**STS CONTINGENCY PLAN GAS WIDURI**

The following actions should be taken or considered in the event of any emergency arising during loading / discharging operations:

- Sound the emergency signal / alarm
- Alert crew members on both ship’s
- Initiate emergency procedures
- Stop any cargo operation (activated ESD system)
- Muster crew on muster station
- Purge cargo hoses and disconnect cargo hoses
- Confirm the ship on main engine is ready for use

**PROCEDURES:**

1. **FIRE**
   - Activate ESD same time report to duty OOW by radio.
   - Evacuate the area if not possible to extinguish alone.
   - Activate general alarm.
   - Mastering
   - Prepare Engine
   - Combat/Extinguish the fire by any means. By: Activating Deck water spray, Use of Foam and DCP, Close/Stop the flow of gas and let it burn the existing. Otherwise follow master Advise accordingly and refer to MSDS.
   - Prepare Engine as necessary and disconnect the cargo hose by any possible means to cast off from STS vessel
   - Inform to port authority and port control
   - Inflammable and explosive substance to be shifted
   - If necessary, preparation of abandoning the ship and inform ship’s position, etc to the nearby office of the agency in charge of maritime safety, port authority and person related with the ship.

2. **GAS ESCAPE OR LEAKAGE**
   - Immediately stop cargo operation.
   - Advise to alarm STS vessel.
   - Stop all ventilation including cargo compressor if running.
   - Mustering inside of accommodation.
   - Briefing and ware breathing apparatus to assist the situation on deck.
   - Stop/Rectify and let the gas disperse completely.
   - Atmosphere check by using calibrated gas detectors.
   - Resume STS transfer operation when both parties are fully convinced with their consent for the safe operation.
   - Never resume until after the cargo leak or released has been stopped and all gas has dispersed

3. **MOORING LINE PARTED**
• Stop cargo operation immediately
• Raise alarm. Advise STS Ship. (a series of short rapid blasts on the ship’s whistle)
• Replace parted mooring line immediately
• Resume operation
• If any serious station with mooring lines
  1. Stop cargo operation
  2. Disconnected cargo hoses

4. COMMUNICATION FAILURE

• If communication breakdown occurs during approach maneuvers for STS operation, the maneuver should be aborted and subsequent actions to be taken by each ship’s should be indicated by the appropriate sound signals as prescribed in the international regulations for preventing collision at sea.
• During STS transfer operation Stop cargo operation immediately as if necessary.
• Give 3 blasts on the whistle to alarm the STS ship.
• The operation should not be resumed until satisfactory communications have been re-established.

5. HOSE BURST / FAILURE

• Activate ESD, Report, close Manifold.
• Stop all ventilation and compressor if running.
• Mustering
• Deploy smoke divers to close some other valves which are necessary.
• Observe and let the liquid gas evaporate and completely dispersed
• Disconnect damage cargo hose and replace.
• Atmosphere check by using calibrated gas detectors.
• Resume STS transfer operation when both party are fully convince with there consent for the safe operation.

6. FENDER BURST

• Stop cargo operation immediately
• Raise alarm. Advise STS Ship.
• Disconnect cargo hose
• Standby engine.
• Advise mooring gang if still on board and deploy ships crew on deck to assist.
• Use portable fender or any available means to avoid close contact with the other vessel.
• Unberth the ship as per agreement.

7. HYDRAULIC OIL POLLUTION

• Stop Cargo operation immediately.
• Raise alarm. Advise STS ship.
• Check all scupper plug in place and re-tight.
• Deploy all crew to mitigate the spill.
• Report accordingly.

8. OPERATION WEATHER LIMIT

• Wind forces: less than 15m/sec
• Visibility for berthing: 2.5 miles
• No lightning

9. BREACH IN SECURITY

• Report to SSO immediately
• Act accordingly as per ship security plan

10. EMERGENCY DEPARTURE PROCEDURES

• Stop Cargo operation immediately.
• Raise alarm. Advise STS ship.
• Purge the cargo hose(s)
• Disconnect cargo hose as much as possible.
• Discuss unberthing with the receiving ship
• Report to port control.
• Cut the rope if needed by using fire axe.

11. INJURIES TO PERSONNEL (FROST BURNS, SUCCOATION ETC)

A. TREATMENT FOR FROST BURNS

• Warm the area quickly by placing it in water at 42°C until it has thawed. As immediate action necessary, and without the warm water close to hand, in the first instance the affected part can be warmed with body heat or woolen material. If the finger or hand has been affected, the casualty should hold his hand under his armpit. Blood circulation should be allowed to re-establish itself naturally. If appropriate, the casualty should be encouraged to exercise the affected part while it is being warmed.
• Keep the patient in warm room.
• Do not massage the affected area
• Severe pain may occur on thawing: give pain killer or morphine if serious.
• Blisters should never be cut, not clothing removed if it is adhering firmly.
• Dress the area with sterile dry gauze
• If the area does not regain normal color and sensation, obtain medical advice
• Pls. Refer to MSDS if crew injured cause by liquid gas cargo.

B. SUCCOATION
• DURING RESCUE, the patient should be connected to the portable oxygen resuscitation apparatus and oxygen administered until transferred to safety.
• When the patient is in safe room

**The unconscious Patient**
1. Ensure there is clear passage to the lungs and that an airways is in place
2. Place mask over the nose and mouth and give 35 percent oxygen
3. Connect the mask to the flow meter and set it as 4 liter per minute

**The conscious Patient**
1. Ask if the patient suffers with breathing difficulty. If the patient has severe bronchitis, then give only 24 percent oxygen, all others should be given 35 percent oxygen
2. The mask is secured over the patient’s mouth and nose.
3. The patient should be placed in the high sitting-up position.
4. Turn on the oxygen flow meter to 5 liters per minute.

Oxygen therapy should be continued until the patient no longer has difficulty in breathing and has healthy color. If the patient has difficulty in breathing or if the face, hands and lips remain blue for longer than 20 minutes, seek urgent medical assistance.

This contingency plan is in corporate with the Ship to Shore Checklist where carried out and fully understood by both parties.

Teluk Semangka, September 02nd, 2015

CAPT. MARCELLUS HAKENG J.
MASTER LPG/C GAS WIDURI

LPG/C CLIPPER