

Bulk Liquid Cargo Management Guideline

NOVEMBER 2016

Disclaimer

This document contains important information intended as a guide for the requirements and recommendations for the safe handling and storage of bulk liquid cargo in the Port of Melbourne by ship owners and Masters (or their agents), berth operators, stevedores, leaseholders and their employees, representatives and contractors. The guide incorporates and references minimum statutory requirements and industry standards that apply, or may apply, at the port.

Please note that compliance with statutory requirements and industry standards is the independent responsibility of any person accessing or undertaking any activity at the port (whether on port land or port waters). Therefore, readers must independently verify that the information contained within is current, accurate and complete.

Victorian Ports Corporation Melbourne (VPCM) does not warrant and makes no representation that the information in this document is accurate, complete or reliable, and therefore shall not be liable to anyone who may in anyway suffer loss or injury as a result of their reliance on information or procedures contained in this document.

Information contained in this document is current at the time of print. Please note that changes may occur without notice.

Revision history

Date	Version	Reason
1 November 2016		Update for 1 st VPCM Release

Approval history

Date	Name, Title
1 November 2016	Kieran McManus, Manager Health & Safety

Document Location:

The most up-to-date document and central source for referenced forms and additional guidelines can be located on the VPCM website at <http://www.vicports.vic.gov.au>

TABLE OF CONTENTS

1	Preliminary	8
1.1	Purpose	8
1.2	Scope and Application	8
1.3	Requirements	8
1.4	Definitions	9
1.5	Referenced Documents	12
2	Risk Management Process	12
2.1	Hazard Identification.....	12
2.2	Risk Assessment.....	12
3	Training & Inspection Programs	13
3.1	Training.....	13
3.2	Training Outcomes	13
3.3	Inspections.....	13
4	Spill Containment	13
5	Impact of Spills	14
6	Hierarchy of control measures.....	14
7	Emergencies	14
7.1	Emergency Procedures.....	14
7.2	Emergency Plans	15
7.3	Ship's Master.....	15
7.4	Cargo handling company	15
8	Notification	15
8.1	Advance Notification.....	15
8.2	Information to be provided in the notification:.....	16
8.3	Immobilisation.....	16
9	Special categories	17
9.1	Sampling.....	17
9.2	Openings in Cargo Tanks	17
9.3	Tank Washing/Gas Freeing	17
9.4	Handling of Odorous or Toxic Cargoes at all berths.....	18
9.5	Marpol Pre Washes.....	18
9.6	Cargo Tank Venting.....	18
9.7	Entry into Tanks	18
9.8	Hot Work.....	18
9.9	Berthing of Tankers at Ordinary Berths	19

9.10 Ship to Ship Transfers.....19

9.11 Bunkering Operations19

9.12 Ballasting Operations21

9.13 Access to tanker by barge(s).....21

Foreword

This document sets out the requirements and recommendations for the safe handling and transport of Bulk Liquid Cargoes in the Port of Melbourne.

It is designed to assist ship owners (or their agents), ship management companies, ship's masters and bulk liquid terminal operators to provide the minimum acceptable safety requirements for facilities and operating procedures when handling such cargoes so as to ensure the protection of individuals, installations and the environment.

Ship owners, ship management companies, ship's masters and bulk liquid terminal operators must also comply with relevant sections of the Dangerous Goods Act 1985 (DG Act) and the Occupational Health and Safety Act 2004 (Act), particularly with reference to the prevention and reporting of incidents and the maintaining of a healthy and safe workplace.

WorkSafe regulates the handling and transfer of dangerous cargoes in the port area. These activities must be carried out in compliance with the:

- Australian Dangerous Goods Code (ADG) 7th edition
- The Port Management Act 1995
- Transport Integration Act 2010
- Transport Legislation Amendment (Ports Integration) Act 2010
- Transport Legislation Amendment (Hoon Boating and Other Amendments) Act 2009
- Port Management (Port of Melbourne Safety and Property) Regulations 2010
- Occupational Health and Safety Act 2004
- Occupational Health and Safety Regulations 2007
- Dangerous Goods Act 1985
- Dangerous Goods (Storage and Handling) Regulations 2000
- International Maritime Dangerous Goods Code 2008
- AS/NZS ISO 31000:2009 Risk management – Principles and guidelines.
- Australian Standard 3846-2005: The Handling and Transport of Dangerous Cargoes in Port Areas
- The International Maritime Dangerous Goods Code (IMDG Code)
- International Safety Guide for Oil Tankers & Terminals (ISGOTT)
- MARPOL 73/78 (as amended).
- Ship to Ship transfer guide (Petroleum) Fourth Edition 2005

The Port Management Act 1995 and the Port Management (Port of Melbourne Safety and Property) Regulations 2010 now make the transfer of liquids in bulk a “Hazardous Port Activity”. This requires the mandatory application for authorisation and notification of proposal to carry out any bulk liquid transfer.

For practical and operational purposes, the VPCM and Port of Melbourne require that any company or individual who is involved in the handling of bulk liquid cargoes, comply with the requirements of Australian Standard 3846-2005: The Handling and Transport of Dangerous Cargoes in Port Areas (the) company procedures and this guideline.

Where the requirements of the or this guideline conflict with Acts and Regulations, the Acts and Regulations shall apply.

Port operators, tenants, terminal operators, stevedores, ship owners, ship masters and shipping agents all share responsibility for safety in the port and the local community to

ensure that their operational activities are conducted in a safe, secure and environmentally sustainable manner.

Key critical factors required when handling Bulk liquids include:

- Authorisation and notification requirements are all met
- Compliant separation and storage requirements exist at all times
- Safe infrastructure, procedures and work systems are in place
- Competent and trained staff undertake the operations
- A risk assessment covering all facets of the transfer operation is current
- Monitoring programs for safe and effective progression of the transfer operation are evident
- A coordinated reporting and investigation system is active
- Emergency, incident and recovery management processes and equipment are in place

VPCM and Port of Melbourne Health & Safety is staffed by Port Authorised Officers who will inspect, at random, any operation or function associated with bulk liquid cargoes to ensure that the operation is being performed in accordance with the above requirements.

The Port of Melbourne reserves the right at any time to refuse or restrict the passage of goods deemed to be dangerous or hazardous through the port.

1 Preliminary

1.1 Purpose

This document sets out the requirements and recommendations for the safe handling and transport of bulk liquid cargoes in the Port of Melbourne.

- It is designed to assist ship owners (or their agents), bulk liquid management companies, Vessel masters and bulk liquid terminal operators to provide minimum acceptable safety requirements for facilities and operating procedures when handling such cargoes to maximise the protection of individuals, installations and the environment.
- A risk assessment process should be adopted when handling bulk liquid cargos. The assessment may identify other specific safety treatments not covered by this guideline. In such circumstances, additional risk treatments or measures must be considered.

1.2 Scope and Application

This guideline covers:

- Bulk liquid dangerous cargoes, hazardous substances and harmful materials including environmentally hazardous substances (marine pollutants) and wastes, covered by the International Maritime Dangerous Goods Code (IMDG Code).
- Non-hazardous bulk liquid cargoes as they represent a risk to the environment, and operation of the port.

1.3 Requirements

VPCM requires that any ship, terminal operator, company or individual, involved in the handling, transport and storage of bulk liquid dangerous cargo, complies with the requirements of Legislation, the standard and this guideline.

Non-hazardous bulk liquid terminal operators are required to comply with the requirements of Legislation, the relevant sections of the standard and this guideline.

Certain sections of the standard may refer to other State, National and International codes and regulations for further guidance. Where the requirements of the standard or this guideline are in conflict with Federal or State Dangerous Goods Acts and Regulations, the Acts and Regulations shall apply.

The Port of Melbourne reserves the right at any time to refuse or restrict the passage of goods deemed to be dangerous or hazardous through the port.

1.4 Definitions

Agent

A person or organisation representing the ship owner, cargo owner and cargo receiver.

AS3846

Australian Standard 3846–2005: The handling and transport of dangerous cargoes in port areas (the standard).

Berth

Any dock, pier, jetty, quay, wharf, marine terminal or similar structure (whether floating or not) at which a ship may tie up. It includes any plant or premises, other than a ship, used for purposes ancillary or incidental to the loading or unloading of dangerous cargoes.

Correct technical name

Has the meaning given in the International Maritime Organisation (IMO) International Maritime Dangerous Goods Code (IMDG Code) and is synonymous with 'proper shipping name'.

Dangerous cargoes

Any of the following cargoes in bulk, and within the scope of the following:

- Oils, covered by Annex I of MARPOL 73/78.
- Gases, covered by the Codes for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk.
- Noxious liquid substances or chemicals, including wastes, covered by the Codes for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk and Annex II of MARPOL 73/78.
- Dangerous goods, hazardous and harmful substances, materials and articles including environmentally hazardous substances (marine pollutants) and wastes, covered by the International Maritime Dangerous Goods Code (IMDG Code).

The term 'dangerous cargoes' includes any empty, uncleaned packaging's (such as tank containers, receptacles, intermediate bulk containers (IBC's), bulk packaging's, portable tanks or tank vehicles) that previously contained dangerous cargoes, unless the packaging's have been sufficiently cleaned of residue of the dangerous cargoes and purged of vapours so as to nullify any hazard, or have been filled with a non dangerous substance.

NOTES:

In assessing the hazard posed by the cargoes referred to above, the volatility, toxicity and pollution category of the cargo must be considered.

For the purpose of this guide, coal is not considered a dangerous cargo.

Department of Agriculture and Water Resources

Federal Department managing quarantine controls at Australia's borders to minimise the risk of exotic pests and diseases entering the country.

Handling

The operation of loading or unloading of a ship; transfer to, from, or within a terminal area or ship; or trans-shipment between ships or other modes of transport. This includes intermediate keeping; i.e. the temporary storage in the port area during their transport from the point of origin to their destination, for the purpose of changing the modes or means of transport.

Note: This is an important term, which relates to the actual physical operation of moving materials. It is a widely drawn scope so as to cover all of the many operations, which relate to the transfer of bulk liquid cargoes in a port area.

Hazard

Means any thing, activity, occurrence or circumstance of any kind that has the potential to cause injury to persons, to damage property or pollute the environment including:

- An explosion, fire, harmful reaction or the evolution of flammable, corrosive or toxic vapours involving dangerous goods; or
- The escape, spillage, leakage or the loss of containment of any bulk liquid cargo.

Hazardous port activity

Means any activity involving the following:

- The transfer of dry or liquid cargoes to and from vessels and wharves.
- Hot works, being thermal or oxygen cutting or heating or any other heat or spark producing activity

IMDG Code

The International Maritime Dangerous Goods Code, published by the International Maritime Organization.

MARPOL

Marpol 73/78 is the International Convention for the Prevention of Pollution from Ships,

Port of Melbourne Operations (Port of Melbourne)

The private operator of the Port of Melbourne commercial operations following the conclusion of the Port of Melbourne Lease Transaction in 2016.

Port of Melbourne DPAO

a Port of Melbourne Duty Port Authorised Officer tasked with monitoring Hazardous Port Activities on Port of Melbourne controlled areas is carried out in accordance with the conditions of the issued authority.

Packing Group

The division of dangerous goods, other than Classes 1, 2, 5.2,6.2 & 7, into three hazard groups designated in decreasing order of hazard, by the Roman numerals `I' (high danger), `II' (medium danger) and `III' (low danger).

Proper shipping name

The name used to describe a dangerous good, as defined in the IMDG Code.

Regulatory authority

Worksafe is the regulatory authority that determines the conditions under which Dangerous Cargoes are handled and/or kept in operational areas within the Port of Melbourne.

Risk

Means the likelihood of injury to persons, damage to property or pollution of the environment being caused by a hazard.

Responsible Person

A person appointed by an employer or the Master of the ship and empowered to take all decisions relating to a specific task, having the necessary knowledge and experience for that purpose.

Reasonably Practicable

The severity of the hazard or risk

- the likelihood of serious injury or damage
- the state of knowledge about the hazard or risk
- information you know about the hazard or risk
- information provided to you about the hazard or risk
- ways to remove or mitigate the risk
- the availability and suitability of risk controls
- the cost of removing or mitigating the risk.

Ship

Any seagoing or non-seagoing water craft, including those used on inland waters, used for the transport of dangerous cargoes

TFOM

Tanker Facility Operations Manual – a manual written by Port of Melbourne health and safety outlining the operational requirements, roles and responsibilities of all parties involved in bulk liquid operations at Port of Melbourne controlled bulk liquid berths in the Port of Melbourne

VPCM

Victorian Ports Corporation (Melbourne), the former Port of Melbourne Corporation (PoMC) following the conclusion of the Port of Melbourne Lease Transaction in 2016.

VPCM Duty Port Authorised Officer (DPAO)

a VPCM officer tasked with issuing authorities and monitoring that Hazardous Port activities on port land and in port waters are carried out in accordance with the conditions of the issued authority.

Worksafe

The Victorian WorkCover Authority's Worksafe Division.

1.5 Referenced Documents

Referenced documents such as Acts, Industry Codes of Practice, ISO Standards and Australian Standards have been referred to throughout this document. The latest editions should always be referenced to ensure that the latest safety developments and requirements are incorporated.

2 Risk Management Process

This is a process that assists ship's Masters and berth operators in identifying hazards and implementing corrective treatments or measures to eliminate or reduce the risks associated with handling bulk liquid cargoes.

2.1 Hazard Identification

The entire handling and transfer process needs to be examined to identify any hazards associated with the particular type of cargo being handled and the type of transfer operation being employed:

- A single hazard (explosive, flammability, toxicity)
- Multiple hazard (mixing of hazard classes)
- Cumulative hazard (fire, explosion, environmental impact).
- Other hazards also need to be considered which may be external to the process.
- These hazards can include:
 - Prevailing weather conditions
 - Proximity of other Goods on board the ship and terminal
 - Proximity of activities and facilities on board the vessel and terminal
 - Hot Work.
- Information for identifying hazards can be obtained from sources such as:
 - IMDG Code
 - Material Safety Data Sheets
 - Worksafe Guidelines and Standards
 - Industry publications.

2.2 Risk Assessment

There are various methods of carrying out a risk assessment. The purpose of the risk assessment is to determine the consequence of:

- likely injury to people from the transfer process
- likely damage to property from the transfer process
- likely pollution to the environment
- The risks that need to be controlled
- The order in which the risks need to be controlled
- A generic assessment can be used to minimise duplication and to streamline the process.

The person(s) responsible for carrying out a risk assessment must ensure that the risk assessment is:

- Valid for that transfer process
- Reviewed and current

- Consistent with the Australian Standard AS/NZS ISO 31000:2009 - Risk Management: Principles and Guidelines.

3 Training & Inspection Programs

3.1 Training

Based on risk assessments and the complexity of the handling and storage of bulk liquid cargo in port areas, port users must monitor that all staff involved in the handling and storage of bulk liquid cargo in port areas are provided with an appropriate formal training program.

The aim of the training should be to ensure that each person who may be involved achieve the requisite knowledge and competencies required to undertake the operation safely.

All staff involved with the handling and storage of bulk liquid cargo in port areas must be provided with adequate supervision until they can demonstrate they are competent in handling the operation in a safe manner.

Responsible parties should select training courses that cover the theoretical aspects of handling and storage of bulk liquid cargo including relevant, hazards, guidelines and regulations for all staff involved in these operations.

3.2 Training Outcomes

Ship and shore staff undertaking handling and storage of bulk liquid cargo operations should be:

- proficient in the handling process;
- have knowledge of the hazards that may arise from the process;
- conversant with and understand the information provided on the material safety data sheets for the product/s being handled;
- conversant with the requirements of the relevant guidelines and regulations; and
- be able to respond to any emergency and assist till emergency assistance arrives.

3.3 Inspections

All responsible parties involved in the handling transport and storage of bulk liquid cargo operations must develop and implement a comprehensive inspection program.

These inspections should be regularly undertaken and recorded. regular inspections can identify faults and potential failures in the processes before incidents occur.

4 Spill Containment

Any spill during the handling and storage of a bulk liquid cargo operation, must be contained on the site.

The immediate action is to stop all operations, report the spill incident to **Emergency Services on 000 then Melbourne VTS on (03) 9644 9777**, take corrective action to contain and or minimise the impact on people the environment and property.

Response and clean-up operations thereafter will depend on:

- The nature of the product spilt
- The quantity of product spilt
- The potential impact to people, the immediate area and the surrounding environment.

5 Impact of Spills

Spill Impacts spill may include, people in the immediate vicinity, infrastructure in the area, marine and land based areas, groundwater and soil.

Measures to prevent or control the impact of a spill will require a risk assessment.

The hierarchy of controls will need to be employed to suit the containment and clean-up operations.

The hierarchy of control is a sequence of options which offer staff involved with the handling and storage of bulk liquid cargo a number of ways to approach the control of spill hazards, working down the list to implement the best measure possible.

6 Hierarchy of control measures

- Eliminate the hazard
- Substitute the hazard with a lesser risk
- Isolate the hazard
- Use engineering controls
- Use administrative controls
- Use personal protective equipment

7 Emergencies

Actions and systems used when dealing with bulk liquid cargo incidents may include the following.

7.1 Emergency Procedures

Emergency procedures are required for handling all foreseeable emergencies during a bulk liquid cargo operation. Emergency procedures may vary but must include as a minimum:

- Raising of an alarm
- Action by persons to ensure their own safety and the safety of those around them
- Action by persons to minimise the damage to people, property and the environment
- A designated method of informing emergency services, Port of Melbourne, government agencies, adjacent properties, dangerous goods owners including charterers and their agents.

7.2 Emergency Plans

The purpose and scope of an emergency plan should be designed to manage and coordinate all aspects of the emergency. Emergency plans should include:

- Responsibilities of key personnel
- Circumstances and systems to activate the plan
- Outline teams and roles to handle various aspects of the emergency
- Additional resources such as emergency services, additional power.

For any emergency involving fire, injury, rescue or hazardous spill **Emergency Services 000 and Melbourne VTS must be contacted on (03) 9644 9777.**

7.3 Ship's Master

The master of a tanker moored at a tanker berth must ensure that, within their area of responsibility, dangerous cargo handling activities are carried out in accordance with:

- Ships specific procedures
- ISGOTT
- Australian Standard AS 3846
- Relevant sections of this guideline
- A fully completed ship shore operational and safety checklist.

7.4 Cargo handling company

The cargo handling company, within their area of responsibility, must ensure that hazardous cargo handling operations are carried out in accordance with:

- Operators specific procedures
- ISGOTT
- Australian Standard AS 3846
- The Port of Melbourne Tanker Facility Operations Manual
- Relevant sections of this document.
- A fully completed ship shore operational and safety checklist.

Representatives from the ship and the cargo handling company must complete a ship/shore safety and operational agreement that is fully compliant with the Oil Companies International Marine Forum (OCIMF) guidelines and the requirements of the International Safety Guide for Oil Tankers and Terminals (ISGOTT). The agreement **MUST** be completed prior to the start of any ship/shore transfer of bulk liquid cargoes.

A VPCM or Port of Melbourne Port Authorised Officer may audit the completed ship/shore safety and operational agreement at any time during cargo handling operations.

8 Notification

8.1 Advance Notification

Key elements of the Port Management (Port of Melbourne Safety and Property) Regulations 2010 in Division 1 and 2 requires that VPCM receive both an application for

authorisation and notification of the carriage of bulk liquid cargo at least 24 hours prior to arrival in the Port in the form of a properly prepared manifest.

Dangerous goods notifications will only be accepted by entry through VPCM's 'DG Hub' interface at this website: www.dghub.com.au.

DG Hub is VPCM's mandatory notification process for the intention to undertake the ship/shore transfer of bulk liquids and gaseous dangerous cargoes.

Advance notification shall be provided to VPCM at least 24 hours before a bulk liquid dangerous good is brought into the waters of a port area or onto the berth. This requirement shall apply to bulk liquid dangerous goods that are to be unloaded or loaded and those to be left on board.

8.2 Information to be provided in the notification:

The following minimum information shall be provided in the advance notification:

- a Name and Lloyds/IMO number of ship.
- b Estimated date and time of arrival (ETA) of ship, or delivery of goods to port area, as appropriate.
- c Name of agent, contact name and telephone number.
- d Proper shipping name/correct technical name.
- e UN number (where applicable).
- f IMDG Code classification and any subsidiary risk, with Packing Group or MARPOL NLS category and flash point, as appropriate.
- g Quantity of cargoes to be unloaded/loaded and those to be left on board.
- h For solid bulk dangerous cargoes, a certificate of manufacture.
- i For liquids and liquefied gases, whether the ship holds the following valid certificates, as appropriate:
 - i International Oil Pollution Prevention Certificate.
 - ii International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk.
 - iii Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk.
 - iv International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk.
 - v Certificate of Fitness (Gas Carrier Code)
 - vi International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk.
 - vii Cargo inhibitor certificate (where applicable).
- j The condition of the dangerous cargo and any known defect in the cargo containment, handling system, equipment or instrumentation that is related to the bulk cargo and that could lead to an abnormal hazard.
- k Any known defect that could adversely affect the safety of the port area, the ship or the environment.

8.3 Immobilisation

Where a tanker is required to be immobilised alongside a tanker berth, the agent is required to complete an application (Form 4) prior to immobilisation.

The completed form must be forwarded to:

Port Superintendent - Melbourne VTS: e-mail engineimmobilisation@vicports.vic.gov.au

9 Special categories

9.1 Sampling

All sampling methods are to be agreed at the initial safety meeting and are not to be changed without agreement of the vessel and terminal shore officer. Closed or pump-stack sampling is the preferred method except in the case of non-hazardous products which may be open sampled subject to certain conditions.

In the case of a request for open sampling the vessel and terminal shore officer are to conduct a joint risk assessment to set the conditions that are required to ensure the safety of all operations and personnel in the port area.

Conditions may include but are not limited to:

- Number of tanks that may be sampled at one time
- Safety precautions to be observed
- Need for vapour monitoring.

9.2 Openings in Cargo Tanks

Whilst a tanker is alongside a tanker berth, and particularly during bulk liquid cargo handling, or while ballasting into ex-bulk dangerous cargo tanks, all cargo tank lids must be firmly closed and secured.

In the case of the need to open cargo tank lids the vessel and terminal shore officer are to conduct a joint risk assessment to set conditions that are required to ensure the safety of all operations and personnel in the port area.

9.3 Tank Washing/Gas Freeing

Washing and/or gas freeing of ex-toxic, carcinogenic or highly odorous cargo tanks is not permitted at any tanker berth in the Port of Melbourne.

Washing and/or gas freeing of the above cargo tanks [if required] must take place in Port Phillip Bay at the outer anchorage south east of Point Cook with the washing's remaining on board.

Where tank washing and/or gas freeing is carried out alongside, the operation must be carried out in accordance with, ISGOTT, the particular tanker's own operating manual and any other restrictions applied by the Port of Melbourne Tanker Facility Operation Manual, concurrent tank washing and or gas freeing are not permitted with cargo operations.

Concurrent crude oil washing and cargo discharge operations are permitted.

All washing must comply with:

'Tank washing & gas freeing at tanker berths - guide' available from the Port of Melbourne website: <http://www.portofmelbourne.com/port-operations/safety-and-environment>

9.4 Handling of Odorous or Toxic Cargoes at all berths

The vessel and terminal shore officer are to ensure that no unplanned vapour escape occurs at any berth to ensure the safety of all operations and personnel in the port area.

9.5 Marpol Pre Washes

Pre Washing of cargo tanks under Marpol requirements is considered a separate operation to washing / gas freeing.

All Marpol pre washes should be carried out in accordance with Marpol guidelines and any pre conditions set by AMSA and/or VPCM.

9.6 Cargo Tank Venting

Cargo tank venting must only be performed using the tankers approved venting system. Other forms of venting must be agreed between the vessel and terminal shore officer to ensure the safety of all operations and personnel in the port area.

Where certain cargo discharges require a vapour return system, the vessel and terminal shore officer must ensure that returning vapour is not released into the atmosphere.

9.7 Entry into Tanks

If man entry is required into a cargo tank or other confined space that has previously held a bulk liquid cargo or where the condition of the atmosphere is not known, the following procedures must apply when the tanker is alongside.

Where a member of the ship's crew is required to enter a cargo tank or confined space, the confined space entry procedure must be in accordance with the tankers own operating manual. This documentation should be available for viewing in the cargo control room before and during tank entry.

If a person other than a member of the ship's crew is required to enter a cargo tank or confined space, all persons who will be involved in the entry of the space must be appropriately trained and the entry must be in accordance with the Victorian Occupational Health and Safety Regulations 2007 Part 3.4 – Confined Spaces and the associated compliance code.

An independent chemist must issue a gas free certificate for that particular cargo tank or confined space, approving it "Safe for Man Entry"

9.8 Hot Work

Hot work cannot take place on board a tanker whilst it is alongside the berth or anywhere within the boundary of the berth without first seeking an authority from VPCM via portsafety@vicports.vic.gov.au

An authority to conduct "Hot Work" may be granted by VPCM subject to any conditions set by the Port of Melbourne.

A VPCM or Port of Melbourne Port Authorised Officer may conduct an inspection of the work site prior to VPCM issuing an authority

A gas free certificate may be required.

9.9 Berthing of Tankers at Ordinary Berths

Tankers berthing at ordinary berths in the Port of Melbourne must comply with the Port of Melbourne document:

‘Tankers Docked at non-tanker berths -minimum requirements’ (available from <http://www.portofmelbourne.com/port-operations/safety-and-environment>)’

In addition, any tankers berthing at ordinary berths must have flammable cargoes onboard equal to or less than 50% of the total cargo tank capacity of the vessel and seek specific permission from the VPCM (minimum of 24Hrs notice in advance) by email to portsafety@vicports.vic.gov.au, prior to applying for an authority to conduct a bulk liquid transfer. Note that any permission granted by VPCM may be refused, or subject to conditions set by, the Port of Melbourne.

In this case the ships agent must arrange for additional resources that must consist of as a minimum:

- A fire fighting vehicle/pump with two portable monitors capable of delivering a foam solution to cover the manifold and deck areas of the vessel.
- Sufficient foam concentrate for 30 minutes application at a rate of 6%; and
- Trained personnel (MFB or equivalent).

9.10 Ship to Ship Transfers

Ship to ship transfers must be undertaken in accordance with relevant international, national, state and local legislation, regulation and guidelines, and may only occur with permission of the Harbour Master.

Guidance is available from:

- MARPOL Annex I- Regulations for the Prevention of Pollution by Oil Chapter 8 - Prevention of Pollution during Transfer of Oil Cargo Between Oil Tankers at Sea
- Ship to Ship transfer guide (Petroleum) Fourth Edition 2005.

9.11 Bunkering Operations

Bunker transfer operations are cargo and ship dependant and must be clarified on a visit to visit basis.

The Master of a ship involved in non-cargo liquid transfer operations shall ensure that the transfer will only take place if:

- The vessel and terminal shore officer have conducted a joint risk assessment to ensure that cargo transfer and bunker operations are compatible and ensure the safety of operations and personnel.
- A bunker authority has been issued by VPCM

- A transfer checklist has been completed in full and truthfully including the VPCM authority number issued to the ship.
- Details in writing of the quantity and type of product are recorded on the operational sequence plan.
- The scuppers/wash ports are firmly plugged or sealed.
- Manifolds not in use are blanked.
- The product hoses are well supported and have sufficient play.
- There is a well-tightened bolt in every bolt hole of the manifold flange.
- The manifold connection has been provided with a good seal.
- There is a sufficiently large save all (drip tray) under the manifold connections.
- There is effective communication established and maintained with the ship's engineering department, so as to enable immediate shutdown if required.
- Any cargo handling in progress will not hinder transfer operations and vice versa.

The Master of a barge must provide sufficient notice to the receiving vessel and shall not begin the transfer operation unless he has ensured that:

- The vessel and terminal shore officer have conducted a joint risk assessment to ensure that cargo transfer and bunker operations are compatible and ensure the safety of operations and personnel.
- The barge is securely moored.
- A transfer checklist has been completed in full and truthfully including the quantity and type of product.
- There is effective communication established and maintained by the barge, so as to enable immediate shutdown if required.
- The product hoses are in good condition and in test in accordance with the appropriate Australian Standard, and the test certificate is available on request.
- The product hoses are well supported and have sufficient play.
- The manifold connection has been provided with a good seal.
- There is a well-tightened bolt in every bolt hole of the manifold flange.

Road tanker transfer operations may take place providing the following are complied with:

- The product hoses are in good condition and in test in accordance with appropriate Australian Standards, and the test certificate is available on request.
- Where required a transfer checklist has been completed in full and truthfully including the quantity and type of product.
- An appropriate drip tray is in place under hose connection points where required.
- All camlock fittings are locked, closed and secured.
- A responsible person or the driver remains adjacent to his vehicle at all times during the transfer operation.
- Effective communications have be established and maintained between ship and driver, or responsible person to enable immediate shutdown if required.
- Any length of hose spanning the water must be in a continuous length containing no joins or connections.
- Every length of hose must be securely blanked at both ends before deployment or recovery.
- It is compulsory to use radios as the communication medium where the line of sight between the ship and bunker vehicle is obstructed and or the distance is > 75 metres.

Once transfer has commenced:

- A constant visual watch is maintained throughout the entire transfer operation.
- Sufficient absorbent material is available on site to deal with any accidental spillage.

- If a spillage does occur all efforts must be made to stop or limit the spillage and immediately notify the vessel, terminal and Melbourne VTS.

If any of the requirements laid down in these paragraphs cannot be fulfilled during bunker transfer operations then the operations must stop immediately.

VPCM and Port of Melbourne Port Authorised Officers (or their representatives) reserve the right to inspect all facets of the bunker transfer operations before commencement, and / or during the operations.

9.12 Ballasting Operations

Discharge of ballast water from segregated/dedicated ballast or cargo tanks is not permitted except where: there is written authorisation from:

- Department of Agriculture and Water Resources for International ballast water (Ballast Water from International ports);
- EPA Victoria for Domestic ballast water (Ballast Water from Australian Ports); and
- The ballast water is discharged ashore for treatment.

9.13 Access to tanker by barge(s)

Before any barge(s) or other waterborne craft come alongside a tanker permission must first be obtained from the vessel and terminal shore officer.

Note that the vessel and terminal shore officer must conduct a joint risk assessment to ensure that cargo transfer and barge operations are compatible and ensure the safety of all operations and personnel in the port area.

Victorian Ports Corporation (Melbourne)

Street address

Level 5, 530 Collins Street
Melbourne Victoria 3000
Australia

Postal address

GPO Box 261
Melbourne VIC 3001
Australia

Tel: +61 3 8347 8300 Fax: +61 3 8347 8301

www.vicports.vic.gov.au

**VICTORIAN
PORTS MELBOURNE**

The logo for Victorian Ports Melbourne, featuring a white inverted triangle pointing downwards, positioned to the right of the text.