



# GUAM POWER AUTHORITY

ATURIDÁT ILEKTRESEDÁT GUAHAN  
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March 23, 2018

## AMENDMENT NO.: VIII

TO

INVITATION FOR MULTI-STEP BID NO.: GPA-009-18

FOR

SUPPLY OF RESIDUAL FUEL OIL NO. 6

Prospective Bidders are hereby notified of the following changes:

1. **Under Schedule A, Product Quality Specification Residual Fuel Oil No. 6 Page 73 of 134**

Please note changes:

- b. **FROM:** "Item 5: API Gravity Maximum Allowed Value 12.1." (Amendment VII)

**TO NOW READ:** "Item 17: API Gravity **Minimum** Allowed Value 12.1."

2. **FROM:** "Item 8: Vanadium Content, Maximum Allowed Value 70"

**TO NOW READ:** "Item 8: Vanadium Content, Maximum Allowed Value 90"

3. **FROM:** "Item 10: Guaranteed Gross Heating Value (HHV) Minimum Allowed Value 6.30"

**TO NOW READ:** "Item 10: Guaranteed Gross Heating Value (HHV) Minimum Allowed Value 6.10"

4. After Page 74 of 134

- a. Insert: "Schedule B: Tristar Port and Terminal Information Handbook" (Attached)

- b. Insert: "Schedule C: Tristar Vessel Vetting Procedure" (Attached)

All other Terms and Conditions in the bid package shall remain unchanged and in full force.

  
JOHN M. BENAVENTE, P.E.  
General Manager

**Port and Terminal Information Handbook**

**Terminal: Agat Terminal, Guam**

**DOCUMENT NUMBER**

**TER-01**

EDITION	REVISION	DATE	PREPARED	APPROVED
1	01-10-13	10.31.2013	Kamsen Chin	GM – KK Vikraman

**PAGE REVISION STATUS**

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This handbook is to provide a reference for Vessel Staff, Vessel Operators, Marine staff and Depot Staff for the safe conduct of Operations in the Terminal.

The contents of this handbook should be used with due consideration to Industry standards – IMO Conventions, International Safety Guide for Oil Tankers and Terminals (ISGOTT), OCIMF and IPIECA Guidelines as well as National laws.



**DOCUMENT CONTROL PAGE**

Latest electronic copy supersedes all previous copies. All previous copies are to be destroyed on receipt of the latest copy. **It is the responsibility of the General Manager Tristar Terminals Guam, Inc. to update the information on an annual basis.**

<u>Document Title:</u> <b>Agat Port and Terminal Information Handbook</b>
<u>Document Reference:</u> <b>ISGOTT, OCIMF, Marine Terminal Operation Manual, SIGTTO</b>
<u>Document Controller:</u> <b>General Manager or Quality &amp; Planning Manager</b>

Issue Date	Amended Section/Page No.	Details of change	Approved by	Indicator
10/31/13	2 - p.9	Maximum - LOA & Draft	KK Vikraman	GM

	Prepared by:	Reviewed by:
Name	Kamsen Chin - Quality & Planning Manager	John Aflege - Terminal Operations Manager

	Approved by:
Name	K.K Vikraman - General Manager



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## LIST OF ABBREVIATIONS

ISGOTT	(International Safety Guide for Oil Tankers and Terminals) is the standard reference and basis for all standards and procedures.
SIGTTO	Society of International Gas Tanker and Terminal Operators
API	API Gravity, numerical system used on petroleum products corrected to density and relative density.
ASA	American Standards Association
B/L	Bill of Lading. Document issued by the cargo supplier stating the quantity of material delivered to the vessel.
DWT	Deadweight Tons
ETA	Estimated Time of Arrival
GRT	Gross Registered Tons
HHW	High High Water
OCIMF	Oil Companies International Marine Forum
KL	Kiloliters
LOA	Length Overall. Length of a vessel taken over all extremities.
LOP	Letter of Protest
MLLW	Mean Low Low Water
P2P	Product to Product
PIC	Person in Charge of Transfer Operations (Per USCG CFR)
SBT	Segregated Ballast Tanks
SDWT	Summer Dead-weight Tonnes
UKC	Under Keel Clearance
UHF/VHF	Ultra High Frequency/Very High Frequency
USCG	United States Coast Guard



**SECTION 1: EMERGENCY PROCEDURES**

**EMERGENCY CONTACTS**

**Any vessel on charter to Tristar and/or proceeding to any Tristar Terminals is required to give prompt notice of:**

- Personnel injury
- Vessel grounding
- Cargo release
- Contamination or loss of cargo
- Collision, Fire or Explosion
- Breach of hull
- Damage to any Terminal
- Situations with the potential to become more serious
- Any request for assistance.

**Notification should be per Charterer’s instructions or Charter Party to the Charterer & Tristar Terminals Guam, Inc..**

**TERMINAL EMERGENCY CONTACTS**

**In addition to the above, one of the following Terminal numbers should be advised of an incident that occurs while alongside or in the approaches to any Tristar Terminal.**

	<b>Name</b>	<b>Tel. No.</b>
Shore Officer	Joe Sablan	+1.671.727.3338
Shore Officer	John Sioco	+1.671. 688.8931
Jetty Office	Duty Officer	+671.477.9489
Terminal Office	Duty Officer	+1671.565.2300
Terminal Manager	John Afleje	+1.671.565.3306 Mobile +1.671.688-4633
Fire Dept		911
Hospital		+1.671.646.5801 / 6876
Police		911
OSRO	John Manibusan	+1.671. 688-5038
NRC (USCG)		+1.800.424.8802
Harbor Master (PAG)	Charlene Yatar	+1.671.477.5931 ext. 333



## EMERGENCY SIGNALS

### INCIDENT ALARM (TERMINAL)

- ◆ By verbal advice over the radio or VHF.
- ◆ Continuous ringing of shore Siren.

### VESSEL EMERGENCY (or reported from Vessel)

- ◆ By verbal advice over the radio.
- ◆ Tank ships - at least six blasts on the ship's whistle, each of not less than ten seconds duration, supplemented by a continuous sounding of the general alarm system.

### BARGES

- ◆ By verbal advice over the radio.
- ◆ Visual and verbal signalling as appropriate.

## TERMINAL EMERGENCY PROCEDURES

In case of any emergency, transfer operations are to be ceased immediately and equipment secured as appropriate.

Necessary notifications are to be made.

Emergency Response is to be mounted by the vessel per their procedures and by Terminal per their Emergency and Facility Response Plans.

**In all Cases – Ensure that Personnel Safety is the first priority.**

Brief reference of emergency response details from the Dock Operations Manual -

### Oil Spills –

- ◆ Cease Operations. Close all valves. Eliminate source of spill.
- ◆ Drain lines into containment systems. Stop any spill to water.
- ◆ Make external and internal notifications.
- ◆ Respond per Spill & Facility Response Plans for Marine Operations Spills/Leaks.

### Fire/ Explosion –

- ◆ Shut down transfer operations.
- ◆ Sound fire alarm; notify Fire Dept. Follow Emergency Response Plan for Fire/Explosion.
- ◆ Make external and internal notifications.
- ◆ Eliminate fire source if possible.



#### Personnel Injury –

- ◆ Cease transfer Operations
- ◆ If prudent – Remove injured party to safe location. Give First aid.
- ◆ Make external and internal notifications. Follow Emergency Response Plan for Medical Emergency.
- ◆ Get medical assistance to injured person(s).

#### Severe Weather Conditions –

- ◆ Terminate transfer operations.
- ◆ Secure transfer valves and disconnect hoses.
- ◆ Comply with Weather Limitations notice.

#### Terrorist Activity –

- ◆ Terminate Transfer Operations.
- ◆ Secure the area.
- ◆ Follow Facility Response Plan.
- ◆ Make external and internal notifications.

## **SECTION 2: TERMINAL INFORMATION**

### **LOCATION:**

The Tristar Guam waterfront facility (Wharf Foxtrot-1/ F-1 Dock) is located in Apra Harbor in the US Territory of Guam at Lat 13° 27.5N Long 144°39.5E.

**Apra Harbor** is situated midway along the W coast of Guam and is the main berthing facility on the island, consists of a commercial harbor, a naval complex, and a repair facility. The harbor is comprised of two main areas; **Apra Inner Harbor** and Apra Outer Harbor. **Apra Outer Harbor** is the principal commercial port for the island.

US Chart 81048 covers the area.

### **DESCRIPTION:**

The approaches to the harbor are free and deep, as is the channel between the breakwaters.

The facility is a T Head Jetty consisting of a concrete platform and with breasting and mooring dolphins that have 2 units of single 100 ton quick release hooks and 4 units of double 100 ton quick release hooks.

All operations in Apra Outer Harbor are under the jurisdiction of The Port Authority of Guam and The United States Coast Guard. Prior to entry all vessels must establish communications with Guam Port Control Harbormaster's office on VHF-FM channels 12, 13 or 16.

Vessels entering, leaving or shifting berth are required to give a minimum of 24 hours notice to The Port Authority of Guam Harbor Master and US Coast Guard Captain of the Port. Failure to give such notice is a basis for denying entry. No vessel shall enter or leave the harbor without radio clearance from the Harbormaster. Vessels must be ISPS/MTSA compliant.



**CARGO TRANSFER FACILITIES & MAXIMUM RECEIVING RATES**

<u>Product</u>	<u>Discharging Rate</u>	<u>Maximum Pressure</u>
Mogas - 16"	C line - 7000 barrels	100 psi
Gas Oil - 16"	D line - 7000 barrels	100 psi
Jet - 24"	A line - 13,000 barrels	100 psi
RFO - 24"	B line - 12,000 barrels	100 psi

Receiving rates are calculated at 7m/sec maximum flow rate on one pipeline to one receiving tank. During start of discharge and product changeover, receiving rates will be much lower to comply with the maximum allowable flow rate during initial pumping of 1m/sec. Actual receiving pressures will be agreed upon in the Ship/Shore Safety and Operational Agreement, which will be signed by the Ship's Officer and Shore Officer before cargo operations.

<u>Line</u>	<u>Product</u>	<u>Manifold</u>	<u>No. hose</u>
A line	Jet	2 x 150 PSI ANSI	3 x 10" X 35'
B line	RFO	2 x 150 PSI ANSI	3 x 10" X 35'
C line	Mogas	1 x 150 PSI ANSI	3 x 10" X 35'
D line	Gas Oil	1 x 150 PSI ANSI	3 x 10" X 35'
LPG	Vapour	1 x 300 PSI ANSI	2 x 4" X 50'
LPG	Liquid	1 x 300 PSI ANSI	2 x 6" X 50'



## **PORT & BERTH RESTRICTIONS/ MAXIMUM & MINIMUM VESSEL CRITERIA**

The berthing facility has a maximum depth of 15.8 meters at MLLW. A minimum Under Keel Clearance (UKC) in the channel of 1.0 m is required.

**Maximum LOA - 259 meters (ref. PAG Harbor Master Letter dtd 10/25/2013)**

**Minimum LOA - 99.9 meters**

**Maximum breadth - 45 meters**

**Max. vessel draft alongside - 16.4592 meters (ref. PAG Harbor Master Letter dtd 10/25/2013)**

**Maximum Displacement - 108,840 metric tons**

**Maximum Freeboard - 23 meters**

## **UNDERKEEL CLEARANCE**

Vessels are required to maintain a minimum Under Keel Clearance of 1m at all times

## **ANCHORAGES & WAITING AREAS**

Anchorage have been designated within Apra Outer Harbor. The Port of Guam Authority will assign the vessel's designated anchorage and waiting area.

## **PILOTAGE/ MOORING BOATS / TUGS**

Pilotage is compulsory for vessels over 500 gross tons and all vessels entering the port for the first time and after daylight hours. Pilot services are available on a 24-hour basis for Apra Harbor. Pilots are required to board inbound vessels and leave outbound vessels at Alpha Hotel Pilot Station

Tugs of up to 3600 HP operate within Apra Harbor.

A Minimum of 2 tugs is required to be in attendance when berthing and unberthing. Arrangements may be made through the vessel agents.

## **MINIMUM MOORING ARRANGEMENTS**

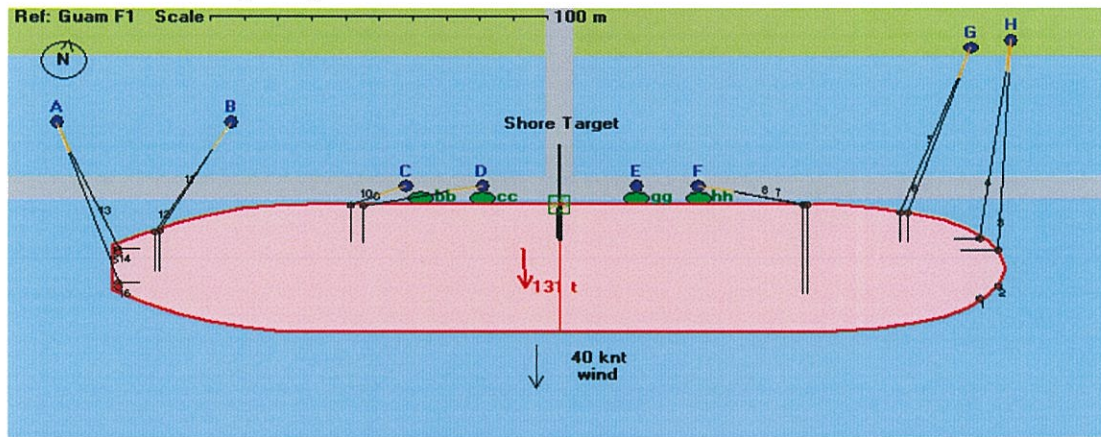
The Terminal requires the following minimum moorings -

Headlines and Stern lines - 2 each.

Forward & Aft Spring lines - 2 each.

Forward & Aft Breast lines - 2 each.

**Minimum Mooring Diagram:**



**COMMUNICATIONS PRIOR ARRIVAL**

ETA's are to be advised regularly through Tristar Terminals Guam Inc. directly to the Terminal. The following communications are to be sent at the earliest opportunity.

Information Required From Vessels Prior To Arrival

- A) Vessel's Name and Port of Registry
- B) ETA
- C) Arrival draft and Displacement / Departure draft & Displacement.
- D) Amount & Stowage Plan and preferred order of all cargo to be loaded or discharged.
- E) Loading- Amount of freewater in cargo/ Discharging – Tank preparation & Last 3 cargoes.
- F) Maximum freeboard measured from manifold to water surface during discharge.
- G) Confirm maximum draft / max freeboard/ arrival displacement will not exceed;
  - Max draft 16.4592 meters
  - Maximum Freeboard 23 meters
  - Displacement 108,840 metric tons
- H) Best estimate of discharge time and discharge rate basis average rates given.
- I) Manifolds numbered from forward to be used for discharge.
- J) Confirm all vessels Cargo, Navigational, Mooring equipment and Engines are in good working order. Give details if not.
- K) Confirm vessel has received this Terminal Handbook and complies with all requirements noted.

The Terminal should note this exchange of information and confirm with Ship Officer/ PIC, upon boarding the vessel. Copies should be retained.



## **ENVIRONMENTAL CONDITIONS**

### **Tides and Currents**

The mean tidal range at Apra Harbor is 1.6 feet, while the spring range is 2.3 feet. Generally tidal currents in the harbor have little velocity. See Tide Tables for daily predictions at web site below.

<http://www.prh.noaa.gov/guam/public.php>

The prevalent set of the current at the harbor entrance is usually S or SW regardless of the tidal currents, but a set to the N or NE may be experienced, especially during the summer months. The flood current in the harbor entrance sets N to NNE at a maximum rate of 1.5 knots. The ebb current sometimes attains a maximum rate of 3 knots.

### **Climatic and Weather Conditions**

Winds and seas in the vicinity of Guam are mostly Easterly due to the NE Trades. Occasional westerly winds are experienced in the Summer months. The rainy season in Guam is from July to November. Typhoons frequently pass in the vicinity of the Island during the Summer months. Most pass off the island, however their associated heavy winds and rain affect the island.

### **Weather Restrictions**

**20 Kts (25 mph)** - If winds are constantly above this speed, vessels are requested to have additional deck watch in attendance.

**25 Kts (30 mph)** - If sustained winds are experienced at this speed, all product movements are to be suspended.

**30 Kts (35 mph)** - If sustained or higher winds are experienced or expected, loading hoses must be drained and disconnected. Once hoses have been disconnected, the vessel should be prepared to vacate the berth and/or have tugs standing by to assist. The vessel Master should order tugs and Pilot in good time, as deemed necessary.

The Terminal and Master may allow a deviation from the above limits based on mutual agreement and subject to an assessment of current and forecast weather on the ability to conduct safe docking operations. (e.g. onshore wind blowing vessel onto the berth, etc.)

### **Weather precautions**

In order to minimize the danger posed by severe weather conditions, the following precautions should be observed:

No berthing is allowed during electrical storm. For vessels already alongside, cargo operations must be stopped and if necessary, preparations made to unberth.

Final responsibility for the safety of the ship and her cargo rests with the vessel Master and in case of emergency such as severe weather conditions; none of these regulations should prevent the master or responsible ship officer from taking any action he deems necessary.



## **FACILITIES AT BERTH**

### **Slop/ Dirty Ballast / Oily Waste Reception**

There are no facilities for dealing with slops or dirty ballast at the berth. Arrangements may be made through the agents.

### **Availability of Bunkers**

Gas oil bunkers is available at F-1, coordinate with your agent and supplier for the bunker supply.

### **Availability of Fresh Water**

Fresh water is available at this time.

### **Garbage Reception**

Approved garbage reception facilities are available in the port via approved contractors and by arrangement through agents. Golden Dragon International Terminals, Inc. is the accredited garbage collector at the Port.

### **Arrangements for Receiving Stores**

The handling of vessel's store and general cargo is not permitted during cargo transfer operations.

Stores barge are not allowed to come alongside the vessel to deliver stores when alongside at the Terminal. Hand carried stores may be taken onboard subject to the usual security checks.

### **Tank Cleaning, Purging and Gas Freeing**

Tank cleaning/washing and gas freeing operations are not permitted during vessel's stay alongside.

## **TERMINAL ACCESS AND VISITOR SECURITY**

### **Personnel Access**

For entry and exit from the berthing facility, crewmembers may pass through the jetty gate. However, the vessel master/ship's agent must submit a crew list to the jetty guard before they are allowed to pass through the Terminal. Crewmembers passing through the Terminal must pass only through authorized areas and proceed directly to the jetty gate.

The Terminal reserves the right to refuse entry for any personnel transiting the Terminals.

### **Unauthorized or Intoxicated Persons**

Unauthorized, disorderly or intoxicated persons shall not be allowed on any Terminal or on any vessel(s) alongside.

Visitors will only be allowed on board a vessel with the knowledge and approval of the Terminal representative. Visitors transiting through the Terminal or visiting a vessel at the Terminal are required to comply with all Terminal regulations contained within this booklet.



## **SECTION 3: TRISTAR TERMINAL REGULATIONS**

### **GENERAL SAFETY AND EMERGENCY**

#### **APPLICABILITY**

Except as otherwise provided, these regulations apply to all tanker vessels hereinafter referred to as 'vessel', calling at Tristar Terminals Guam, Inc. Marine facilities.

The Terminal receives vessels alongside on the understanding that operations will be conducted safely and expeditiously and that jetty will be vacated as soon as practicable after operations have been completed.

#### **SAFETY/ ROLES AND RESPONSIBILITIES**

Responsibility for the safe conduct of operations whilst a ship at this Terminal rests jointly with the Master of the ship (ship officer) and a responsible Terminal/depot representative (shore officer).

**IN AN EMERGENCY, NONE OF THESE REGULATIONS SHOULD PREVENT THE MASTER OR RESPONSIBLE SHIP OFFICER FROM TAKING MEASURES THAT HE DEEMS ARE NECESSARY FOR THE SAFETY OF THE VESSEL AND CREW.**

#### **CONDITIONS OF VESSEL ACCEPTANCE**

Vessels are accepted at a Terminal on the understanding that operations will be conducted in accordance with all applicable legislation, together with practices contained in relevant Codes of Practice, in particular, the guidance contained within the latest edition of the International Safety Guide for Tankers and Terminals (ISGOTT).

Vessels found deficient on arrival may be subject to refusal until the deficiencies have been satisfactorily rectified.

#### **EMERGENCY ACTIONS**

On arrival, discuss with the shore officer actions to be taken in the event of an emergency. This shall include procedures to be followed and means of communications as stated in the handbook.

#### **MINIMUM NUMBER OF CREW:**

There must be sufficient qualified crewmembers onboard at all times for vessel operations and/or berth evacuation in the event of an emergency.

#### **SAFETY EQUIPMENT:**

Vessels must have all Life Saving and Fire Fighting equipment in good working condition and available for immediate use. For tankers/vessels, Fire Fighting equipment will include the following:

- a) Two fire hoses, fitted with adjustable nozzles, uncoiled, connected to the tanker's fire main and laid out on the main deck near the cargo manifold in use.
- b) Two portable fire extinguishers of foam or dry chemical type, placed near the vessel's manifold.
- c) An International Shore Fire Connection clearly marked and available for use.
- d) The vessel lifeboat shall be rigged, ready for immediate as means of escape in an emergency.
- e) A pilot ladder or accommodation ladder shall be rigged on the seaside of the ship ready for immediate lowering as means of escape in an emergency.

Barges need to comply with all of above, as applicable.

Vessels staff must acquaint themselves with the safety arrangement ashore, particularly with the following:

- a) Location of Fire Alarm
- b) Location of Fire Extinguishers
- c) Location of Cargo Emergency Stops and Shut down systems.

#### **VESSEL STATE OF READINESS**

While alongside a Terminal, a tank vessel must at all times be able to move under its own power at short notice. If, for any reason, the vessel cannot comply with this requirement, the Terminal representative must be advised immediately.

For tank barges, the tug assigned to a tank barge or a number of tank barges shall standby in the immediate vicinity of the barge(s) and shall maintain engines ready for manoeuvring at short notice.

#### **EMERGENCY SHUT DOWN**

For LPG vessels, the ship shall provide the shore with ESD control buttons prior to product receiving. These buttons are to be used by the shore representative when an emergency arises and should thus preferably be routed along shore. Upon activation, this emergency control button shall automatically shut down the product compressor and raise the alarm of the ship. The port should also be equipped with ESD and break-away coupling.

#### **VESSEL SUITABILITY**

**Any vessel calling at the Terminal must be cleared under the applicable Tristar Quality Assurance process (Accepted by MAJOR OIL companies or SIRE ACCEPTABLE).**

The Terminal receives a vessel alongside with the understanding that the ship is in all respects ready to discharge cargo safely and efficiently; that the ship is capable of operating within the physical limitations of the berth dimensions, maximum draft, UKC and hose/manifold operating envelopes.



### **SAFE ACCESS**

The Ship and Shore officer should ensure that Safe Access is rigged and maintained throughout the vessels stay at the Terminal. The vessel is required to provide a suitable gangway to enable safe access between ship and shore with a Safety net rigged under to span any opening to the water below. Handrails /ropes must be provided on both sides and maintained taut. A person should be on watch in the vicinity of the gangway, especially when persons are embarking or disembarking.

Any alternative arrangements should be used only following a Risk Assessment to ensure Safe Access is always maintained.

### **ALCOHOL/DRUGS**

Masters are advised that operations will cease when the actions of a person or persons involved in operations are not under proper control as a result of the use of alcohol, drugs and/or fatigue.

Access to the jetty restricted area for persons similarly suspected of being affected by alcohol/drugs will be denied.

### **CRAFT ALONGSIDE**

No craft is permitted to come alongside or remain alongside a vessel without the prior permission of the Terminal representative. Should a craft be given permission to come alongside, personnel on board it must be instructed regarding safety regulations.

### **ENTRY INTO ENCLOSED SPACES**

As a matter of general policy, any personnel entry into enclosed spaces on a vessel alongside a Terminal is prohibited unless necessary for the safety of the vessel and Terminal.

In certain trades involving Tristar Chemicals, tank entry may be required, for example, to check on tank preparation prior to loading particularly sensitive cargoes. Such tank entry should only be undertaken following recognised enclosed space entry procedures that include the issue of a written permit (ISGOTT/ NIOSH recommendations refer). The Terminal representative must be provided with a copy of the chemist's certificate confirming the suitability of the tank for entry.

### **MAINTENANCE AND REPAIR WORK**

Readiness of vessel's engines and Safety equipment is to be maintained at all times when at the Terminal.

Major planned repair work is not permitted while alongside the Terminal. Other repairs may be permitted on a case-by-case basis and may only commence once approval has been obtained from the Terminal representative.

Any repair involving hot work and welding shall not take place without the prior written permission of the Terminal representative (& USCG if applicable).

### **PROTECTIVE CLOTHING AND EQUIPMENT**

Vessel personnel on board must adhere to the following minimum dress code while alongside a Tristar Terminal:

- Long pants



- Suitable shoes, preferably safety shoes or boots with steel toe cap (sandals or similar footwear is prohibited)
- Shirt with sleeves
- Approved life jacket or buoyant work vest when working aboard a barge without safety rails, or when working outboard of any safety rails.

Personnel engaged in vessel operations are actively encouraged to utilise PPE to the fullest during transfer, hose handling and mooring/unmooring operations. This includes the wearing of hard hats and safety goggles.

Attention must be given to the need for additional PPE when handling certain hazardous cargoes. In such circumstances, splash protective eye wear, face masks, chemical suits, rubber boots and gloves, respirators or fresh air breathing apparatus should be considered for use, as appropriate.

### **HOT WORK**

No hot work permitted while vessel is alongside.

The use of power-driven or manually operated devices, capable of producing sparks, is prohibited in the cargo area, cargo tanks, fuel tanks, cargo pump rooms or enclosed spaces immediately above or adjacent to cargo tanks, such as cofferdams. No chipping or other activities likely to produce sparks shall be permitted in these areas.

### **MOORING**

All vessels must be securely moored alongside with sufficient ropes and/or wires in accordance with minimum mooring requirements established by the Terminal.

The effectiveness of the mooring system is dependent upon the sum total of all the mooring lines and therefore moorings must be properly tended throughout the vessel's stay.

The use of 'mixed mooring', e.g. synthetic fibre ropes and steel wire ropes in the same service (Breast lines or Springs etc.) is not allowed. Lines in the same service should be of similar material. In this context, it should be noted that moorings constructed of High Modulus Polyethylene (HMPE) have the same extension characteristics as wire and may be used in the same service.

Mooring lines shall be secured on board using the storage reel or, on vessels not equipped with reels, on bitts. The practice of securing lines on the warping drums of winches is not permitted.

Self-tensioning winches, if fitted, must not be used in the automatic mode.

Nylon pendants fitted to wire moorings shall be of sufficient length and strength and should be properly secured to the wire using a suitable shackle.

Tankers shall rig emergency towing wires of adequate strength secured to the offshore bow and quarter bollards with the towing eye maintained at, or about, the waterline.

**Mooring activities are statistically the most dangerous operations causing personnel injury. Lines can part or inadvertently release and 'snap back', causing release of the static energy stored in the taut line.**



**All personnel must stay well clear of danger areas when lines are under tension.**

### **GARBAGE**

No garbage or refuse of any kind shall be dumped overboard from any vessel moored at a marine Terminal. Vessel-generated domestic garbage should be collected in suitable containers.

In US territories, Medical wastes, hazardous wastes and, for foreign flag vessels, waste regulated by the Animal and Plant Health Inspection Service (APHIS), is to be collected separately.

### **SMOKING**

Smoking is strictly prohibited on vessels alongside except under controlled conditions in specifically designated areas, not having doors or ports that open directly onto the cargo deck. Smoking is prohibited on board any unmanned tank barge while at or in the vicinity of the Terminal.

Smoking in the Terminal is only permitted in designated smoking areas.

Designated smoking areas should be conspicuously marked.

### **SOURCES OF IGNITION**

The carrying and use of matches, lighters or other sources of ignition, which includes battery-operated equipment and cameras, is prohibited within the Terminal and on the deck of vessels alongside.

### **PORTABLE ELECTRICAL EQUIPMENT**

All flashlights used shall be of a safe type, which is approved by a competent authority.

The use of portable electrical equipment on wandering leads is prohibited in hazardous zones during cargo transfer operations. The equipment should be disconnected from power and preferably removed from the hazardous zone.

Only cellular phones and pagers of an intrinsically safe type are permitted on the deck of vessels while alongside a Terminal.

### **CARGO OPERATIONS**

#### **PRE TRANSFER CONFERENCE & CHECKLIST**

Before operations begin, the persons in charge of the transfer operations for vessel and shore (PIC/ Ship & Shore Officer) must conduct a Pre Transfer conference. As part of this conference they should jointly conduct an inspection and complete the **latest edition (Ed. 5) of the ISGOTT Ship/Shore Safety Checklist (and USCG DOI, if applicable)**.

The shore officer, together with a responsible ship officer, will inspect the ship prior to start of operations, and from time to time thereafter at intervals not exceeding 6 hours,

to ensure that the questions on the Ship/Shore Safety Checklist can be answered in the affirmative.

Where corrective action is needed, the Terminal/depot may not agree to operations commencing nor should they have been started, may require them to be ceased. Similarly, if the master considers that safety is endangered by any action on the part of his or Terminal staff, he should request operations be ceased until the situation is rectified.

### **VESSEL INFORMATION**

To facilitate pre transfer formalities, the vessel should have the following documentation readily available on arrival at the Terminal:

- Cargo stowage plan
- Cargo Loading/ Discharge Plan
- Other relevant information should be readily available, such as tank cleaning records, list of previous cargoes carried and vessel experience factor calculations.

### **DUTY PERSONNEL REQUIREMENTS**

During the transfer of oil and/or hazardous material to or from a vessel, both the vessel and the dock are required to have a person-in-charge (PIC/Ship Officer/ Shore Officer). It is required that a PIC is designated for each vessel involved in a transfer. The PIC must be physically on board the vessel during all stages of the transfer operation. If the PIC needs to leave the vessel for any reason, he must be properly relieved by a qualified tankerman or the transfer must be halted.

### **WATCH SCHEDULE**

The watch schedule for vessel personnel should be arranged to minimise fatigue. Working hours should be recorded to ensure that they do not exceed USCG or STCW 95 limits, as applicable.

Watch hand-overs involving the person-in-charge should be scheduled so as not to take place during critical phases of the transfer operation, such as 'topping off' etc.

### **CARGO PUMPROOMS**

Cargo pumprooms should be well ventilated and gas free before arrival at the Terminal. While alongside, the ventilation system shall be kept running and the pumproom kept free of cargo vapors. Atmosphere must be checked to ensure safe conditions are maintained.

### **ACCOMMODATION DOORS AND PORTS**

All external doors and portholes shall be closed during operations. Accommodation boundary doors should preferably be fitted with self-closing or other control devices but at no time should they be locked.



## **ACCOMMODATION VENTILATION AND AIR CONDITIONING**

The intakes of central air conditioning or mechanical ventilation systems should be adjusted to prevent the entry of petroleum vapors, if possible, by re-circulation of air within the accommodation spaces.

Window-type air conditioning units that are not certified, as safe for use in the presence of flammable gas or which draw in air from outside the accommodation must be electrically disconnected and any external vents or intakes closed.

## **COMMUNICATIONS**

Clear communications must be agreed and established between the Ship and Shore representatives.

Identification of the name of ship should always be included in ship to shore voice communications to avoid misunderstanding.

In case of breakdown of communication, cargo operations should be ceased until communication is restored.

## **MAIN TRANSMITTING AERIALS**

Radio transmissions on medium (MF) and high frequency (HF) during transfer operations are potentially dangerous and therefore are strictly prohibited while alongside. The main and reserve transmitting antenna shall be earthed while at the Terminal.

## **USE OF VHF AND SATCOM WHILE ALONGSIDE**

Transmissions on permanently installed VHF/UHF equipment are acceptable provided the power output is reduced to one watt or less.

Portable VHF/UHF equipment of an approved type may be used for intra-ship and ship/shore communications.

Satcom equipment may be used while alongside the Terminal unless specifically prohibited under local regulations.

## **FLAME SCREENS/ DECK OPENINGS**

All deck openings, tank hatches, butterworth plates, sounding pipes, etc., are to be kept closed while alongside the Terminal unless properly fitted with a flame screen.

During cargo transfers, the cargo tank venting system as designed for the particular vessel shall be used. If necessary, ullage ports or other gauge points may be opened for short periods to enable ullaging or sampling to be undertaken.

## **SCUPPERS/DRAINS**

Before any transfer of cargo, ballast, slops or bunkers takes place, deck scuppers and drain holes in savealls and drip trays must be suitably plugged. If local regulations permit, accumulated water may be drained off as required and scupper plugs replaced immediately after the water has been run off. Oily water should be transferred to a slop tank or other suitable containment and it is recommended that a portable pump is rigged



ready for this purpose. Air-operated pumps, such as Wilden pumps, must be securely grounded to the vessel's structure to prevent the generation of electrostatic charges.

#### **DISCHARGE CONTAINMENT/DRIP PANS**

Drip pans, manifold drip trays and other containment shall be kept empty while the vessel is alongside a Terminal. Plugs and valves shall be properly secured.

#### **CARGO TRANSFER RATES**

The maximum allowable loading rates shall be established and agreed by PIC's/ Ship & Shore officers during the pre-transfer conference. Rates shall be established for initial loading and will take into account the need for precautions when handling grades defined as static accumulators. Procedures for final topping-off will also be agreed.

#### **CHECKS ON QUANTITIES TRANSFERRED**

Preferably every hour, the vessel should provide the Terminal representative with information regarding the amount of cargo that has been discharged or loaded. The Terminal will provide the vessel with comparable shore figures. If the exchange of information reveals a sudden or significant difference between the Terminal and vessel figures on quantities transferred, operations should be stopped until a satisfactory explanation can be found.

#### **MAXIMUM CARGO TANK FILLING LEVEL**

The maximum cargo tank filling level shall not exceed any of the following limits:

- six inches below the deck;
- 98 percent of tank capacity; or
- three inches below the set point of the overfill control system for a tank barge. In the US this is required by 46 CFR 39.20-9(b) or the liquid overfill alarm for a tank ship required by 46 CFR 39.20-7(d), as applicable, when collecting vapors of crude oil, gasoline blends or benzene.

#### **SUSPENSION OF OPERATION AND REMOVAL OF VESSEL ALONGSIDE**

The Terminal reserves the right to suspend operations and/or require removal of vessel alongside the jetties for:

- Infringement, disregard or breach of all applicable regulations.
- Defects in the vessel, and/or her equipment, manning or operations, which in the reasonable opinion of the depot representative present a hazard to premises, personnel, environment, or operations.
- Operational performance that fails to utilise satisfactorily the available depot facilities and thereby, in the reasonable opinion of the depot representative constitutes an unacceptable constraint to depot operations.

#### **TANK BARGE GAUGE POINTS**

The appropriate tank opening or fitting to be used for custody transfer measurement should be identified as the 'gauge point' and the corresponding reference height (the total height between the rim of the ullage port and the striking plate at the bottom of the tank) shall be clearly marked.

### **INSULATION MEANS BETWEEN SHIP AND SHORE**

To provide effective electrical isolation between the ship and shore, Terminal systems are provided with insulating flanges. The use of bonding cables is not permitted.

With the protection provided by insulating flanges, the use of cathodic protection systems for vessel and jetty structures may be continued while a vessel is alongside.

### **TRANSFER MANIFOLD AND CONNECTIONS**

Every mechanical loading arm or cargo hose must be properly supported to ensure that flange connections are not subjected to undue strain. In all cases, the points of connection between the vessel's manifold and the cargo transfer arm or hose must be completely over the manifold containment or drip tray.

All flanged connections must be fully bolted with a bolt in every hole.

The loading arm or hose must be blanked as soon as it is disconnected from the manifold. Manifold connections not in use are to be kept fully blanked with blind flanges, gaskets and a bolt in every hole.

### **MATERIAL SAFETY DATA SHEETS (MSDS)**

An MSDS or Cargo Information Card should be available on request from the supplier of the product, i.e. a vessel loading cargo should receive the information from the Terminal and a vessel discharging cargo should, if requested, provide an MSDS to the Terminal.

### **SPECIFIC CARGO TRANSFER PROCEDURES**

#### **TANK CLEANING**

No tank cleaning operations shall be conducted alongside a Terminal without prior approval of the Terminal representative.

#### **HANDLING STATIC ACCUMULATOR CARGOES**

The precautions described in ISGOTT shall be adhered to when loading, ullaging or sampling cargoes defined as static accumulators in non-inerted tanks. This will include controls on initial flow rates and restrictions on the use of metallic dipping, ullaging or sampling equipment.

#### **INERT GAS OPERATIONS**

As a general policy, it is required that if a vessel is equipped with an inert gas plant, it should be used. Inert gas operation should be conducted in accordance with procedures contained in the vessel's IGS manual. The Terminal representative may require random checks to be made to verify the oxygen content in cargo tanks prior to commencement of transfer operations.

## **PROCEDURES FOR HAZARDOUS CARGOES**

### **BENZENE**

Benzene is a known hazard in Petroleum. The requirements of OSHA and the USCG must be adhered to when handling benzene or hydrocarbon mixtures containing in excess of 0.5% of benzene by volume. Vessel owners, operators and personnel on board must be familiar with all applicable regulations and adhere to them, including the requirements of 46 CFR Part 197.

In the event that airborne concentrations of benzene are likely to exceed accepted exposure limits (PEL of 1 ppm and STEL of 5 ppm) within any area, the area should be designated a 'regulated' area. It is the responsibility of the vessel to establish and clearly mark regulated areas with warning signs and to limit access only to authorised personnel

Ullaging and gauging should be undertaken through vapor lock valves.

An approved respirator must be used at all times when exposure limits are likely to be exceeded, for example, when sampling cargo, making or breaking cargo connections, opening a cargo tank or transferring cargo when tanks are vented at less than 12 feet above the working deck.

Impervious gloves and tight-fitting goggles or a facemask shall be worn during sampling, making or breaking a cargo connection and when gauging a tank through a restricted gauging tube.

### **HYDROGEN SULFIDE**

Hydrogen sulphide (H<sub>2</sub>S) may be present in significant concentrations in crude oils and refined products such as naphtha, fuel oil, bitumens and gas oils and in the vapor spaces of tanks that have previously contained such cargoes. Vessels should be aware of the potential presence of H<sub>2</sub>S and should adopt appropriate monitoring procedures. Any concentration to exposures above 10 ppm should not be permitted without proper respiratory protection in the form of a supplied-air respirator or self-contained breathing apparatus.

Information on the presence of H<sub>2</sub>S must be exchanged during the pre-transfer conference. The vessel owner/operator or vessel PIC must inform the facility PIC if the previous cargo contained, or was suspected to contain, H<sub>2</sub>S.



October 25, 2013

## VESSEL VETTING PROCEDURES

**General Information:** All vessels with intentions to berth at the Tristar Terminals Guam, Inc F-1 Dock Facilities are required to meet the following:

**STEP I:** Vessels Owners or Parties to provide vessel's Q88 to Tristar Terminals Guam Inc. Quality & Planning Manager or designate at least thirty days prior to vessel arrival.

**STEP II:** All vessels calling F-1 Dock must have a current and satisfactory SIRE report.

**STEP III:** All vessels must in all respect comply with United States Coast Guard Regulations and Local Laws.

**STEP IV:** All vessels arrival conditions must be within the following F-1 Dock berthing restrictions:

<b>Maximum LOA</b>	<b>259 meters</b>
<b>Maximum breadth</b>	<b>45 meters</b>
<b>Maximum vessel draft alongside</b>	<b>16.4592 meters</b>
<b>Maximum Displacement</b>	<b>108,840 metric tons</b>
<b>Maximum Freeboard</b>	<b>23 meters</b>

**STEP V:** Upon receipts of vessel's nomination with all required documents, Tristar Terminals Guam Inc (Quality & Planning Manager or Designate) to reply within three working days if vessel rating:

1. CLEARED – MEANING "SUITABLE"
2. NOT CLEARED – MEANING "UN-SUITABLE"