TERMINAL REGULATIONS
AND SAFETY GUIDELINES
BOOKLET

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PREFACE:

The primary purpose of this booklet is to apprise those serving on any Ships / Vessel as well as those operating at the Terminal as the Chandra Asri Petrochemical of the instructions and recommendations for the promotion of safe, pollution – free and efficient operations at Terminal and of any Vessel / Ships thereat.

These instruction and recommendations do not always delve in detail on all possible situations and are meant to furnish those concerned the best available guidance for the adoption of safety procedures in such situations.

These regulations have been compiled for your information and guidance for safe operations at Chandra Asri Petrochemical. It is not intended as a substitute for the “International Safety Guide for Oil Tanker and Terminal and Tanker Safety Guide (Liquefied Gas).

A Vessel’s agent shall ensure that a vessel is provided with this booklet well in advance of its visit to the Terminal.
A Master of Vessel shall acknowledge his receipt of this booklet and understand its content.
Needless to say, a Master of a Vessel is required to be versed in various regulations and procedures generally applicable in the Port of Anyer / Merak, Including health, immigrations, Customs, Security, Radio advice and visual signals.

Nothing in this regulation will relieve the Master of the Ship of his responsibility to observer regulations as required by International Law, or by the Port of Anyer / Merak Authority and other regulations.

This booklet will require updating from time to time. It is for your retention and for your continued use and reference prior to future visits to Chandra Asri Petrochemical.

We look forward to your full co-operation during your stay in Terminal at Chandra Asri petrochemical and request that you pay particular attention to any matter concerning safety and pollution prevention.

Established : May, 2002
Update : April, 2006
March, 2011
PERNYATAAN PEMENUHAN KEAMANAN FASILITAS PELABUHAN
STATEMENT OF COMPLIANCE OF A PORT FACILITY

No : 02-0086-DN

Diterbitkan berdasarkan ketentuan
KODA INTERNASIONAL TENTANG KEAMANAN KAPAL DAN FASILITAS PELABUHAN
Issued Under the provisions of the
INTERNATIONAL CODE FOR THE SECURITY OF SHIPS AND PORT FACILITIES (ISPS CODE)

berdasarkan wewenang PEMERINTAH REPUBLIK INDONESIA
Under the Authority of the Government of the Republic of Indonesia

oleh DIREKTORAT JENDERAL PERHUBUNGAN LAUT
by Directorate General of Sea Communication

Nama Fasilitas Pelabuhan
Name of Port Facility
PT. CHANDRA ASRI PETROCHEMICAL CENTER

Alamat Perusahaan
Address of The Company
JL. RAYA ANYER K. 123 CIWANDAN, CILEGON, BANTEN

Dengan ini dinyatakan
this is to certify

1. Bahwa pemenuhan fasilitas pelabuhan ini dengan ketentuan SOLAS 74 bab XI-2 dan bagian A dari Peraturan Internasional untuk keamanan kapal dan fasilitas pelabuhan (ISPS Code) bahwa fasilitas pelabuhan ini telah di verifikasi dan beroperasi sesuai rancangan keamanan fasilitas pelabuhan yang disetujui.

that the compliance of this port facility with the provisions of SOLAS 74 chapter XI-2 and part A of the International Code for the security of ship and port Facilities (ISPS Code) has been verified and that this port facility operates in accordance with the approved port facility operates in accordance port facility security plan.

2. Rancangan Keamanan Fasilitas Pelabuhan telah disetujui untuk :

This Plan has been approved for Port Facility Security Plan

Jenis Pengoperasian
Type of operation
DISCHARGING/ UNLOADING RAW MATERIAL (LIQUID)

Jenis Kapal yang dilayani
Type of Ship
TANKER

Aktivitas atau Informasi lain
Activities or other relevant information
INTERNASIONAL DAN NASIONAL

Tanggal Verifikasi Awal/ Pembaharuan
Date of Initial/ Renewal Verification on which this certificate is based
02 October 2009

Pernyataan pemenuhan ini berlaku sampai dengan
This Statement of Compliance is valid until
01 October 2014

Dapat di verifikasi seperti yang dinyatakan dihalaman sebelah
Subject to verifications as indicated opposite

Diterbitkan di
Issued at
Jakarta

Tanggal
Date of issue
21 April 2010

A.n.

DIREKTUR JENDERAL PERHUBUNGAN LAUT
DIREKTUR KESATUAN PENJAGAAN LAUT DAN PANTAI
O.b.
Director General of Sea Transportation
Director of Sea and Coast Guard
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MARINE NAVIGATION

1. Location of PT. Chandra Asri Petrochemical Terminal

   **Jetty-A**
   Position : 06°-02-00 S & 105°-55-753 E

   **Jetty-B**
   Position : 06°-02-09 S & 105°-55-750 E

   **Jetty-C**
   Position : 06°-02-32 S & 105°-55-690 E

   Light : 1 Navigation light (white Color) installed each Mooring Dolphin.
           1 Navigation light (Red Color) installed on Platform Jetty.

   Characteristic : Mo ( U ) 10 s

2. Ular Island

   P. Ular (06°–00.6 ' South & 105° – 55.6 ' East) is a good navigation mark point.
   Height = 47 M, Light house with Characteristic FL.W.55.64 M.8M could be helpful
to approach area.

3. Proceed to the anchorage Area

   Consult : Admiralty sailing direction Books
            Kepanduan Bahari Indonesia Books

   Caution : Volcano activity has been reported in the area between Rakata &
            Sebesi Island.
            Ships are advised to avoid this area.

4. Fishing craft which might around Sunda Strait.

5. Tide & Table Information’s
   Tide information for Anyer/ Merak can be found in the tide table and tidal
   stream Indonesia archipelago, issued by Dinas hydro Oceanography.
   The Tidal range is approximately 0.8 M and current velocities can approach 1.5
   kts.

6. Chart Publications
   - British Admiralty Chart No.198
   - British admiralty Publication 36 sailing direction
   - Indonesian Hydrographic Office Chart No.95, 71
7. Anchorage at Anyer Terminal
   a. Anchorage can be taken by ship at 06-01-30 S / 105-54-00 E, SW of Ular island, but please consult with agent. The depth in this area is about 20 m. The area is large with sufficient maneuvering and swinging room for several ships of the size to be accommodated at the Anyer Terminal.

   b. The tidal stream is strong in this area. This is advised to pay out substantial amounts of chain in order to retain the anchor position. The bottom is coral sand.

8. Wind Weather
   - The SE monsoon prevails from April to September but does not attain any great of constancy until August, it is particularly unsteady in the daytime and variable winds are common. In August and September the monsoon blows stronger and steadier, generally from SE and SSE and particularly of the Java coast at night when the land breeze reinforces the monsoon. The NW monsoon arrives at the end of November. This result in WSW wind in December, W wind in January and WNW wind in February. Clouded skies and SW squalls are frequent, the latter occurring generally during the NW monsoon and accompanied by the thunder.

   - The rainfall corresponds with the monsoon, the NW monsoon month being the rainy. February has the greatest rainfall, with September the least.

   - The state of the sea is generally rather rough, heavy swells are not uncommon, particularly during the stronger period of the NW monsoon, when the current is running counter to the prevailing wind. As a rule, the sea is calmest in March, July and November.
TERMINAL INFORMATION

I. Berth-A

Maximum draft : 13.0 meters
Depth : 15.0 meters
Height of Jetty (mean sea level) : 3.45 meters
Max Deadweight of ship : 80,000 Tons
Max LOA : 260 meter
Minimum PBL : 50 meter

This is general product jetty. Under normal conditions it is capable of handling the following.

<table>
<thead>
<tr>
<th>No</th>
<th>PRODUCT</th>
<th>NO./LINE SIZE</th>
<th>HOSE/ARM</th>
<th>LOAD/DISC. RATE</th>
<th>MAX.PRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Naphtha</td>
<td>1 X 24”</td>
<td>1 X 8”</td>
<td>2,300 MT/Hr</td>
<td>4.0 Kg/Cm²G</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 X 16”</td>
<td></td>
<td>7.0 Kg/Cm²G</td>
</tr>
<tr>
<td>2</td>
<td>Pyrolysis Gasoline</td>
<td>1 X 8”</td>
<td>1 X 12”</td>
<td>500 MT/Hr</td>
<td>4.3 Kg/Cm²G</td>
</tr>
<tr>
<td>3</td>
<td>Lp. Propylene</td>
<td>1 X 8”</td>
<td>1 X 8”</td>
<td>800 M3/Hr</td>
<td>5.6 Kg/Cm²G</td>
</tr>
<tr>
<td>4</td>
<td>HP. Propylene</td>
<td>1 X 8”</td>
<td>1 X 8”</td>
<td>350 M3/Hr</td>
<td>17.0 Kg/Cm²G</td>
</tr>
<tr>
<td>5</td>
<td>Buthanol</td>
<td>1 X 8”</td>
<td>1 X 8”</td>
<td>400 M3/hr</td>
<td>7.0 Kg/Cm²G</td>
</tr>
<tr>
<td>6</td>
<td>Octanol</td>
<td>1 X 8”</td>
<td>1 X 8”</td>
<td>400 M3/hr</td>
<td>7.0 Kg/Cm²G</td>
</tr>
<tr>
<td>7</td>
<td>Crude Acrylic Acid</td>
<td>1 X 4”</td>
<td>1 X 4”</td>
<td>175 M3/Hr</td>
<td>7.0 Kg/Cm²G</td>
</tr>
<tr>
<td>8</td>
<td>Butyl Acrylate</td>
<td>1 X 4”</td>
<td>1 X 4”</td>
<td>175 M3/Hr</td>
<td>7.0 Kg/Cm²G</td>
</tr>
<tr>
<td>9</td>
<td>2-Ethyl Hexyl Acrylate</td>
<td>1 X 4”</td>
<td>1 X 4”</td>
<td>175 M3/Hr</td>
<td>7.0 Kg/Cm²G</td>
</tr>
<tr>
<td>10</td>
<td>Ethyl Acrylate</td>
<td>1 X 4”</td>
<td>1 X 4”</td>
<td>175 M3/Hr</td>
<td>7.0 Kg/Cm²G</td>
</tr>
</tbody>
</table>

II. Berth-B

Maximum draft : 8.0 meters
Depth : 12.0 meters
Height of Jetty (mean sea level) : 3.45 meters
Max Deadweight of ship : 6,000 Tons
Max LOA : 115 meter
Minimum PBL : 37 meter

This is a general product jetty. Under normal condition it is capable of handling the following.

<table>
<thead>
<tr>
<th>No</th>
<th>PRODUCT</th>
<th>NO./LINE SIZE</th>
<th>HOSE/ARM</th>
<th>LOAD/DISC. RATE</th>
<th>MAX.PRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hp. Propylene</td>
<td>1 X 4”</td>
<td>1 X 4”</td>
<td>200 MT/Hr</td>
<td>18.6 Kg/Cm²G</td>
</tr>
<tr>
<td>2</td>
<td>Pyrolysis Gasoline</td>
<td>1 X 8”</td>
<td>1 X 4”</td>
<td>250 MT/Hr</td>
<td>7.0 Kg/Cm²G</td>
</tr>
<tr>
<td>3</td>
<td>Raw C4</td>
<td>1 X 6”</td>
<td>1 X 4”</td>
<td>100 MT/Hr</td>
<td>16.0 Kg/Cm²G</td>
</tr>
<tr>
<td>4</td>
<td>L P G</td>
<td>1 X 6”</td>
<td>1 X 4”</td>
<td>145 MT/Hr</td>
<td>16.0 Kg/Cm²G</td>
</tr>
<tr>
<td>5</td>
<td>Iso Butane</td>
<td>1 X 6”</td>
<td>1 X 4”</td>
<td>100 MT/Hr</td>
<td>16.0 Kg/Cm²G</td>
</tr>
<tr>
<td>6</td>
<td>Crude Acrylic Acid</td>
<td>1 X 4”</td>
<td>1 X 4”</td>
<td>175 M3/Hr</td>
<td>7.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>7</td>
<td>Butyl Acrylate</td>
<td>1 X 4”</td>
<td>1 X 4”</td>
<td>175 M3/Hr</td>
<td>7.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>No</td>
<td>Product</td>
<td>No./Line Size</td>
<td>Hose</td>
<td>Load/Disc. Rate</td>
<td>Max. Press</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------</td>
<td>---------------</td>
<td>--------</td>
<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td>1</td>
<td>Pyrolysis Gasoline</td>
<td>1 X 8”</td>
<td>1 X 8”</td>
<td>500 MT/Hr</td>
<td>7.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>2</td>
<td>Lp Ethylene</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>300 MT/Hr</td>
<td>7.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>3</td>
<td>Iso Butane</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>100 MT/Hr</td>
<td>16.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>4</td>
<td>LPG</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>145 MT/Hr</td>
<td>16.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>5</td>
<td>N-Hexane</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>200 MT/Hr</td>
<td>10.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>6</td>
<td>Hexene - 1</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>200 MT/Hr</td>
<td>10.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>7</td>
<td>Butene - 1</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>130 MT/Hr</td>
<td>16.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>8</td>
<td>Diesel Oil</td>
<td>1 X 8”</td>
<td>1 X 8”</td>
<td>200 MT/Hr</td>
<td>9.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>9</td>
<td>Raw C4 / CC4</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>100 MT/Hr</td>
<td>16.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>10</td>
<td>HP Propylene</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>40 MT/Hr</td>
<td>16.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>11</td>
<td>Marine Fuel Oil</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>120 MT/Hr</td>
<td>9.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>12</td>
<td>Pyrolysis Fuel Oil</td>
<td>1 X 6”</td>
<td>1 X 6”</td>
<td>200 MT/Hr</td>
<td>9.0 Kg/ Cm²G</td>
</tr>
<tr>
<td>13</td>
<td>Naphtha</td>
<td>1X8” to 24”</td>
<td>1 X 8”</td>
<td>500 MT/Hr</td>
<td>9.0 Kg/ Cm²G</td>
</tr>
</tbody>
</table>

**III. Berth-C**

| Maximum draft | 7.0 meters |
| Depth         | 8.3 meters |
| Height of Jetty (mean sea level) | 4.40 meters |
| Max Deadweight of ship | 10,000 Tons |
| Max LOA       | 130 meter |
| Minimum PBL   | meter |

This is a general product jetty. Under normal conditions it is capable of handling the following.

**PILOTAGE & TUGS**

**PILOTAGE**

Pilotage is compulsory for all ship. There are 2 Pilot Offices in Banten area:
- Pilot Office under Sub. Dinas Perhubungan Laut- Cilegon
  They are working at channel 15 & 16 with call sign “PAPA CHARLY”
- Pilot Office under PT. (Persero) Pelabuhan Indonesia II – Banten
  They are working at channel 12 with call sign “KILO BRAVO”

**TUG BOAT & PILOT BOAT**

- Sub Dinas Perhubungan laut – Cilegon
  The horse power of tug boat between 3500 HP until 4500 HP
- PT. (Persero) Pelabuhan Indonesia II – Cabang banten
  The horse power of tug boat between 1080 HP until 3500 HP
REGULATION FOR VESSELS

ISPS Code
That the security system and associated security equipment of the ship has been verified in accordance with section 19.1 of part A of the ISPS Code.
That the verification showed that the security system and any associated security equipment of the ship is in all respect satisfactory and that the ship complies with the applicable requirements of chapter XI-2 of the convention and part A of the ISPS Code.

EMERGENCY TOWING WIRE
Emergency towing wires to be positioned on the seaside bow and quarter back ward.
The aye of the wires should be maintained not more than 2 meters above the water line and adjusted during operations. They should be made fast on the ship’s bits, while having sufficient slack on deck to provide towing length of 50 meters. Means should be provided to prevent the slack from accidentally running into the water, these means should be arranged that can easily be broken by a tug boat’s crew.

SAFE ACCESS
Where possible, shore gangways will be made available, failing which ship must provide a gangway.
Ships must secure a safety net under the gangway. If shore gangway is issued, Ship to provide a strong landing point for the shipboard end of the gangway and a bulwark ladder where applicable. The provision and use of shore gangway is on condition that users of gangway do so at their own risk.
An accommodation ladder or pilot ladder should be ready on the off-shore side.

SHIP READINESS
The ship must be able to move under it own power at shore notice. Any repairs or other that requires immobilization are not permitted while alongside the berth. Should immobilization be necessary, written application, giving nature of repairs and the duration, should be made to the shift controller at least 24 hours before arrival. Whether permission is granted or not will depend on the prevailing situation at time of berthing and at time of berthing and discretion of the shift controller.

DECK WACTH
Operation should be under constant control. Vessels are to have on board at least one Senior Deck Officer (Master or Chief Officer) and one Senior Engineer (Chief or Second). In addition, sufficient officer/ Crew should be retained on board to cope with any emergency situation.
All personnel should be familiar with the danger of the product handled. The handling of cargo must be supervised by a responsible ship’s Officer.
Ship’s personnel must be allowed to take change of cargo operation or tanker activities when they are intoxicated state or under influence of drugs.
**VISITOR**
No visitors other than those people who have business with the vessel will be allowed on board unless approval has been granted by the Marine Superintendent and the Master of the vessel. It is the responsibility of the Master to ensure that visitors comply with the terminal regulations during the vessel’s stay at the terminal.

Terminal staff shall have the right to board any vessel at any time to ensure that these regulations are observed and shall have the right to stop operation in the event of contravention of any provision of the regulations.

**COMMUNICATION**
Ship/ Shore communication in respect of cargo operation is by a Handy-talkie radio set on a dedicated frequency loaned to the ship during her stay alongside. Jetty control room will use the call-sign “ CA. TERMINAL “.

It is essential that a listening watch is maintained throughout by the responsible Officer.

If communication by means of the Handy-talkie fails then vessels should re-establish communication by calling “ Chandra Asri Terminal “ on VHF Channel 69

**OPERATIONAL PROCEDURES**
The ship/ Shore safety check list will apply throughout the ship’s stay alongside. All procedures in respect to the handling of cargo or of ballast, including precaution, should be established and agreed to during the preplanning discussion. Any proposed change or deviation to operational plan should be laid down in writing.

During electrical storms, the handling of volatile petroleum, loading non volatile petroleum into non gas free tanks, ballasting into non gas free tanks, inert gas purging, tank cleaning or gas freeing after the discharge of such cargoes should be stopped and all tanks openings and vent line valves closed.

The initial and maximum loading rates, topping off should be agreed, having regard to:

1. The maximum allowable pressure and flow rate.
2. Avoid accumulation of static electricity.
   If the static accumulation properties of the substance handled and the situation in the tank so requires, no conducting object (notably metallic sounding rods, sampling apparatus, steel ullage tapes and synthetic fiber rope) should be inserted into that tank during loading and during a period of at least 30 minutes after the cessation of loading (applicable to non-inert ship only). Synthetic fiber ropes should not be used with sampling cans or other sounding equipment.

   Clean ballast on board may be pumped overboard on the off-shore side of the jetty. The taking of ballast into segregated ballast or cargo tank should be discussed and agreed with terminal before commencement of pumping.

3. The ship should advise the terminal at least 15 minutes before the final tanks so to be topped off and request the loading rate to be reduced sufficiently to permit effective control of the flow on board.
   In the case where the ship encounters difficulty with ship/ shore Handy-talkie communication, the ship should use the VHF on channel 69.
FIRE FIGHTING EQUIPMENT
Fire fighting equipment, fire hoses and extinguishers should be positioned near the manifold. Fire main system should be pressurized, or be capable of being pressurized at shore notice. Unsure that fire mains can be connected utilizing the international ship/shore connection.

SCUPPERS, DRIPS TRAYS, UNUSED CONNECTIONS AND OVERBOARD DISCHARGE VALVES
All deck scuppers should be effectively plugged. Accumulation of water should be drained off periodically. Where LPG is being handled, the scupper may be kept open, provided that fire main pressure available in the vicinity of the manifold. The ship should be provided with fixed drip trays.

On unused cargo and bunker connections, blank flanges should be fully bolted. Sea and over board discharge valve when hydraulic valve, some means of notable indication be used to ensure that the valves remained closed.

TANK HATCHES
Tank hatch must remain shut except when required for tank entry or gas freeing. When tank entry is permitted, The condition stipulated in the agreed tank entry permit be strictly followed and ship/shore manifold hoses/Arm must not be connected. Ullaging and sampling points may be fitted with suitable flame screens.

TANK VENTING
Pressure/Vacuum relief valve setting and associated vent system should be checked before operations. During cargo operations, the pressure/relieve valve or other approved venting system must be set in the operational mode as specified in the manufacture manual. Ships carrying low flash cargo (Flash point less than 60°C closed up cup method) and all vessels fitted with closed ullaging and an-approved venting system are to practice close loading/discharging unless otherwise agreed.

Ship using inert gas must ensure that follow their inert gas manual. If any part of the inert gas system should become defective then cargo operations must be stopped immediately.

TANK CLEANING
Tank cleaning, purging, gas freeing or inert is not allowed during alongside.

ELECTRICALLY OPERATED EQUIPMENT
Hand torches, portable UHV/VHF walkie-talkie and radio telephone sets must be of an approved design or an intrinsically safe type. The ship’s main radio transmitter should not be used. The main transmitting aerials must be connected and earthed. The ship’s radar installation should also be not used without authority from shore. The use of Portable electrical equipment on wandering leads is prohibited. The use of hand phones and pagers on board vessels
or in the terminal is prohibited unless these equipment intrinsically safe and approved by Chandra Asri. All ship’s visitors including agents, surveyors and superintendent with non Chandra Asri approved hand phones and pagers must surrender these at Chandra Asri security checkpoint prior to boarding the vessel at the berth. This equipment may be collected upon returning of the visitor’s pass before departure from Chandra Asri.

SMOKING AND NAKED LIGHTS REQUIREMENT
Smoking on board may only take place in rooms specified by the Master in consultation with the terminal. No smoking is allowed on the jetty or the refinery area. Notices specifying the approved smoking place shall be conspicuously exhibited on the door of the approved smoking places when vessel is alongside. Places which are directly accessible from the outside should not be designated as places where smoking is permitted, in the designated smoking place, all port should be kept closed and doors into passageways should be kept closed except when in use.
Open fire cooking (gas cylinders) is banned. Maintenance or repairs involving welding, burning, the use of abrasive tools, chipping or scraping, is prohibited.

GARBAGE
No garbage, hot ashes or other hazardous materials nor shall any other objectionable materials, either solid or fluid, be throw overboard or discharged from the vessel at Chandra Asri Terminal.

PREVENTION OF SPARKING AND EXCESSIVE FUNNEL SMOKING
Soot blowing is prohibited. Excessive funnel smoking or any sparking must be stopped immediately.

BUNKERING
• No bunkering from lighters or barges when alongside.
• Bunkering is available at anchorage area

PREVENTION POLLUTION AT THE SEA
In the event of any spillage of oil from a vessel, irrespective of reasons of source, the Master and Owner shall be held responsible for all expenses involved in the cleaning up of such spillage.

FRESH WATER SUPPLY
• Fresh water is available at jetty for quantity of 100 tons or less per day.
• Water supply at Jetty-A & B available 10~15 M³/Hr
• Water supply at jetty-C is available by Truck Lorry
• Notice one day before ETA.
CATHODIC PROTECTION
As the pier and jetties are equipped with cathodic protection, large currents can flow in electrically conducting path between ship and shore, for example mooring wires or loading arms. These connections should be insulated to avoid exhausting the pier cathodic protection system by added load of the ship’s hull. Otherwise the pier would lose its corrosion resistance. Moreover, there is a very real danger of an incendive arc when the ensuing large current is suddenly interrupted during the connecting or disconnecting of the wire on the bitts or the loading arm at the manifold. In order to block the current through the loading arm, an insulating flange is inserted within the length of the loading arms/hose, and fiber tails must be connected to the end of the wires. Ships to shore bonding cables are therefore not required.

REPAIRS
- All repair work and any operations which may cause sparking are prohibited when vessels are along side.
- Repairing of radio and radar which must transmit an electrical wave are prohibited.
- Repairing of main engines, boilers and propulsion machinery which may cause dead ship conditions are prohibited.
- Any person who intends to do minor repair work within a ships should obtain permission from the terminal representative.

PHOTOGRAPHING
- Photographing within the terminal premises and quay zone is prohibited save by a special permission from the Loss Prevention Dept. of the plant.
- A member of the terminal may require the person, who took photograph at the restricted area without receiving permission, to produce the film.

PROVISION SUPPLY
- Supply of provisions or any other articles by barge is prohibited throughout vessel’s stay alongside the terminal.
- Supply of provisions from shore is allowed.
- The use of derrick mounted on cargo deck is strictly prohibited during cargo and ballast handling operation.
- Prior approval concerning provision supply should be obtained from the terminal representative.
SAFETY REGULATIONS

1. Sea valves - Overboard valve - E/R bilge valve are properly closed and sealed.

2. Fire Fighting equipment are always ready for immediate use:
   - 2 (Two) fire hose to be connected with main fire line, one forward and one aft of the ship’s manifold.
   - Monitors: to be pointed towards the manifold and ready for immediate use.
   - Powder fire extinguishers placed near manifold.
   - Fire pump in a standby condition.
   - International Ship shore fire connection to be placed and clearly marked

3. Fire wire or towing wires made fast to the bollard fore and aft with sufficient length and the eyes always kept approx 1 M above water line.

4. Effective safety net to be fitted underneath the gangway or accommodation ladder.

5. The duty officer should satisfy himself that the mooring ropes are safely and securely moored at all time. The movement of ship could jeopardize the arms connection.

6. Tank pressure relieve valve in good position and condition.

7. Communication between ship and shore by Handy-talky. In the interval of approx 12 hours battery should be refreshed. Always make sure that the battery is good enough to energize Handy-talky at all time.

8. Whilst tanker is berthing, the boiler, steering gears, and other equipment essential for maneuvering to be maintained in such condition that will enabling the ship to move away from the berth at a shore notice by her own power.

9. Manning
   A Sufficient number of personnel to deal with an emergency should be present on board the ship at all time during berthing.

10. Stability
    Ship bending moment should be closely monitored to avoid excessive bending force during cargo operation.

11. Cargo valve
    All valves hydraulic, pneumatic or manual powered valve when not in use to be closed and marked in such away that no mistake could take place.

12. Any leak occur whether internally or externally to be re-fixed immediately.

13. No hammering - chipping - sand blasting should take place at all time during berthing.
14. Smoking only allowed in designated smoking places and when prohibition of smoking required to be executed, shore representative will inform duty officer.

15. Navigation radar 3 Cm and 10 Cm only allowed to be switched on prior to departure or shortly after berthing.

16. No Sparks and heavy black smoke generates from funnel.

17. No Unauthorized person on board.

18. No Oil on deck, All scuppers to be effectively plugged.

19. The procedures for cargo operation and ballast handling have to be consulted with shore representative. Terminal has no slop tank, tank cleaning whilst berthing is not permitted.

20. No dirty ballast to be discharged. Any intention to discharge clean ballast should be informed to terminal before arrival, and should have a written permission from Terminal Representative.

21. Prevention of oil Pollution
   - Prior to arrival ship is requested to ensure that all crew members are conversant with the anti pollution, which must be complied with at all times.
   - It is recommended that sea valves/ overboard discharge (which should be shut) and ballast/ bunker/ bilge operations are checked by the Chief Officer and/ or Chief Engineer before arrival.
   - It is prohibited to transfer oil (FO, DO, LO) from tank to tank. No domestic or other rubbish shall be dumped into the sea.
   - In the event of an oil spill, the Master shall notify the terminal representative as soon as possible.

22. Leaks, Spillage and Gas Detection.
   - As general principle it shall be recognized that although any large volume leak or spillage of dangerous substances represents and obvious and considerable potential for serious fire and/ or explosion hazard, a comparatively minor and unrecognized leaks or spillage may also develop into a serious fire and/ or explosion hazard.
   - When any leak or spillage of dangerous substances occurs during cargo handling, the following action shall be taken immediately.
     a) Stop all cargo handling.
     b) Close or open the appropriate valve to isolate or minimize the volume and pressure at the leak source.
     c) Use the vapor return system if this will assist in relieving pressure at the leak source.
     d) Ensure that all doors, window, ventilators (other than safe closed circuit ventilating systems) are closed.
     e) Prohibited all smoking and the use of naked lights.
     f) Restricted the operation of electrical switches to essential purpose only.
g) Such other action as may be given to the following if the circumstances warrant:
   i. Sounding the general or emergency alarms.
   ii. Assembling emergency teams with appropriate equipment including breathing apparatus and protective clothing.
   iii. Operating the water spray system to disperse or deflect gas clouds from ignition potential ignition source such as the accommodation and machinery spaces and on the Jetty platform.
   iv. Employ water hoses and spray to disperse accumulations of liquefied gas and maintain structural steel temperatures if necessary.

- A permanently installed gas detection system shall properly calibrated and set for the cargo and the system shall be in continuous operation monitoring the various spaces for which it was designed. Not less than one of portable gas detection equipment in good order and condition and suitable for cargo being loaded or discharged shall be provided.

23. Stopping of Cargo Handling

Cargo handling shall be stopped whenever:
   a) There is, or imminent danger of fire or explosion on board the ship or on shore.
   b) There are high concentrations of any dangerous gases on or in the vicinity on the ship or berth.
   c) It is considered unsafe to continue due to leaks or spillage.
   d) There is any emission of sparks or flames from the ships funnel or the continuous emission of dense smoke which suggests serious machinery or equipment malfunction.
   e) There is significant electrical or mechanical failure adversely affecting the safety of handling.
   f) The ship is found to be violating any safety rules or procedures and fails to take immediate corrective action.
   g) There is significant movement of the ship affecting the safety of the transfer connection of the ship.
   h) There is a failure of the agreed means of communication between the ship and terminal representative.
   i) It is considered unsafe to continue due to the stability, draft, trim or list condition of the ship.
   j) Required by the terminal representative.
   k) Required by the ship.

24. Gangways and access

Ship master is responsible for ships gangway operation and providing of safe access from ship to Jetty.
### JETTY FACILITIES

<table>
<thead>
<tr>
<th>No</th>
<th>Jetty</th>
<th>Water Depth (M)</th>
<th>Max. Draft (M)</th>
<th>Product</th>
<th>Arms/ Hoses</th>
<th>Range Size</th>
<th>Class</th>
<th>Max. Loading Rate MT/HR</th>
<th>Max. Unloading Rate MT/HR</th>
<th>Max. Back Press Kg/Cm²2G</th>
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<tr>
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<td>22</td>
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<td>ANSI 150#RF</td>
<td>175</td>
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</tr>
</tbody>
</table>
SAFETY REQUIREMENTS

Date : 
Port : Chandra Asri Petrochemical Terminal - Indonesia

To : Master of MT / LPG.c. .................................................................

Dear Sir,

Responsibility for the safe conduct of operations while your ship is at this Terminal rests with you as Master of the ship, and with the responsible terminal representative. We wish, therefore, before operations start to seek your full co-operation and understanding on the safety requirement set out in the ship/shore Safety Check list, which are based on safe practice currently accepted by the oil and Tanker industries.

We expect you and all under your command to strictly adhere to these requirements throughout your stay alongside this Terminal and, for our part, ensure that our personnel do likewise and cooperative with you in the mutual interest of safe and efficient operations.

Before the start of operations, and form time, for our mutual safety a member of the terminal staff, where appropriate together with a responsible officer, will make a routine inspection of your ship to ensure that the questions on the ship/shore safety check list can be answered in the affirmative. Where corrective action is needed we will not commence operations or, should they have started, we will require them to be stopped. If corrective action is not taken within reasonable time, we shall adopt such measures as appears to us most appropriate to deal with the situation and we shall notify you accordingly.

Similarly, if you consider safety is endangered by any action on the part of our staff or by any equipment under our control you should demand immediate cessation of operations.

THERE CAN BE NO COMPROMISE WITH SAFETY

The senior terminal representative on duty is Port Facility Security Officer (PFSO)
His telephone is : 601501 Ext 352
Fax. (0254) 601835
Handy - talkie : call sign “ CA-TERMINAL ”
VHF communication is : Channel - 69

IN THE EVENT OF ANY DISREGARD OF THESE REQUIREMENTS BY ANY SHIP, WE SHALL HAVE THE RIGHT TO STOP ALL OPERATIONS AND ORDER THAT SHIP OFF THE BERTH FOR APPROPRIATE ACTIONS TO BE TAKEN.

We look forward to receiving you full cooperation during your part stay in Chandra Asri Terminal, as such as we trust you would receive ours.

Very truly yours,

Loading Master                            Acknowledge receipt:

( Master )
**FIRE & EMERGENCY**

**Alarm Signal**
The alarm signal for a fire or other emergency the Chandra Asri Petrochemical VARIABLE pitch note the electric sirens.

NOTE: There will normally be a test of the equipment at : 12.00 Hr every Wednesday.

**Ship Operations**
When the fire alarm sounded, ship should stand by for possible stoppage of operations. **SHIP’S STAFF MUST NOT INITIATE ANY ACTION ON THEIR OWN** concerning shutting down of valve (etc). UNLESS the fire is on board their ship or directly endangering the vessel. Ships must await instructions from shore before taking regarding cargo or bunkering operations. Master will be advised by senior shore personnel regarding the movement of their ships. **NO ATTEMPT MUST BE MADE TO UNMOOR AND LEAVE THE WHARF Without instructions from the terminal.**

**Communications**
On hearing the fire alarm, a member of the vessel’s staff should man the ship’s radio, switch on to channel 16 and stand by for information.

**Ship’s Personnel**
Ship’s personnel ashore in Chandra Asri area should endeavor to return to their ships on hearing the alarm signal and remain on board until the “ALL CLEAR” has sounded.

“**ALL CLEAR**”
The signal to indicate that the Emergency is over is a CONTINUOUS NOTE on the electric sirens.

[ _____ _____ _____ ]

**IN CASE OF FIRE, DO NOT HESITATE TO RAISE THE ALARM**

**SHIPS FIRE ALARM WHEN ALONGSIDE TERMINAL BERTH**
One or more blasts of the ship’s whistle; each blast of not less than ten seconds duration supplemented by a continuous sounding of the general alarm system.

**TERMINAL FIRE ALARM:**
At this terminal alarm signal is: **A VARIABLE PICT NOTE ON ELECTRIC SIRENS**

**FIRE ON BOARD SHIP**
- Raise alarm
- Fight fire and prevent fire spreading
- Inform terminal
- Cease all cargo operation and then close all valve
- Stand by to disconnect hoses or arms
- Bring engines to standby

**FIRE ON OTHER SHIPS OR TERMINAL**
- **YOU WILL BE ADVISED : AND IF NECESSARY WHEN INSTRUCTED TO :**
- Cease all cargo operation and then close all valves
- Stand by to disconnect hoses or arms
- Bring engines to standby

**FIRE ON TERMINAL**
- Raise alarm
- Cease all cargo operation and then close all valves
- Fight fire and prevent fire spreading
- if required stand by to disconnect hoses or arm
- Inform all ships
- Terminal emergency procedure is immediately affected.
SAFETY MEASURE AT TERMINAL

We request you to perform the safety measures to prevent accident.

A. BERTHING SPEED & ANGLE.
   JETTY - A.
   - Ship with D.W.T 50.000 up to 80.000 T,
     - Berthing speed shall be less than 10 Cm/Sec.
     - Berthing angle shall be 0 – 6 Degree and as parallel as possible.
   - Ship with D.W.T bellow than 50.000 T,
     - Berthing speed shall be less than 15 Cm/Sec
     - Berthing angle shall be 0 – 6 Degree and as parallel as possible.
   JETTY - B.
   - Berthing speed shall be less than 15 Cm/sec
   - Berthing angle shall be 0 – 6 Degree and as parallel as possible.
   JETTY – C
   - Berthing speed shall be less than 25 Cm/sec
   - Berthing angle shall be 0 – 6 Degree and as parallel as possible.

B. SAFE MANEUVERING
   Master shall perform the safe maneuvering in consideration of ship condition
   and circumstances – Sea current, Wind, Weather, Etc.
   Especially, Please pays attention to berthing speed and angle and also un-
   berthing in parallel with jetty.

C. TUG BOAT
   We request you to arrange tug boat(s) on berthing and un-berthing for safe
   maneuvering, the account is according to ship owner/ Operator.

Yours Faithfully,

Loading Master
PREVENTION OF SEA POLLUTION

I hereby inform you that Master shall observe strictly the INTERNATIONAL CONVENTION for POLLUTION from ships due to avoid sea pollution.

Especially, Master shall observer the under mentioned article:

1. It is prohibited to discharge: Oil, Oily water, Engine Bilge, Cleaning water, noxious liquid substances and other.
2. Discharge valve of engine bilge must be closed and lashed.
3. It is prohibited to transfer oil such as; Fuel oil, Diesel oil, Lubricate oil, Etc Between tanks in ship.

If sea pollution occurs, Master shall notice to shore representative as soon as possible.

ANY FINES SHALL BE FOR SHIP’S ACCOUNT.

LOADING MASTER

ACKNOWLEDGED BY,

MASTER
Date : 
Port : Chandra Asri Petrochemical Terminal - Indonesia

To : Master of MT/ LPG.c ..................................................

OPERATION OF PUMPS & VALVES

Dear Sir,

You are advised to refer to ISGOT Section 7.3 which state “The incorrect operation of pumps valves can produce surge in the pipeline system. These surges may be sufficiently severe to damage the pipelines, hoses and metal arms. One of the most vulnerable parts of the ship to shore connection. Pressure surges are produced upstream of a closing valve may become excessive if the valve is closed too quickly. They are most likely to be severe where long pipelines and high flow rates are involved.”

To avoid pressure surges, valves at the downstream end of a pipeline system should not be closed against the flow of liquid except in an emergency. This should stress to all personnel responsible for cargo handling operations on board your ship.

To avoid sudden closure of valve in an emergency, the ship should advise the terminal at least 15 minutes before the final tanks are to be topped off and request the loading rate to be reduced sufficiently to permit effective control of the flow on board.

Before the commencement of the topping off operation, the ship/shore communications system must be tested. In the event of a breakdown in the ship/shore Handy-talkie, the ship should request for it to be replaced, or make contact with Terminal Control via VHF Channel 69.

Upon completion of loading, the ship must request the terminal to stop. Only after the terminal has confirmed that shore pumps have stopped, will the ship then close its valves.

Yours truly,

[Signatures]

Acknowledge Receipt : ___________________________

Loading Master

Ship’s Rubber Stamp : ___________________________
COMMUNICATIONS - CARGO OPERATION

Please be advised that all ship/shore communications with respect to cargo operation is to be conducted via Motorola Handy – talkie. These radios are on a dedicated Chandra Asri private frequency directly linked to our Control Room.

CALL SIGN : “CA. TERMINAL”

Please restrict use of this frequency to cargo operations only as other vessels alongside will also be using same frequency.

We have placed on board one Motorola radio for the advised cargo operation purpose.
In the event of a breakdown of this Motorola radio, you can contact “CA-TERMINAL” on VHF Channel 69 for a replacement set.

Please acknowledge receipt of this radio and ensure that it is return to the Shore Officer prior to your vessel’s departure from the berth.

Received one Motorola Radio Original: _______________________

Exchange: _____________________

Master’s Signature/Ship’s stamp …………………………………………………………………………………

Time : ______________________ Date :

Collected from vessel by :

Name / Signature of Loading Master
APPROVED
SMOKE ROOM
NO SMOKING OUTSIDE THIS AREA

NOTE: This sign to be displayed on the door to smoke room by Chief Officer
APPROVED
SMOKE ROOM
NO SMOKING OUTSIDE THIS AREA

NOTE: This sign to be displayed on the door to smoke room by Chief Officer
The Ship/Shore Safety Check-List

Ship's Name________________________________

Berth________________________ Port : Chandra Asri Petrochemical

Date of Arrival_________________ Time of Arrival________________

### Part 'A' – Bulk Liquid General – Physical Checks

<table>
<thead>
<tr>
<th>Bulk Liquid – General</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is safe access between the ship and shore.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>2. The ship is securely moored.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>3. The agreed ship/shore communication system is operative.</td>
<td>A</td>
<td></td>
<td>R</td>
<td>System: Backup System:</td>
</tr>
<tr>
<td>4. Emergency towing-off pennants are correctly rigged and positioned.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>5. The ship’s fire hoses and fire-fighting equipment are positioned and ready for immediate use.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>6. The terminal’s fire-fighting equipment is positioned and ready for immediate use.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>7. The ship’s cargo and bunker hoses, pipelines and manifolds are in good condition, properly rigged and appropriate for the service intended.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The terminal’s cargo and bunker hoses or arms are in good condition, properly rigged and appropriate for the service intended.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The cargo transfer system is sufficiently isolated and drained to allow safe removal of blank flanges prior to connection.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Scuppers and save-alls on board are effectively plugged and drip trays are in position and empty.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>11. Temporarily removed scupper plugs will be constantly monitored.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>12. Shore spill containment and sumps are correctly managed.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>13. The ship’s unused cargo and bunker connections are properly secured with blank flanges fully bolted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. The terminal’s unused cargo and bunker connections are properly secured with blank flanges fully bolted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. All cargo, ballast and bunker tank lids are closed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Sea and overboard discharge valves, when not in use, are closed and visibly secured.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. All external doors, ports and windows in the accommodation, stores and machinery spaces are closed. Engine room vents may be open.</td>
<td></td>
<td></td>
<td>R</td>
<td>Location:</td>
</tr>
<tr>
<td>18. The ship’s emergency fire control plans are located externally.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If the ship is fitted, or is required to be fitted, with an inert gas system (IGS), the following points should be physically checked:

<table>
<thead>
<tr>
<th>Inert Gas System</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Fixed IGS pressure and oxygen content recorders are working.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>20. All cargo tank atmospheres are at positive pressure with oxygen content of 8% or less by volume.</td>
<td></td>
<td></td>
<td>P</td>
<td>R</td>
</tr>
</tbody>
</table>

Part B – Bulk Liquid General – Verbal Verification

<table>
<thead>
<tr>
<th>Bulk Liquid – General</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. The ship is ready to move under its own power.</td>
<td></td>
<td></td>
<td>P</td>
<td>R</td>
</tr>
<tr>
<td>22. There is an effective deck watch in attendance on board and adequate supervision of operations on the ship and in the terminal.</td>
<td></td>
<td></td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>23. There are sufficient personnel on board and ashore to deal with an emergency.</td>
<td></td>
<td></td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>24. The procedures for cargo, bunker and ballast handling have been agreed.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>25. The emergency signal and shutdown procedure to be used by the ship and shore have been explained and understood.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>26. Material Safety Data Sheets (MSDS) for the cargo transfer have been exchanged where requested.</td>
<td></td>
<td></td>
<td>P</td>
<td>R</td>
</tr>
<tr>
<td>27. The hazards associated with toxic substances in the cargo being handled have been identified and understood.</td>
<td></td>
<td></td>
<td></td>
<td>H2S Content: Benzene Content:</td>
</tr>
<tr>
<td>28. An International Shore Fire Connection has been provided.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. The agreed tank venting system will be used.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>30. The requirements for closed operations have been agreed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. The operation of the P/V system has been verified.</td>
<td></td>
<td></td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>32. Where a vapour return line is connected, operating parameters have been agreed.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>33. Independent high level alarms, if fitted, are operational and have been tested.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>34. Adequate electrical insulating means are in place in the ship/shore connection.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>35. Shore lines are fitted with a non-return valve, or procedures to avoid back filling have been discussed.</td>
<td></td>
<td></td>
<td>P</td>
<td>R</td>
</tr>
<tr>
<td>36. Smoking rooms have been identified and smoking requirements are being observed.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>37. Naked light regulations are being observed.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
</tbody>
</table>
If the ship is fitted, or is required to be fitted, with an inert gas system (IGS), the following statement should be addressed:

<table>
<thead>
<tr>
<th>Inert Gas System</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>51. The IGS is fully operational and in good working order.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>52. Deck seals, or equivalent, are in good working order.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>53. Liquid levels in pressure/vacuum breakers are correct.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>54. The fixed and portable oxygen analysers have been calibrated and are working properly.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>55. All the individual tank IG valves (if fitted) are correctly set and locked.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>56. All personnel in charge of cargo operations are aware that, in the event of failure of the inert gas plant, discharge operations should cease and the terminal be advised.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>
If the ship is planning to tank clean alongside, the following statements should be addressed:

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

* Delete Yes or No as appropriate

Part ‘C’ – Bulk Liquid Chemicals – Verbal Verification

<table>
<thead>
<tr>
<th>Bulk Liquid Chemicals</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Material Safety Data Sheets are available giving the necessary data for the safe handling of the cargo.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A manufacturer’s inhibition certificate, where applicable, has been provided.</td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>3. Sufficient protective clothing and equipment (including self-contained breathing apparatus) is ready for immediate use and is suitable for the product being handled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Countermeasures against accidental personal contact with the cargo have been agreed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The cargo handling rate is compatible with the automatic shutdown system, if in use.</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>6. Cargo system gauges and alarms are correctly set and in good order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Portable vapour detection instruments are readily available for the products being handled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Information on fire-fighting media and procedures has been exchanged.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Transfer hoses are of suitable material, resistant to the action of the products being handled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Cargo handling is being performed with the permanent installed pipeline system.</td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>11. Where appropriate, procedures have been agreed for receiving nitrogen supplied from shore, either for inerting or purging ship’s tanks, or for line cleaning into the ship.</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
</tbody>
</table>

Tank No 1  Tank No 5  Tank No 8  Tank No 2  Tank No 6  Tank No 9  Tank No 3  Tank No 7  Tank No 10  Tank No 4
DECLARATION
We, the undersigned, have checked the above items in Parts A and B, and where appropriate Part C or D, in accordance with the instructions, and have satisfied ourselves that the entries we have made are correct to the best of our knowledge.

We have also made arrangements to carry out repetitive checks as necessary and agreed that those items with code ‘R’ in the Check-List should be re-checked at intervals not exceeding ____ hours.

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

OPERATING INSTRUCTIONS FOR GÄVLE OIL TERMINALS RECEIVED/AVAILABLE ON BOARD

Rev_____ Date___________

<table>
<thead>
<tr>
<th>For Ship</th>
<th>For Shore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Rank</td>
<td>Position or Title</td>
</tr>
<tr>
<td>Signature</td>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>Time</td>
<td>Time</td>
</tr>
</tbody>
</table>

Record of repetitive checks:

<table>
<thead>
<tr>
<th>Date:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td></td>
</tr>
<tr>
<td>Initials for Ship:</td>
<td></td>
</tr>
<tr>
<td>Initials for Shore:</td>
<td></td>
</tr>
</tbody>
</table>