patch of ground to the north west of “B” Anchorage, with a charted depth of 11.9 meters.

Newly arrived tankers should avoid this patch when proceeding to the anchorage or the SPM. The position of the shallow patch is: Lat. 16. 52.30’N Long. 42. 26.95’E, and is approximately one (1) cable in circumference.

No vessel shall enter any restricted or prohibited area without a Pilot on board. Fishing vessels are prohibited from fishing and/or anchoring in these zones.

Under no circumstances shall anchors be used in these areas due to the existence of submerged pipelines.

## 3 Pilotage, Mooring Rules and Operations for SPM Buoys

### 3.1 Pilot Boarding

The Harbor Pilot and, if assigned, Harbor Pilot Assistant and/or Harbor Pilot Trainee, will board the tanker close to Tanker Anchorage B. The Master should provide an adequate lee for embarking the Pilot team if they are to board by boat, or orient and prepare his/her ship as requested by the helicopter dispatcher, if the team is to board by helicopter.

Pilot boat operations and boarding activities from a launch are limited by the following weather conditions: a wave height of 2 meters and/or wind speed of more than 25 knots.



Harbor Pilots will not attempt to berth vessels bound for or at the SPM unless it is safe for the mooring boat to operate in the prevailing conditions.

At all times mooring boats shall operate within their allowable design specifications after a careful evaluation of the existing circumstances and weather conditions, carried out by the Harbor Pilot.

The Pilot/Pilot Assistant, as applicable, will advise the Master on all maneuvers and operations relative to berthing, connecting and disconnecting hoses and unberthing. Moreover, they will also provide all communications between ship and shore during cargo loading and be the Saudi Aramco Representative with respect to safety observations and other requirements

### 3.2 Helicopter Operations

Helicopter operations are not carried out routinely at Jazan Port.

In the eventuality that a helicopter may be required as part of an emergency or other procedure, all vessels should be prepared for helicopter operations to be carried out according to the "International Chamber of Shipping (ICS) - Guide to Helicopter/Ship Operations."

All vessels should have a copy of this booklet and the safety checklist relevant to helicopter operations on board.

### 3.3 Preparations Prior to Mooring

Ships assigned to the SPM buoys must comply with the OCIMF recommendations for equipment employed at single point moorings.

During the approach, while mooring/securing to the SPM, the vessel's anchors must be secured by stoppers to prevent accidental dropping with subsequent damage to the subsea pipelines and equipment.

Line handling during mooring/unmooring shall be performed by the ship's staff under instructions of the Pilot/Pilot Assistant.

Ship cargo cranes shall be rigged and ready to lift the hose connecting equipment basket from the launch from either side. If available, a trolley may be required to transport this equipment about the vessel's deck.

The vessel shall have the following equipment ready for use on the forecastle head.

- Large crow bar.
- Large intrinsically safe flashlight for night mooring.
- A messenger line 24 to 28 mm diameter, 150 m in length.
- Winch drum or empty spool drum to heave onboard the mooring pick up rope.

Where possible, the mooring line(s) should lead through a Panama chock in the center of the bow, rather than through a single port or starboard bow fairlead to reduce the possibility of yawing.

Power should be available to the winches (mooring deck equipment) on the forecastle and to the cranes at the ship's manifold to ensure they are ready to lift the ancillary mooring and hose handling equipment. The manifolds shall be prepared for cargo operations, as detailed in 3.3.2.

The Pilot/Pilot Assistant will check that all equipment for mooring and hose connecting operations are on board the launch and in working order prior to departure. Items such as chain hoists, gaskets, wrenches, flange bolt sets, butterfly valve handles, ullaging equipment, sample bottles, etc., may be required and placed on board.

### **3.3.1 Preparing the Forecastle Head**

Ship's staff will prepare the forecastle head for the mooring operation at the instruction of the Pilot/Pilot Assistant.

### **3.3.2 Preparing the Port Side Manifold**

All Saudi Aramco SPM terminals have been designed for port manifold vessels only. The cargo crane must be currently certified, tested and ready for use.

Two 16" flange connections to be fitted on cargo manifolds.

To avoid delays, the vessel should have reducers ready at the port side manifold to adapt to any other size requests.

Drip trays, absorbent material or sand and firefighting equipment should be in position.

Saudi Aramco normally supplies the following, but their presence will prevent delays in case of deficiency or malfunction.

- Handy-Billy/Chain block
- Spare spanners
- Spare wire strops
- Spare bolts

### **3.3.3 OCIMF Standard Manifold Arrangement**

To secure the hoses to the vessel's manifold the manifold arrangement must be as recommended in OCIMF publication "Recommendations for Oil and Chemical Tanker Manifolds and Associated Equipment."

### **3.3.4 Equipment Transfer**

Saudi Aramco mooring and hose connecting equipment will be lifted aboard the tanker from the launch on either the port or starboard side, by means of the ship's crane.

Normally, the transfer of equipment will be done once the ship is fully secured to SPM. If the ship requires cargo reducers, the transfer will be done as soon after the Pilot boards the vessel as possible. For this purpose, the hose handling crane shall be ready for immediate use and an adequate lee shall be provided.

To prevent injury to personnel and damage to the launch superstructure, the hoisting block must be secured and controlled by a handling line during the entire transfer operation.

## **3.4 Mooring Sequence of Operations**

### **3.4.1 Mooring / Line Boats**

Jazan Bulk Plant Terminal normally operates with two tugs and a mooring boat. Both tugs are available for mooring assistance at the SPMs.

The launches and other terminal facilities are equipped with compatible VHF and UHF two-way radio equipment of adequate power.

### **3.4.2 Operational Limits**

Harbor Pilots should not attempt to berth vessels at the SPM unless it is safe for the mooring boat to operate in the current conditions. The decision to proceed with the operation should only be made in agreement with the mooring boats.

At all times mooring boats shall operate within their allowable design specifications. The Harbor Pilot should complete a careful evaluation of the existing circumstances and weather conditions including consideration of the wind speed and direction, the state of the sea including the assessment of swell and currents.

### **3.4.3 Optimum Approach Direction**

Prior to making the final approach to the SPM, it is important that the Master and the Pilot evaluate and agree, on all conditions and factors that will influence the mooring operation. These conditions and factors include: the tide, current, wind, swell and wave effect, and the direction in which the floating hose strings and hawsers are lying.

The optimum approach to the terminal is into the wind and sea. At times this approach will not be possible, because of the current being at variance with the wind or sea conditions. Accordingly, it is incumbent upon the Master to exercise careful judgment when approaching the terminal, particularly during the hours of darkness and in poor visibility.

Particular attention must be given to the location of the floating hose string. Normally, the position of the floating hoses will be controlled by the currents, rather than by wind effect.

### **3.4.4 Approaching the SPM**

When the optimum approach route has been selected, the tanker should proceed toward the terminal at a suitable speed, dependent upon the conditions at that time. Approximately 1,000 m from the berth, the vessel should have only sufficient way on for steerage.

The floating hose string should be on the port side. The tanker should make the final approach with the buoy on the port bow, rather than dead ahead. This permits the Pilot/Pilot Assistant on the bridge to observe the buoy at all times, and in the event of any misjudgment of the approach speed, there is no danger of overrunning the buoy.

In general, the vessel will approach the SPM on a heading against the wind and/or current whichever takes dominance.

It is extremely dangerous for small boats to lie in the path of large vessels, particularly when the larger vessel has a bulbous bow. Therefore, the ship's crew must carry the messenger line to a safe location aft of the bow, along the flat side of the hull before lowering the messenger line, thereby making it unnecessary for the boat to position itself right ahead or under the flare of the vessels bow.

The tanker's approach speed must be reduced to a minimum, but sufficient to keep the ship's maneuverability.

A tugboat may be secured right astern throughout the ships approach to the SPM as deemed necessary by the Harbor Pilot.

### 3.4.5 Mooring Hawser Hookup

As the vessel approaches the berth, the floating hoses are towed away from the path of the approaching tanker. In addition, the angle between the cargo hose and the pick-up rope should not be allowed to extend more than 90° and in no case the cargo hose and pick-up rope be in opposite directions.

When the vessel is approximately 300 to 460 m (1,000 to 1,500ft) from the buoy, and still making way, the mooring boat will bring the port hawser pickup rope (80 mm diameter) and make it fast to the messenger. At the boat's signal, the pickup rope is heaved on deck.

Under no circumstances must any load be put on the pickup rope as this may lead to the failure of the rope.

The tanker should be brought to a dead stop between 45 and 60 m (150 and 200ft) from the buoy. At this point, the chafing chain is lifted into the bow chock and then to the bow chain stopper to be secured under the direction of the pilot. Ease back on the pickup rope until the weight is taken up.

Care must be taken to gradually transfer the load to the hawser, to avoid any shock loading that can result from a freely drifting tanker taking up hawser slack.

## 3.5 Connecting the Hoses

Connecting cargo hoses is to be carried out by the ship's staff under instruction and supervised by the terminal representative:

Due to possible vessel induced movement to the crane wire/hook, the vessel must use guide ropes to reduce/control the hook movement at all times during raising and lowering operations.

1. **Lower crane hook to the mooring boat, which will connect it first of all to the forward hose.**
2. **Heave up until the blank flange is level with the hose rail.**
3. **Unshackle hose snubbing lines from the flanges.**
4. **Continue heaving up the hose as directed by the Pilot Assistant.**

5. Secure snubbing lines in a manner to facilitate possible slackening as directed.
6. Lower the hose to bring the hose flange to the manifold and check the alignment of the flanges.
7. Lower the hose onto the drip tray and removed the blank flange.
8. Lift the hose and connect it to the manifold. Never use a wire strop around cargo hoses.
9. If the ship is required to connect two cargo hoses then the second cargo hose is connected in the same way. It is important to use all of the bolt holes and a new gasket for every connection.
10. After all hoses are connected, they must be supported in way of the vessel's side rail, by means of nylon belly bands hooked up to ship's crane. Be advised that the hoses cannot touch the saddle rail at any time.

### 3.6 Use of Tug/Engine at Berth

After securing chains, a tug will be made fast astern using a vessel's line of suitable length and strength for the whole period the vessel is at the SPM, and utilized as necessary to keep a safe distance from the SPM and reduce any unnecessary strain.

The utilization of the tug is important at all times and particularly important during times of changing sea conditions and adverse weather conditions.

Vessels that are only able to run their engines astern for short periods should maintain them in a state of readiness at short notice and use them as required to maintain position off the SPM. At such times, the Pilot may direct the operation from the forecastle with a vessel's officer and with the bridge manned by the Master.

### 3.7 Bow Watchman

At all times when at berth, there shall be an experienced crewmember on duty at the bow of the vessel. He shall be issued with a means of immediate communication with the Deck Officer on duty.

He shall observe the configuration of the hoses and mooring hawsers, and the proximity of the SPM and hoses to the tanker. He shall be alert to oil leaks or spills, unattached oil slicks in the vicinity and deteriorating weather conditions. He shall immediately report any abnormal event or deteriorating weather to the Deck Officer on duty.

### 3.8 Manifold Watchman

At all times, when at berth and when cargo hoses are connected, there shall be a watchman on duty at the manifold. He shall observe the configuration of the hoses and the manifold connections. He shall be alert to oil leaks or spills, stress or chafing on the hoses or ancillary equipment and deteriorating weather conditions. He shall report any abnormality to the Deck Officer on duty.

### 3.9 The Deck Officer on Duty

The Deck Officer shall immediately report any abnormal events, deteriorating weather or other situations coming to his attention to the Pilot or Pilot Assistant on duty.

### 3.10 Gangways

The gangway is to be rigged and ready on the starboard side of the vessel, maintained at deck level.

### 3.11 Boarding Vessels at Berth

Small craft are not allowed in the vicinity of the vessel and no one is permitted to board or leave a vessel while cargo operations are in progress.

Should it become urgent for personnel to board or leave a vessel for any reason during the cargo operation, the Pilot must be contacted to request permission to shut down the cargo operation while the small craft is alongside.

### 3.12 Care of Berth Equipment

In bad weather, maintenance work is extremely difficult and involves possible danger to personnel. For this reason, vessels are requested to give as much assistance as possible by taking proper care of the mooring and hose equipment.

Saudi Aramco will hold the vessel responsible for all costs and/or losses resulting from damage to the mooring and hose equipment where they consider that the vessel has been negligent in taking proper care of them.

### 3.13 Disconnecting the Hoses

Disconnecting a single cargo hose or hoses is to be carried out by the ship's staff under instruction and supervised by the terminal representative:

Due to possible vessel induced movement to the crane wire/hook, the vessel must use guide ropes to reduce/control the hook movement at all times during raising and lowering operations.

1. Connect the hose strop and if two cargo hoses are connected the after-hose strop to the crane hook, take the weight and disconnect the flange.
2. Replace the blank flange using all the bolts and a new gasket. Tighten the bolts to avoid uneven tension on the flange.
3. Lower hose to deck and secure.
4. Repeat with forward hose, if two cargo hoses are connected.
5. Secure the crane hook to the lifting hook of the after hose and raise the hose until the weight is taken off the snubbing wires.
6. Release the snubbing wires, lower the hose to rail level and shackle the snubbing wires to the flanges.
7. Lower the hose end into the water and trip the hook to release.

8. Repeat for the forward hose if two cargo hoses are connected.

Return all Saudi Aramco tools and equipment to the steel basket, stow it in a seaman like manner, and prepare for lowering to the mooring boat on either the port or starboard side, dependent on weather conditions.

### 3.14 Unmooring Procedure

1. Take the weight of the chain and hawser on the pickup rope using the windlass.
2. Disconnect chafing chain from the bow chain stopper.
3. Slowly slack the pickup rope until the support buoy is in the water and taking all of the weight of the chain.
4. Pay out the pickup line either to the mooring boat or as the ship clears the berth.

## 4 Berth Information

The specific gravity of seawater at Jazan is approximately 1.025.

### Cargo Rates

Will be set by the Harbor Pilot in coordination with the Terminal.

Each hose weighs approx. 3.5MT and is designed for:

- Maximum throughput 18,000 BPH
- Normal operating pressure 11 Bar
- Design pressure 15 Bar

### Ballast and Slop Reception

Not available at the Jazan Bulk Plant Terminal.

## 4.1 Procedure at Berth

### 4.1.1 Cargo and Ballast Operations

Cargo rates will be set by the Harbor Pilot in coordination with the Terminal and as agreed with the vessel.

All cargo and ballast operations will be controlled by the ships' Officers.

Ballast and Slop Reception is not available at Jazan Refinery SPM Terminal.

Radio communications with the Terminal will be designated by the Pilot or Pilot Assistant. The need for emergency shutdown of discharging aboard the vessel must be communicated as soon as possible to the Harbor Pilot and Terminal.

## 4.2 VHF Communications Failure

In the event of failure of radio communication systems, the vessel will sound five long blasts on the vessel's whistle. Loading operations will be stopped and will not be resumed until communications have been restored.

## 5 Completion and Departure

### 5.1 Cargo calculations on arrival and departure

The Cargo Officer in coordination with the attending cargo surveyor and if necessary Harbor Pilot assistance, will supply the ship's cargo figures on arrival and prior to departure in U.S. (i.e., Gross) Barrels. The Terminal Representative will not accept the figures until they are presented in writing on the Saudi Aramco ullage report form.

Results of ship/shore comparison take time and Masters are urged to prioritize the cargo calculations and completion of the ullage report form to avoid delay.

If the vessel is released, the Harbor Pilot will leave after unmooring is completed and the ship is clear of the berth. If the ship/shore difference is large and the vessel is not released, the Cargo Officer in coordination with the attending cargo surveyor and if necessary Harbor Pilot assistance, will survey any cargo to Saudi Aramco inspection procedures and report the findings to Saudi Aramco Terminal Planners.

Refer also to "Common Rules and Information," Section 11.3 "Cargo Calculations and Release."

### 5.2 Departure

Upon completion of unmooring, the vessel will make a lee for the mooring and hose connecting equipment to be discharged onto the launch, on either port or starboard side.

The Pilot/Pilot Assistant will normally leave by Pilot launch.

All vessels using the Jazan facilities should then proceed outwards via the departure North Channel.

## 6 Annex

### Location Chart



Jazan SPM Berths

