10. Dangerous cargo

10.1 General

PBPL is responsible for the management of dangerous goods in port, including the loading and unloading of ships alongside and movement across the wharf. VTS is responsible for monitoring and managing the safe movement of ships in Queensland waters. VTS will assist the port authority in controlling traffic movement in the port, maintaining on/water safety distances, and responding to emergency situations.

The following codes and guidelines apply:

- IMO IMDG Code
- International chamber of shipping oil companies, international marine forum
- Society of international gas tankers and terminals (ISGOTT)
- Australian Standard AS 3846 2005
- AMSA Australian annexe to the IMDG Code Marine orders part 41
- AAPMA dangerous substances guidelines.

10.1.1 Notification

Chapter 5 Part 4 of the <u>Transport Operations (Marine Safety) Regulation 2016</u> outlines the duties of owners and masters of vessels in relation to the carriage of dangerous goods. The regulation requires that ships carrying dangerous goods and bulk liquids must comply with the appropriate directions of the IMDG code and AS3846 and are to notify PBPL and VTS of the intent to bring dangerous cargo into or depart from a pilotage area. (Port Notice – Dangerous Goods)

Ships have to report the information required in section 90(2)(a) of the regulation namely the arrival and/or departure of the ship, the removal of the ship to another berth or anchorage, the transfer of the cargo to another ship the loading of the cargo, and the details of the cargo in an approved form.

In the port of Brisbane agents/masters are to submit dangerous goods information electronically to the PBPL through the 'DGTrack' system. VTS has access to this system thus meeting all dangerous goods reporting requirements.

Minimum notification times for the scheduled movement or handling of dangerous cargo in a pilotage area are as follows:

Movement	Minimum notification
Ship inbound	48 hours prior to scheduled arrival at pilot boarding ground
Ship departure or removal	3 hours
Ship to ship transfer	24 hours
Loading, removal or handling alongside	24 hours
Operation of a local marine service	48 hours (See section.90&91 <u>Transport Operations (Marine Safety)</u> <u>Regulation 2016</u>)

Table 14 - Dangerous Cargo Minimum Notification Times

10.2 Explosives

10.2.1 Explosives notification

PBPL requires all shipments of class 1 cargo, be they import, export or transit cargo, be advised prior to the shipping line or company taking any bookings for this type or class of cargo. A PBPL reference number will be issued to track all subsequent communications and operations relating to each approved shipment.

10.2.2 Guidelines

The quantity of dangerous goods that may be handled by a ship at any berth is determined by the NEM (1.5.23 Nett explosive mass (NEM) of the cargo, and the location of the berth. Where berths are located close to residential or industrial areas, the amount of explosives that can be handled is reduced. (Port Notice – Dangerous Goods)

10.3 Dangerous cargo limits

PBPL will promulgate the limits that apply to the class of dangerous cargo loaded and unloaded in the port, including the maximum permissible types and quantities for approved berths. (Port Notice – Dangerous Goods)

10.4 Dangerous cargo events

Section 93 of the <u>Transport Operations (Marine Safety) Regulation 2016</u> defines a dangerous cargo event as:

- · the loss, or likely loss, of the cargo from a ship into Queensland waters
- a breach, or danger of a breach, of the containment of the cargo that could endanger marine safety
- anything else involving, or that could involve, the cargo that causes risk of explosion, fire, a
 person's death, or grievous bodily harm of a person
- for a cargo that is a materials hazardous only in bulk (MHB) an event that causes risk of explosion, fire, a person's death, or grievous bodily harm to a person.

The master and or the person in charge of a place where a dangerous cargo event has occurred are required to report the event immediately to VTS and other relevant authority. A full written report is to be submitted on Form F3220 - Dangerous Cargo Event Report to VTS as soon as is reasonably practical.

10.5 Ship to ship transfer (STS) operations

Due to the relatively sheltered waters of Moreton Bay, ship to ship transfer (STS) operations for LPG carriers are permitted under strict conditions.

10.5.1 LPG Carriers

Operations are carried out on a regular basis and under the following conditions:

- Operation to be carried out under Australian Standard AS3846 2005 and the guidelines set out in the Ship to Ship Transfer Guide for Petroleum, Chemicals and Liquefied Gases (1st Edition), OCIMF, and the ISGOTT safety guide
- Operation permitted in weather conditions up to wind speeds of 25 knots (strong wind warning)

- Agents to advise VTS not less than 48 hours prior to the planned operation and request permission
- Agents to confirm that all operational details such as anchoring, mooring, fendering and operational plan have been completed and a copy provided to VTS
- Agents book the vessels' movements in QSHIPS
- Agents to arrange supply of approved fendering
- All vessel movements to be conducted with a licensed pilot, endorsed for STS operations, on board
- Designated STS anchorages in Moreton Bay:
- STS ^1 east entrance beacon bearing: 246° (T) x 3.82 nautical miles (latitude 27° 17·17' S, longitude 153° 16·57' E.)
- STS ^2 east entrance beacon bearing: 244° (T) x 5.11 nautical miles (latitude 27° 16·51' S, longitude 153° 17·80' E).

10.5.2 Gas Transfer operation procedures:

- The larger vessel anchored and the smaller vessel berthed alongside using the larger vessel's ground tackle to sustain the anchorage
- · Lightering vessel to anchor in this location, using her off side anchor
- Berthing of the receiving vessel will only be conducted between 30 minutes before sunrise and to be completed no later than 30 minutes after sunset
- Separation and departure of the receiving vessel may be conducted either day or night with adequate illumination provided at night
- Berthing of receiving vessel; tug requirements as per port practice and conditions (refer <u>8.2</u> tug allocation general requirements arrival and departure)
- Unberthing, tug requirement assessed on a case by case basis
- Venting and purging of tanks, by either vessel, is prohibited during berthing and unberthing operations
- Both vessels to provide and use as required secondary fendering
- 1000 metre all vessel exclusion zone around the large vessel to be declared and monitored by 'VTS during the operation a notice to mariners will be issued
- Both vessels to maintain a 24 hour continuous listening watch on vhf channel 12 for the duration of time that they or either is at anchor
- Agents to submit 'notice of intentions to load, unload or transfer bulk liquids' for each operation