Port of Brisbane Pty Ltd

Common User Port Facility

Maritime 1

Operations Manual

Last Updated September 2010

Port of Brisbane Pty Ltd I ACN 124 048 522

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TABLE OF CONTENTS

Section 1. Purpose and Scope of the Facility

1.1 Purpose

Port of Brisbane Pty Ltd (PBPL) is the owner and operator of the common user Maritime 1 Bulk Liquids Facility.

The purpose of the Facility is to provide for the following cargo types:

- Bulk Liquids

PBPL reserves the right to amend the types of cargo that are loaded or unloaded at the Facility. PBPL may in its absolute discretion refuse to allow use of the Facility for any type of cargo.

1.2 Scope

The Facility consists of a 32m long by 25m wide wharf. The Pocket is 217m long and 35m wide. There is an upstream dolphin and shore bollards. The berth has a declared depth of 9.0m.

This Operations Manual details how the Facility is operated.

PBPL reserves the right to update and amend this Operations Manual as necessary to meet corporate, Legislative requirements and operational needs. It is the Hirer's responsibility to obtain the most update to version from the PBPL website.

1.3 Authority

This document is issued under the authority of PBPL.

1.4 Other Relevant Documentation and Information

This Operations Manual is to be read in conjunction with the following documentation and the following documentation applies to the use of Maritime 1:

- To book a vessel at Maritime 1 please download and fill out the *Berthing Advice and Booking Form for Vessels Loading or Unloading Commercial Cargo and Non-Cargo Working Vessels*, and fax the form to Port Operations Officer at 07 3258 4703 or email to portops@portbris.com.au. PBPL is under no obligation to accept a booking or to allow the use of the Maritime No.1 Wharf.
- PBPL *Common User Port Facility Terms and Conditions for Loading or Unloading Commercial Cargo and Non-Cargo Working Vessels* apply (the Terms and Conditions). PBPL is under no obligation to accept an application or to grant a right for the Hirer to use the Maritime No.1 Wharf.
- Adherence to any port notices issued by PBPL in accordance with the *Transport Infrastructure Act 1994* (Q) and any other laws.
- For PBPL Port Charges refer to the *Port of Brisbane Schedule of Port Charges.*
- The *Shipping Handbook* contains generic operational information for all Port facilities.

A copy of all the above documents can be downloaded at:

http://www.portbris.com.au/operations/bookingPBPLfacilities

PBPL reserves the right to update and amend the above documents in its discretion to meet corporate, Legislative requirements and operational needs. It is the Hirer's responsibility to obtain the most up to date version of all documents.

In addition, to PBPL documentation:

Queensland Maritime Safety's *Port of Brisbane Port Procedures Manual* (as varied from time to time) must be adhered to. Vessels wanting to perform maintenance whilst at the Maritime 1 must observe the requirements published in the *Port of Brisbane Port Procedures Manual* and obtain the appropriate permits.

The manual can be found on the MSQ website – http://www.msq.qld.gov.au/~/media/msqfiles/home/shipping/port-procedures/port-procedures-brisbane/pdf_brisbane_port_procedures.pdf

Or alternatively

e msqmail@msq.qld.gov.au

t +61 7 3860 3500.

1.5 Disclaimer

Everything in this document is correct as at the time of publication. If there are any discrepancies the *Port Procedures Manual* takes precedence. With respect to the use of any part of the Terminal, the terms of any Licence granted by PBPL to a licensee will take precedence, except with respect to any discrepancies between the Licence and the Port Procedures Manual where the Port Procedures Manual takes precedence.

1.6 Contact List

Port Security	Coordinator	+61 7 3258 4614	PBPL.security@portbris.com.au
	Control Room	+61 7 3258 4601 (24hrs)	
Bookings	Port Operations	+61 7 3258 4703 (Fax)	portops@portbris.com.au
	Operations Officer	+61 7 3258 4621	

Section 2. Area Management and Safety

2.1 Facility Overview

Owner	Port of Brisbane Pty Ltd
Distance from River Mouth	14.8km
Wharf (Length x Width)	32m by 25m wide
Nominal Depth	9.0m
Berth Pocket (Length x Width)	217m by 35m
Services	Water is available charged at applicable rates
Fire Fighting Capabilities	Up to 25,0000 DWT,– Foam Tank, Monitor, Hydrants Over 25,000 DWT,- As per QFRS Maritime 1 Readiness Plan – 2009 (as per appendix 6.3 of this manual.
Use	Appropriate wet bulk cargoes, petroleum products, chemicals and other wet bulk
Access	24hr controlled – perimeter fence 1.8m with 3 strands of barbed wire (AS 1725)
Facilities	Guardhouse and amenities block

2.2 Available amenities

The amenities block is a shared facility. It contains limited facilities for use by the hirer during the term of any right granted by PBPL to the Hirer to use the Maritime 1. The use of the amenities block will be based on the *Terms and Conditions* as if the amenities block formed part of the Maritime 1 and will terminate automatically on the termination or expiry of the right to use the Maritime 1 under the *Terms and Conditions*.

The amenities block contains a work area, kitchenette with lunch room and single sex facilities. Electricity, water, local telephone is connected (equipment not supplied). Reasonable usage costs are covered under the Licence agreement and/or facility hire.

There are a limited number of car park spaces available which may be allocated at the discretion of PBPL.

There is no covered storage available at the Facility. Any requirement for covered storage, tents or other equipment should be notified at the time of booking Maritime No.1 Wharf and suitable arrangements negotiated at the discretion of PBPL.

The Queensland Fire and Rescue Service have there own amenities building on site.

2.3 Management

The Facility is managed by PBPL.

PBPL retains possession of the Facility at all times.

PBPL retains a right to access the Facility at all times.

The Facility is managed by PBPL on a Pre Booked Common User Basis via the Operations Division of PBPL.

PBPL is not obliged to accept a booking.

Any right granted to the Hirer to use any part of the Facility is non-exclusive and does not create a relationship of landlord and tenant. The Hirer and anyone accessing the Facility with the consent of PBPL must comply with all notices and signs erected on the Facility and/or the PBPL web page (http://www.portbris.com.au) by PBPL and any other authorised government agency.

PBPL may refuse entry to and/or use of any part of the Facility, for any reason.

2.4 Booking the Facility

Booking the Common User Facility is in accordance with the *Terms and Conditions* document referred to in Section 1.4.

For application to book a vessel at the Maritime 1 please download (from the PBPL website) and fill out the*, Berthing Advice and Booking Form for Vessels Loading or Unloading Commercial Cargo and Non-Cargo Working Vessels*, and fax the form to Port Operations Officer at 07 3258 4703 or email portops@portbris.com.au

The Booking is not confirmed until the booking form has been accepted by PBPL and confirmation sent back to the booking agent.

A Booking must be made not less than 14 calendar days prior to the intended date of use. At that time the vessel's name, LOA, cargo and ETA must be provided with an expected ETD. Successful allocation of a berth will be advised within 48 hours of application. Vessel agents are to keep PBPL closely advised if there are any changes to the ETA of the vessel.

48 hours definite notice of ETA must be given to PBPL, failing which PBPL may cancel the booking, subject to other applications being received for the window specified.

The Maritime 1 is to be used for ship exchange or lay up operations only.

2.5 Occupational Health and Safety and Risk Management

The Hirer, its employees, agents and representatives must:

- comply with all legislative and PBPL requirements, including but not limited to the *Workplace Health and Safety Act 1995* (Q) and the *Workplace Health and Safety Regulation 2008* (Q)
- ensure that any works, activities or operations carried out by or on behalf of the Hirer at the Facility (with the approval of PBPL) are only carried out by appropriately qualified persons in a good and workmanlike manner
- ensure that all plant and equipment used and operated by the Hirer, its employees, agents and representatives conforms to the relevant laws, regulations, standard and specifications
- obtain and comply with any relevant approvals.

The Hirer, its employees, agents and representatives are responsible for their own health and safety and must adhere to the minimum PBPL Occupational Health and Safety requirements.

These are listed on signs displayed around the Facility detailing the following information:

- dial 000 in the event of an emergency
- minimum (Personal Protective Equipment) PPE

Steel cap boots

Hard Hat

High Visibility Vest

- site plan with emergency equipment locations and Muster Points, located on a sign at entry of the Facility
- emergency contact information.

Any required First Aid supplies must be provided by the Hirer.

The Hirer must report to PBPL all incidents occurring on the Facility which have the potential to impact on the structure of the Facility, safety, security or the environment.

At all times the Facility will be operated under the risk management plan of the Hirer and/or their contracted stevedores. If requested by PBPL, the Hirer and/or their contracted stevedores must provide to PBPL a copy of its risk management plan.

The Facility is included in PBPL's standard emergency plans for wharves. The plan is located in the security hut and also includes the records of maintenance as well as the instructions for the fire alarm test (see appendix 6.2). PBPL does require the Hirer and/or their contracted stevedores to link their plan with those of PBPL.

2.6 Induction / Pre or Post use Checklist

Facility users will be required to complete an Induction that will cover Health and Safety, Emergency procedures and Site layout. This will take place on-site and be conducted by PBPL. A record of the induction will be kept by PBPL and the hirer of the facility.

2.7 Facility Maintenance

PBPL reserves the right of access to the Facility at all times.

The Hirer must maintain clear access at all times and can not obstruct roadways to the Facility, to enable emergency or maintenance access to the facility. Appropriate security measures will be taken if a vessel is along side in respect to landside restriction zone.

As outlined in the *Terms and Conditions* (see section 1.4) the Hirer must leave the Facility clean of all rubbish and in the same condition it was in prior to use by the Hirer.

The Hirer must not discharge or place any goods or cargo or drive any vehicle or plant on the Maritime 1 facility without prior approval from PBPL.

Any damage to the Maritime 1 will be repaired and/or remediated as set out in the *Terms and Conditions* (see section 1.4).

2.8 Marshalling – Traffic Control

The Facility is accessed via MacArthur Avenue. The site has limited vehicle access.

2.9 Customs and AQIS

The Facility is secured with a perimeter fence to 1.8m with 3 strands of barbed wire (AS 1725). The Hirer is responsible for ensuring that all Customs and AQIS requirements are met for their vessel and cargo.

2.10 Legislation Compliance

The Hirer must:

- comply with all laws, legislation and PBPL requirements relating to the use of the Facility or the Port of Brisbane. Refer to Section 7 in the *Terms and Conditions* (Section 1.4)
- comply with all notices issued by PBPL and/or any other government agency
- subject to obtaining the prior written consent of PBPL, obtain and comply with all approvals, permits, licences and the like necessary to carry on any activities or operations on the Facility and/or in the Port of Brisbane (and deliver to PBPL a copy of such approvals, permits licences and the like upon their issue)
- comply with the terms and conditions of all environmental licences issued by/to PBPL for any environmentally relevant activity and all other approvals and permits which relate to or affect the Facility.

  Wet Bulk – Import petroleum destined for Neumanns Tank farm located at Eagle Farm. Import and export bulk liquids for Pacific Terminals.

Section 3. Wharf Operations

3.1 Wharf Operations

The vessel will be met by a representative of PBPL.

PBPL will provide and position the Bridge/Manifold Marker upon advice from the Hirer.

The Hirer (or representatives) may at the direction of PBPL be given prior access to enable the prompt turnaround of the vessel.

Cargo vessels must sail within 2 hours of cargo completion unless agreed otherwise with PBPL. Hirers requiring additional time at the Maritime 1 should notify PBPL as soon as possible. PBPL will attempt to accommodate any such requests where possible, but reserves the right to require the vessel to relinquish the Maritime 1 should the need arise.

The Facility will be subject to a pre and post use inspection and the *Terms and Conditions* must be complied with (see Section 1.4).

3.2 Berthing Rules

The Berth Rules for Maritime 1 will be first to Pilot.

3.3 Stevedoring of Vessels at Maritime 1

Hirers are required to ensure that stevedores working the Facility meet the following requirements. They will:

(a) complete the Stevedore checklist (refer to Appendix 6.1) upon the request of PBPL
(b) work the vessel in compliance with Australian Customs and Quarantine Inspection Services requirements
(c) maintain clear access from road to wharf at all times
(d) arrive not less than 1 hour prior to the vessel in order to complete the induction
(e) ensure all cargo and equipment has been removed from the Maritime 1 prior to the vessel's departure.

The Hirer is responsible and liable for the activities of its stevedores.

3.4 Mooring of Vessels with LOA greater than 165 metres

Hirers are required to ensure that vessel is moored as far downstream as possible:

- When the vessel is moored head down (portside to) the stern lines are to be placed on the upstream shore bollard at Maritime 1 and on the P&OAGS bollard that is positioned on Hamilton 4 at the end of Hamilton 4 and some 10-15 metres back from the Quay Line.
- When using P&OAGS bollards, P&OAGS will need to be advised.
- For a sample mooring plan see appendix 6.4

3.5 Productivity of the Hirer

Hirers are required to achieve appropriate work rates as agreed between PBPL and the Hirer before vessel arrival and provide sufficient evidence to ensure the rates have been achieved. Whilst events of force majeure or other major unexpected incidents may delay a vessels departure, every effort should be made to affect a prompt turnaround. PBPL reserves the right to remove the vessel if the work rates are not met and/or it causes disruption to other users of the facility.

3.6 Services

The ships agent is responsible for all provisioning, bunkering and grey water. Operations must be performed in accordance with AQIS and appropriate Occupational Health and Safety requirements.

The Maritime 1 is serviced by water. The requirement for water must be notified at the time of booking the Facility. Water will be metered and charged at a rate determined by PBPL.

3.7 Vessel Maintenance

Vessels wanting to perform maintenance whilst at the Maritime 1 must observe the requirements published in the Maritime Safety Queensland's *Port Procedures Manual* and obtain the appropriate permits. See Section 1.4.

Section 4. Security

4.1 Overview

Facility security is managed by PBPL Port Security and provided at PBPL direction. The security costs will be charged to the Hirer on a cost recovery basis. Any particular special security requirements should be made known to PBPL at the time of booking.

4.2 Access Control

The Facility will be fenced along the perimeter of Maritime 1 between Pacific Terminals and POAGS . The Fence between the Maritime 1 and Hamilton 4 will have a locked personnel gate.

Land access to the Facility will be via a single entry point controlled by PBPL Port Security to verify that all vehicles and personnel who are entering or leaving the Facility have an appropriate reason to be there. Vehicles entering the Facility may be searched.

The Hirer must provide to PBPL a written list of persons authorised by the Hirer to access the Facility on behalf of the Hirer.

The Hirer must not interfere with any security measures.

4.3 Maritime Security Levels and Security Zones

Maritime security levels are declared pursuant to the *Maritime Transport and Offshore Facilities Security Act 2003 (Cth*) (MTOFSA).

Maritime security zones may be established pursuant to the MTOFSA.

The Hirer and all persons accessing the Facility and/or the Port of Brisbane must observe and comply with:

- the *Maritime Transport and Offshore Facilities Security Act 2003 (Cth*) and the *Maritime Transport and Offshore Facilities Security Regulations 2003 (Cth)*
- all directions, requirements, notices, conditions and maritime security plans in place at anytime in relation to maritime security zones and/or maritime security levels.

Security will have a key to access the central Emergency Exit Gate.

4.4 Occupied Wharf

When the Wharf is occupied by a security regulated vessel, the Maritime 1 area will become a maritime security zone.

4.5 Unoccupied Wharf

There will not be a maritime security zone enacted if there is not a vessel berthed at the Facility. However, a security presence will be maintained by PBPL Port Security at all times and it will not be possible to gain unrestricted access to the Maritime 1.

Section 5. Charges

5.1 Overview

The Hirer will be invoiced as soon as practicable after the use of facilities has concluded. The invoice will detail any applicable fees at the rates specified in the *Schedule of Port Charges* (which covers Wharf Fees, Terminal Permit Fees and Security Charges) and utilities charges if applicable.

Additional fees and penalties may apply as laid out in the *Terms and Conditions* (refer to Section 1.4) and/or any Licence that is granted to the Hirer for the use of any part of the Terminal and/or in relation to over-time storage.

5.2 Schedule of Charges

The charges for the use of the facility are located on the PBPL website at:

http://www.portbris.com.au/operations/portcharges

Section 6. Appendices

6.1 Stevedore Checklist

Port of Brisbane Pty Ltd Common User Port Facility

Applicant: _____ Date: _____/_____/_____

	Please Tick YES / NO	
Financial Standing		
Has the Applicant provided evidence that it can pay the Fees due pursuant to the Stevedoring Licence Agreement? (Applicant to provide copy of most recent financial statements)		
Has the Applicant (or a related entity of the Applicant) ever been placed into liquidation, administration, receivership, bankruptcy or entered into a composition or arrangement with its creditors?		
If yes, will that affect the Applicant's ability to pay Fees?		
Reputation		
Does the Applicant provide services at any other port or terminal?		
Is the Applicant presently party to any litigation?		
If yes, is the litigation material?		
Has the Applicant ever been found to have breached any legislation relating to occupational health and safety, environmental management, dangerous goods management, quarantine or customs?		
Compliance with Stevedoring Access Terms		
Has the Applicant provided evidence of:		
the existence of the following current policies of insurance?		
(i) Public Risk (not less than $20,000,000)		
(ii) Workers Compensation		
the arrival of a vessel which the Applicant will be loading or unloading?		
the Applicant has available a workforce which is:		
(i) sufficient to move the cargo within a reasonable time?		
(ii) appropriately trained or qualified in the use of the equipment?		
the existence of an occupational health and safety risk assessment?		
that the Applicant can provide information regarding cargo by EDI?		
Statutory Requirements		

Does the Applicant hold the following approvals (where relevant)?

(a)	dangerous goods?		
(b)	quarantined goods?		
(c)	customs bonding?		

6.2 Maritime 1 Emergency Procedures – Located on site in the Security Hut

PORT of BRISBANE
Here for the future

MARITIME 1
Emergency Procedures

Emergency Services:

Ambulance
Police
Fire Brigade

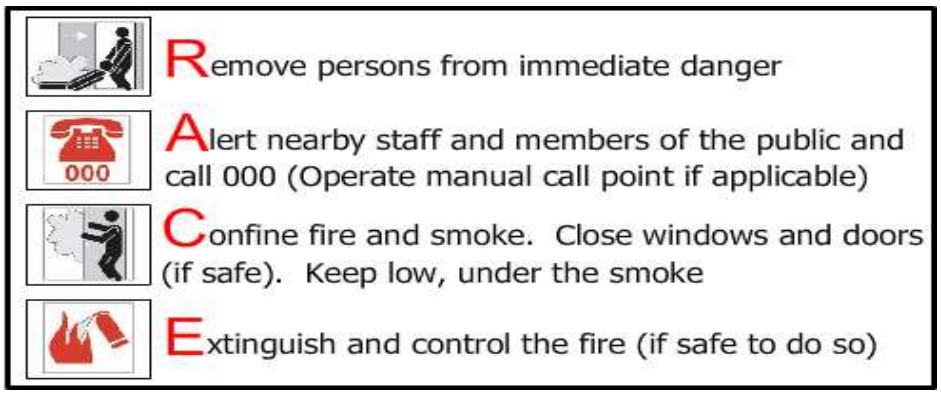
000

Other Numbers:

Port Security	(+617) 3258 4601
Brisbane Harbour Master	(+617) 3305 1700

Contact Numbers

In the event of Fire or Smoke:



Code Red - Fire/Smoke

In the event of Evacuation:

- Raise the Alarm by hitting Manual Call Point. Security will ring 000 and then Port Security base.
- Check amenities areas and other concealed areas where people may be working;
- Arrange for assistance of injured or "mobility impaired persons" to the nominated Evacuation Assembly Area;
- If possible close doors
- Collect the Visitor Register and ensure that all visitors, contract personnel and staff are accounted for at the Assembly area;
- Handover to Emergency Services and assist as directed

Each individual entering this site has a responsibility to familiarise themselves with their location and be aware of:

- The most direct means of exit
- The nominated Assembly area
- The location of any fire fighting equipment on this site.

Code Orange - Evacuation

In the event of a Bomb/Arson/Chemical or Biological release threat:

Remain calm and do not hang up

If possible alert other nearby staff, so they can call **000**

If it is a suspicious object, letter or package – do not approach

If applicable, evacuate the area

Complete the Bomb/Arson/Chemical or Biological Checklist

Handover to Emergency Services and assist as directed

A Guide to Identifying Suspicious Packages and Letters - MAIL

Be alert and check for the following features when sorting and preparing to open packages and letters:

Excessive postage	Protruding wires or aluminium foil
Excessive weight	Unusual weight, given its size
Hand-written or poorly-typed address	Lopsided or uneven envelope
Incorrect titles	Visual distractions
Title, but no name	Ticking sound
Misspellings of common words	No return address
Oily stains, discolouration or odour	Addressed to someone no longer with the department
Marked with restrictive endorsements, such as “Personal” or “Confidential”	Shows city or state in the postmark that does not match the return address
Excessive security material such as masking tape, string, etc	Avoid smelling or tasting unidentified substances or stains

Code Purple - Bomb/Arson Threat

In the event of a Medical Emergency:

Evaluate the situation and assist the injured if it is safe to do so Send for 1st Aiders – Basic Life Support

Check for **D**anger

Responsiveness

Open **A**irway – signs of breathing

Give 2 initial **B**reaths if not breathing normally

Give 30 chest **C**ompressions (almost 2 compressions per second) followed by 2 breaths

Continue CPR until Emergency Services arrive

Ring **000**, Handover to Emergency Services and assist as directed

Code Blue - Medical Emergency

In the event of an unspecified external emergency (E.G. Unknown sourceChemical Spill etc):

Remain inside the building unless otherwise instructed

Notify staff and visitors to muster to a central point

Turn off any Air conditioners and exhaust fans

Close all windows and doors

Ring **000**

Follow instructions from the emergency services

In the event of a cyclone or high intensity storm:

Secure or move inside items likely to become flying hazards

All doors closed and windows on the exposed side secured

Any accessible windows on the sheltered side should be opened to relieve wind pres sure inside buildings.

If personnel are housed within the building, all personnel are to be mustered into an area on the lee side of the building and kept away from glass windows and doors.

Remain in place until it is safe to leave

In the event of an Earthquake

Do not attempt to leave the building (it is safer inside)

Remain calm

Move away from windows and external walls

If possible take cover under a sturdy object

Remain in place until the all clear is given

In the event of a Gas Leak

Evacuate the area

Isolate Ignition sources

If no fire is present and it is safe to do so, Shut off the supply

Handover to Emergency Services and assist as directed

In the event of a Chemical Spill

Evacuate the area

Arrange 1st aid treatment if applicable

If no fire is present and it is safe to do so, Shut off the supply

Only attempt to contain the spill of a hazardous substance, IF:

The spill is of a minor nature.

The MSDS is available stating precautions to be taken.

Code Brown - External Emergency

When you dial 000:

A Telstra operator will ask what service do you require.

Don't explain your emergency to this operator wait to be directed to the correct Emergency service

When connected you may be asked:

The exact location/address? (*Macarthur Ave, Hamilton)*

What is the closest cross street? (*Barcham St)*

What is the best access to the incident?

What is the situation? What is occurring?

What are your details?

Location/ Address Details are:

Location Name: ***Maritime 1***

Address: ***Macarthur Ave, Hamilton***

Dial Triple Zero - 000

Emergency Assembly Area Map

HOW TO TEST THE FIRE ALARM PANEL

BEFORE TESTING, MAKE A PA ANNOUNCEMENT OF YOUR INTENTION TO TEST THE SYSTEM.

Place fire panel door key into Evacuation Control Module – black box – and switch to Manual;

Press PA button and make announcement with microphone;

Turn key switch back to Auto and remove key;

Commence test as per instructions below.

1. Press Ancillary Isolate button on top right hand side;
2. Press Menu button;
3. Press F1 button to select Commissioning;
4. Press F1 button to select TEST ;
5. Press F1 button to select ALARM;
6. Press ENTER button for ZONE 1;
7. Press ACK button, then RESET button, then ACK button again.
8. Panel alarms should be clear – if not, repeat step 7.
9. De-isolate Ancillary – press Ancillary Isolate button on top right hand side;

- **Maintenance Records Available in the Security Hut with this manual**

Maritime 1 Wharf
Readiness Plan - 2009

September 2009

Prepared By – Inspector Steven Sparks

Contents

Purpose of Plan

This plan has been created to provide clarity to the role of the commercially retained crews and QFRS equipment located at Maritime 1 Wharf whilst ship is secured at this Wharf under the authorisation of the Port of Brisbane Pty Ltd.

This Plan navigates to other relevant existing QFRS documents that must be followed as procedure by the crews. Specific points have also been extracted from documents and placed into this one that is of high importance for crews.

No automatic shut off valve exists on ships should a leak, spill or fire occur on the shore side of the ship manifold or shore manifold. In most cases the manifold is being 'observed' by ship crews to ensure ongoing integrity of the hose and manifolds, and should a spill, leak or fire be witnessed then a valve on the ship side is manually active by the crew.

This valve still allows the residual volume of product to flow through the pipe continuing to add fuel to a spill or fire. The volume of residual product is still significant in quantity to cause damage to life, property and the environment without early intervention from the stand-by crew.

Overall Dual Role of Commercial Crews at Maritime 1

Legislated obligations exist that specific levels of fire protection exist at wharves to allow dangerous goods to be off loaded.

Firefighting Equipment Infrastructure Role

The crews and equipment on site form the main infrastructure requirements to meet this legislation, and places obligations on the QFRS, and these crews to ensure the equipment is implemented correctly and is serviceable at all times.

Incident Response and Management Role

The crews are also obliged to respond to and manage all fires or hazardous materials emergency incidents that occur on the ship and off the ship.

The commercial crews, pumpers and equipment fall under the full scope of the Fire and Rescue Service Act and all associated policy and procedures, such as the Operations Doctrine.

This includes the following documents that must be implemented:

- IMS 2.1 – Hierarchy of Command and Control
- IAG 1.3 – Approach, Arrival and Action at Incidents
- IAG 2.4 – Flammable Liquids
- IAG 5.2 – Marine Incidents
- Brisbane Region - Regional Marine Hazard Management 2007 – 2010
- Specific procedures found within this document

Particular reference is made to the Brisbane Region - Regional Marine Hazard Management 2007 – 2010, Section 3.5, which identifies that vessels in birth fall under the powers of all Queensland legislation, including the Fire and Rescue Service Act. This places an obligation on the crews at the wharf to respond to fire and hazardous materials incidents whilst standing by at the ship.

Specific TEM related procedures

Communication with the Area Director in charge of the closest station

TEM SQ must notify the Area Director from Hendra Area Office that the ship is scheduled to attend, at least 1 day in advance.

Attendance at Whyte Island

Staff will be scheduled to attend at Whyte Island 1 hour prior to allotted start time for the product being off-loaded at the Wharf. All staff who are scheduled must attend at this time to assist with preparation of equipment.

The shifts will be 12 hours in duration (where appropriate) at the actual Wharf with additional time for travelling to and from the Wharf before and after shifts.

Meals and drinks, other than the drinking water provided, needs to be supplied by the staff as the site must not be left by any staff member at any time during their shift.

Each crew will have a nominated Officer in Charge who must be the highest ranked person on the assigned shift (required in IMS 2.1 – Hierarchy of Command and Control, page 3)

The first scheduled crew will ensure the allocated pumpers have the correct inventory needed for the Wharf (inventory shown in Appendix A) and the equipment and documents required to be transported to the Wharf is on the vehicles. The crew will then travel to the wharf in the pumps supplied and the Van supplied.

The 4 breathing apparatus supplied are to be housed in the Van.

Changeover crews are to attend at Whyte Island for start of shift and travel together in a vehicle supplied. This vehicle then transports the crew at the wharf back to Whyte Island.

This process is followed for all changeovers during the stay of the ship until the last crew who then returns all vehicles and equipment back to Whyte Island. The equipment is then to be neatly placed in the storage shed that TEM uses, in the first bay that has the side door and at reception in the cottage where applicable.

Clothing to be Worn

All crew members must wear level 1 long sleeve uniform at all times due to the product being offloaded (flammable liquid or combustible liquid). This uniform is to be worn at all times whilst at the Wharf as it forms a protective clothing control measure.

Equipment Housed at Wharf in Maritime 2 Amenities Building

- 2 ground monitors that can provide spray patterns with a projection of 20 metres
- 2000 litres of AFFF foam concentrate is on site, and supplied by PBPL
- 15 hoselines (64mm), 2 hoselines (38/50mm), 8 short feeds
- 1 foam making branch with spigot
- 1 variable flow branch, such as a proteck
- 4 DCP and 4 foam extinguishers
- 40 drums of FH6 foam concentrate for the foam making branch
- First Aid kit
- Ground sheet
- Bolt Cutters
- 4 folding chairs
- Alcohol hand wash
- Soap
- Paper towels
- Kettle

Equipment Taken from Whyte Island to Wharf (and returned)

- 2 pumpers that can supply a minimum of 2250 litres per minute
- 4 portable radios, spare batteries and chargers
- 1 mobile phone and charger
- 4 breathing apparatus and control equipment

- Oxy Viva
- Sufficient drinking water

Documents Required

- This Readiness Plan and appendices for reference and completion at the Wharf where appropriate

Set Up at the Wharf

- A 25 metre radius around the shore side manifold will be deemed an intrinsically safe zone, and lustre cones will be placed in locations to create this zone with 'intrinsically safe zone' signs
- Pumps, feeds, deliveries and monitors will be set up as per attached diagram and photos (Appendix B).
- All equipment and pumps must be tested and ensure that they meet the intended purpose, such as ensuring the incoming pressure has the appropriate difference of outgoing pressure to induce foam for effective produced foam and projection at the monitors
- The monitors must be able to project a stream of produced foam onto the manifold to create a blanket for a spill or fire.
- The monitors must not be closer than 15 metres from the manifold
- A separate delivery line (64mm) must be provided that has a foam making branch attached with two 20 litre drums of RH6 foam concentrate, and no closer than 15 metres from the manifold, and used for 'rapid intervention' for a small leak or fire
- Another separate hose line is to be provided no closer than 25 metres from the manifold and will be used as a protection line when any person enters the intrinsically safe zone. The delivery length can be 38mm/50mm diameter and requires a variable flow branch set on 450 litres/min or the closest setting to this.
- Set up the hydrocarbon detection device in the bunded area at the main manifold and check the alarm works
- A risk assessment must be conducted when locating the monitors and branches for weather conditions (wind), and the form needs to be completed for this (Appendix C). A Blank Site Plan is also included in Appendix B for you to show where equipment has been positioned differently from the prescribed based on this risk assessment.
- 4 short feeds from the booster will form the water source for the base pump adjacent to the booster.
- 4 short feeds will then be used as supply lines from the base pump back into the booster to supply the primary pump, which will deliver produced foam to the 2 monitors
- The supply side short feeds also supply volume and pressure to the 2 ground lines, 1 line has a variable flow branch, the other has the FB5X and drums of concentrate
- The crew must book onto the job with Firecom on 3215 0701.
- The crew must register their attendance with the DMO of Brisbane Region on 3362 9909 at the start of each shift
- The pumpers need to have access to 240volt power supply to keep the batteries charged, and this needs to be checked at the start or each shift.
- Crews need to have the BA's, control equipment, first aid equipment and turnout clothing positioned adjacent to the base pump as the forward control point (just outside the intrinsically safe zone. Response to any incident will be from this location as a control point.

Once Set Up at Wharf

- The crew must respond to any fire or hazmat incident on or off the ship at the Wharf as per Ops Doc protocols

Familiarisation with ship's captain/representative

- Each crew will need to meet with the ship's Captain, or Captain's representative (such as engineer), and tour the ship and familiarise themselves with:
    - Ship layout
    - Ship's firefighting systems and capabilities
    - Possible fire or hazmat hazards and risks on the ship
    - Locations of hazmat on ship

(This follows the 'pre-incident planning' from IAG's 2.4, 4.3 and 5.2)

Rest, Meals, Amenities

- Once all equipment is set up, checked and operational, and the crew has conducted a familiarisation with the ship layout and crew, then at least 2 crew members must be located at the forward control point at all times (this is the small donger building).
- The other crew members can locate themselves in shelter in either the Maritime 2 Amenities Building (the large donger building towards Macarthur Ave). Any crew members who proceed to this building must at all times have a portable radio with them on the correct fireground channel
- Should 2 crew members be resting in this building then they must have the portable radio on full volume, conduct a radio check with the other 2 firefighters at the forward control point, and place the radios in chargers adjacent to where they are resting as this is the means of alerting the crew to an incident
- Toilets can be accessed in the Maritime 2 Amenities Building
- A microwave oven, BBQ, frig and eating utensils are located at the forward control point and this is where all meals are to be consumed.

Equipment Checking

- The equipment and pumps must be checked at least once every hour to ensure operational effectiveness for immediate response (complete attached table in Appendix D)
- This checking process must be completed by at least 2 crew members

Fire Protection for any Person entering the Intrinsically Safe Zone

- Any time a person enters into the intrinsically safe zone 2 firefighters must escort them with 1 DCP and 1 Foam extinguisher. This includes ship's crew members, stevedore staff, petroleum company staff, and any other person who is authorised to enter into the zone.

Fire Protection for the Fuel Company Representative

- Should the fuel company representative require entry into the intrinsically safe zone to collect a sample of the flammable/combustible product then 2 firefighters in level 2 PPE will escort this person to the manifold area
- Prior to entry the firefighters will take the charged hoseline to the manifold to ensure the area is free from flammable liquid spill or leak, and then allow the person to the manifold area for business purposes.
- The firefighters will remain with the person for fire protection at all times in the zone until the person leaves the zone.

Foam Induction

- The mains water supply needs to be sufficiently reduced in pressure at the inlet side of the pump to ensure a difference in pressure exist for foam concentrate to be induced into the pump casing for foam solution to be produced.
- Foam concentrate percentage levels will be set at 6% initially but will need to be monitored closely for effectiveness should a spill or fire occur
- Incoming pressure will need to be monitored to ensure the pressure difference continues for ongoing effective production of produced foam

Communications Plan

- Each crew member is to carry a portable radio at all times placed on channel 5.
- Should an incident occur standard practices will be applied as per Ops Doc
- Refer to below sections about communications plan for the site that involves raising the alarm, ship crew, security staff, stevedore staff, petroleum company staff, and surrounding tenancies notification

Hydrocarbon Detection in Manifold Area

- The detection device placed in the bunded area where the manifold is located will sound an alarm should it detect excess levels of vapour.

- Should the alarm sound 2 crew members located at the forward control point must don level 2 clothing and proceed into the bunded area with the charged case 3 line and investigate if there is a leak or spill
- Implement controls as per Ops Doc should there be a leak or spill
- Ensure all other persons have been evacuated from the intrinsically safe area and no persons (such as ship's crew) enter the area until it is safe

Wharf Alarm Activation

There is a local alarm at the wharf activated by the Security Officer from within the security hut. This alarm is sounded when a potential leak has been detected in the bunded area by the gas detector and the fire crew must respond to investigate and manage the leak as per the Ops Doc.

Ship Evacuation Procedures

The ship has an emergency plan with evacuation procedures. This plan is provided to the Security Officer and the Fire crew must read this plan to understand the ship's process of evacuation, and to assist with this process where appropriate.

Shutdown Procedures on Ship

Should a leak occur then the ship will be required to shut down the flow of the product being discharged through the pipe work coming onto the bunded area.

This is usually a manual process on the ship and requires the ship to be notified. A communications plan must have been established with the ship prior to discharging the product and this will be used to notify the ship of the requirement to shut down flow.

Neighbouring Property Evacuation Procedures

A site emergency plan has been established by the vendors up to a 500 metre radius from the shore side manifold.

This plan will have determined methods of communicating with these properties for early warning to either evacuate immediately or to be placed on stand-by should a small incident grow in size and threaten their safety.

Additional Arriving Appliances

Next arriving appliances will need to gain access to the Wharf via the same gate access the TEM vehicles have used. Either the security staff or a TEM crew member will need to ensure this gate is unlocked for them.

When sufficient appliances are at the FCP to combat the incident then further vehicles can be staged along MacArthur Avenue.

Should additional water supplies be required beyond the supply provided at the booster then MacArthur Avenue is the closest mains supply, and has a large main.

Control and Coordination

These crews are empowered under the Fire and Rescue Service Act 1990 (Qld) and will implement control and coordination to the wharf and personnel at and around the wharf should an event occur.

These crews are permanently located at the Wharf whilst the ship is in berth.

The crews will implement all relevant procedures from their Operations Doctrine and they are fully trained and qualified authorised fire officers.

The OIC of the crew at the Wharf will be the incident controller and will apply IMS and span of control as appropriate to the scale and complexity of the incident. Next attending appliances will comply with the Wharf OIC as the incident controller and follow IMS 2.1 from the Ops Doc.

The base pump located adjacent to the booster is the forward control point and can be used at the control point for the incident in its initial stages, until there is a need to change from this location

Communications Plan

Notification of Firecom via mobile/pumper radio

Should an incident occur then the TEM crew need to treat the incident as they would any other, and notify Firecom with the following:

- The nature, size and complexity of the incident
- The actions being taken by the TEM crew
- What equipment is being used
- What evacuation is being conducted
- What additional resources are required and where they need to attend

Portable radios

These radios are on channel 5 during non-emergency times as a means of communication between TEM crew members.

Should an incident occur the portables need to be changed to Channel 1 which is the dedicated fireground channel for incidents on the north side of Brisbane.

First Aid

First Aid Base will have been established by Wharf Crew at the forward control point location.

Assembly Area

No dedicated assembly area is established as this is dependent upon the nature of an incident, weather conditions and numbers of people involved.

Evacuation is the priority should an event occur and this will be implemented by the QFRS crews, and assembly will occur in this process.

QPS will be the primary agency called upon by the QFRS for evacuation of neighbouring properties.

An Assembly Area will be determined by the Incident Controller at the time of the incident.

Port of Brisbane Pty Ltd and Vendor H&S Management Program

Any site induction information provided to the crews must be followed at all times, such as rules on drinking, smoking, drugs on site, etc.

Flow Test Conducted at Booster

MARITIME 1 FLOW TESTS, Wednesday 9 September 2009, 1100 HRS

Conducted by Brisbane Region Community Safety Branch

Flow tests were carried out by QFRS to establish the optimum flow/pressure available from the recently installed boostered hydrant system.

Equipment used:

1 x Firepac 3000 Pumper

2 x McCrometer Flow Meters

Tests Conducted:

Static Pressure Test using 2 McCrometers connected to the 2 most hydraulically disadvantaged hydrants:

Hydrant 1 – 24 l/s @ 0 kPa residual

Hydrant 2 – 19 l/s @ 0 kPa residual

Total 43 l/s @ 0 kPa residual

Under Boost Test (Pumper Assisted) using 2 McCrometers connected to the 2 most hydraulically disadvantaged hydrants:

1.

Hydrant 1 – 24 l/s @ 200 kPa residual

Hydrant 2 – 19 l/s @ 200 kPa residual

Total 43 l/s @ 200 kPa residual

2.

Hydrant 1 – 24 l/s @ 700 kPa residual

Hydrant 2 – 20 l/s @ 700 kPa residual

Total 44 l/s @ 700 kPa residual

Note 2 feeds only used for tests 1 and 2

3.

Hydrant 1 - 27l/s @ 700 kPa residual

Hydrant 2 – 22 l/s @ 700 kPa residual

Total 49 l/s @ 700 kPa residual

Note 3 feeds used for test 3

Recommendation:-

Four (4) Feeds from booster to pumper be used at all times for this hydrant system.

Once Returned to Whyte Island

- All completed documentation is to be submitted to TEM Cottage once the Stand-By is completed.
- BA's are to be placed neatly on the floor in the TEM shed in the first bay of the shed.
- 2 pumpers to be parked in the pumper parking area
- Mobile phone and charger, 5 portable radios, spare batteries and chargers to be placed back in the TEM cottage in the reception area

Should an Emergency Occur

Potential Types of Emergencies

Fire on ship that is not a flammable/combustible liquid fire

This may be a compartment type fire and would require the exact same controls as a structure fire, including:

- Incident Controller appointed
- BA Entry Officer Stage 1
- Radio procedures
- PPE procedures
- Probable use of ship's firefighting systems and equipment

The following list of incidents have a low likelihood of occurring but must be accounted for in pre-planning, and include:

- *Flammable liquid spill/leak on ship*
- *Flammable liquid fire on ship*
- *Flammable liquid spill or leak at manifold and into river*
- *Flammable liquid fire at manifold and into river*
- *Flammable liquid spill/leak onto wharf*
- *Flammable liquid fire onto wharf*

Should any of these types of events occur relevant sections of the following documents out of the Operations Doctrine would need to be implemented:

- IMS 2.1 – Hierarchy of Command and Control (Appendix E)
- IAG 1.3 – Approach, Arrival and Action at Incidents (Appendix F)
- IAG 2.4 – Flammable Liquids (Appendix G)
- IAG 4.3 – Fuel Processing and Storage Facilities (Appendix H)
- IAG 5.2 – Marine Incidents (Appendix I)
- INCDIR 5.2 – BA Entry Officer (Stage 1), (Appendix J)
- INCDIR 6.1 – Radio procedures (Appendix K)
- Bris Region - Regional Marine Hazard Management 2007 – 2010 (Appendix L)

Appendix A

Pumper inventory

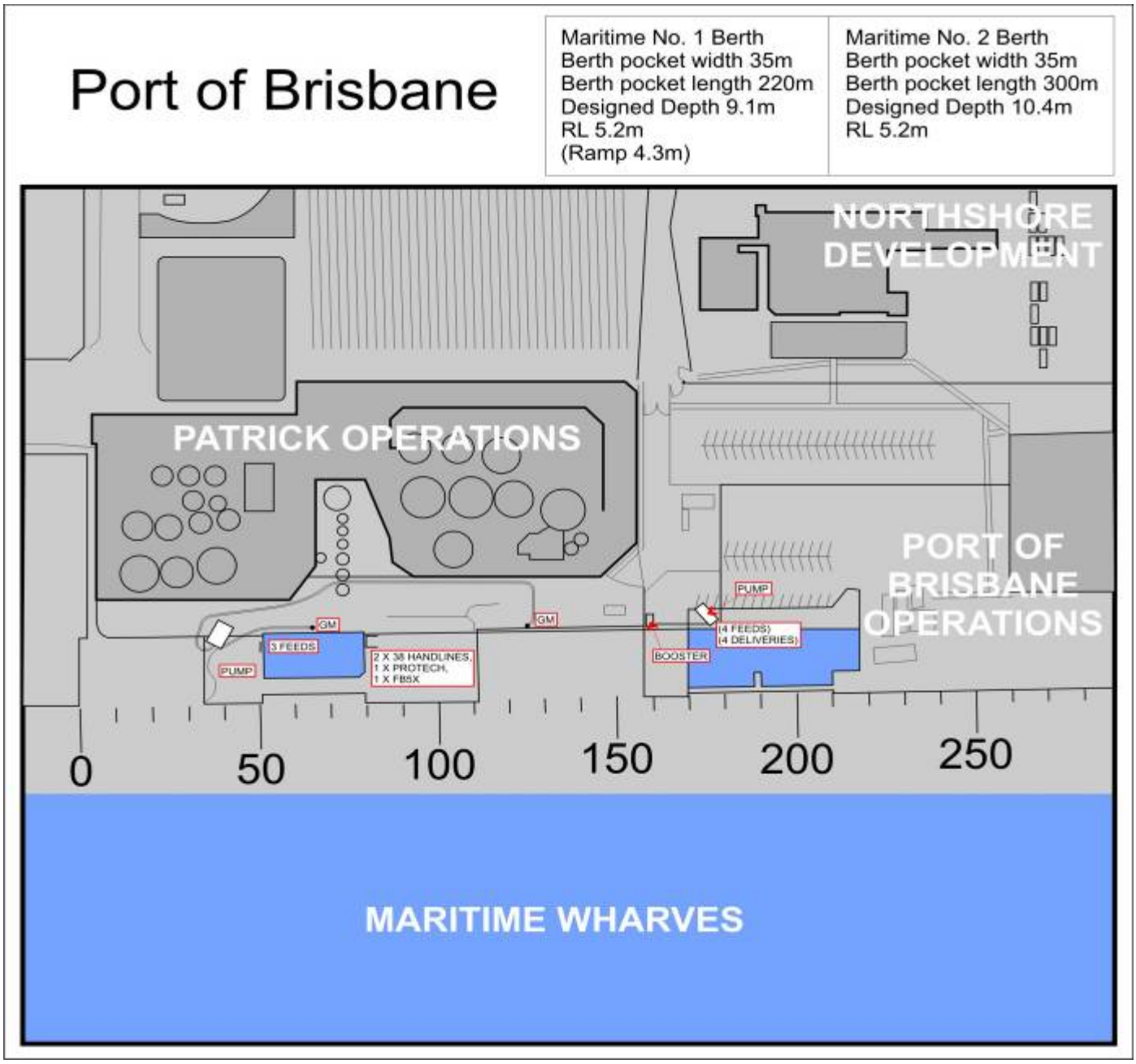
- 4 portable radios, spare batteries and chargers
- 1 mobile phone and charger
- 4 breathing apparatus and control equipment
- Oxy Viva
- Sufficient drinking water

Wharf Inventory

- 2 ground monitors that can provide spray patterns with a projection of 20 metres
- 2000 litres of AFFF foam concentrate is on site, and supplied by PBPL
- 15 hoselines (64mm), 2 hoselines (38/50mm), 8 short feeds
- 1 foam making branch with spigot
- 1 variable flow branch, such as a proteck
- 4 DCP and 4 foam extinguishers
- 40 drums of FH6 foam concentrate for the foam making branch
- First Aid kit
- Ground sheet
- Bolt Cutters
- 4 folding chairs
- Alcohol hand wash
- Soap
- Paper towels
- Kettle

Appendix B

Lay out diagram



Appendix C

Hazard Analysis Form

Date:_____

Hazard Identified	Unwanted Event/s	Current control measures	Likelihood	Consequence	Risk Score

Risk Control Decisions

Control Measure/s Decision – what is to be implemented

Residual Risk – Assume Control Measure is implemented

	Likelihood	Conseq	Risk Score
Have the risk controls sufficiently eliminated or reduced the risk to as low as reasonably practicable? Yes / No - If No repeat analysis Show risk score for this and state rationale why it is acceptable:			

OIC Name:_____ OIC Signature:_____

Table of Likelihood of Unwanted Event

Level	Rating	Likelihood
5	Almost certain	Is expected to occur in most circumstances
4	Likely	Will probably occur in most circumstances
3	Possible	Might occur at some time
2	Unlikely	Could occur at some time
1	Rare	May occur in exceptional circumstances

Table of Consequence of Unwanted Event

	Consequences / Impact				
Likelihood	**Insignificant 1**	**Minor 2**	**Moderate 3**	**Major 4**	**Catastrophic 5**
Almost Certain 5	**M (6)**	**H (7)**	**VH (8)**	**VH (9)**	**VH (10)**
Likely 4	**L (5)**	**M (6)**	**H (7)**	**VH (8)**	**VH (9)**
Possible 3	**L (4)**	**L (5)**	**M (6)**	**H (7)**	**VH (8)**
Unlikely 2	**L (3)**	**L (4)**	**L (5)**	**M (6)**	**H (7)**
Rare 1	**L (2)**	**L (3)**	**L (4)**	**L (5)**	**M (6)**

Definitions of Consequence Ratings:

Insignificant:

- Minor first aid treatment such as cuts, bruises and bumps
- Negligible financial loss (up to $5000)
- Negligible environmental damage

Minor:

- Injury requiring medical treatment, such as heat related illness
- Notable financial loss ($5000 - $50 000)
- Minor environmental damage

Moderate:

- Serious injury (permanent disability, amputation)
- Substantial financial loss ($50 000 - $500 000)
- Serious environmental damage

Major:

- Fatality
- Significant financial loss ($500 000 - $1 000 000)
- Significant environmental damage

Catastrophic

- Multiple fatalities
- Extensive financial loss (greater then $1 000 000)
- Major environmental damage

Appendix D

Inspection Schedule

- Inspection of Equipment and Pumpers to be Every 2 hours.
- Pumpers are to be started, lines charged, flow checked, foam induction checked, and pressures checked.
- All of this is to be recorded each time in the below tables.

Date:_____ Time:_____

Item	Ok	Signed
Portable Radios: • Communication lines checked • Battery charge checked • Spare batteries fully charged		
Pumpers: • Started and batteries charge checked • Hose lines charged • Pressures tested • Flow at Monitors tested for projection • Foam induced to monitor		

Comments on actions taken if not OK:

Date:_____ Time:_____

Item	Ok	Signed
Portable Radios: • Communication lines checked • Battery charge checked • Spare batteries fully charged		
Pumpers: • Started and batteries charge checked • Hose lines charged • Pressures tested • Flow at Monitors tested for projection • Foam induced to monitor		

Comments on actions taken if not OK:

Appendix E

IMS 2.1 – Hierarchy of Command and Control

Appendix F

IAG 1.3 – Approach, Arrival and Action at Incidents

Appendix G

IAG 2.4 – Flammable Liquids

Appendix H

IAG 4.3 – Fuel Processing and Storage Facilities

Appendix I

IAG 5.2 – Marine Incidents

Appendix J

INCDIR 5.2 – BA Entry Officer (Stage 1)

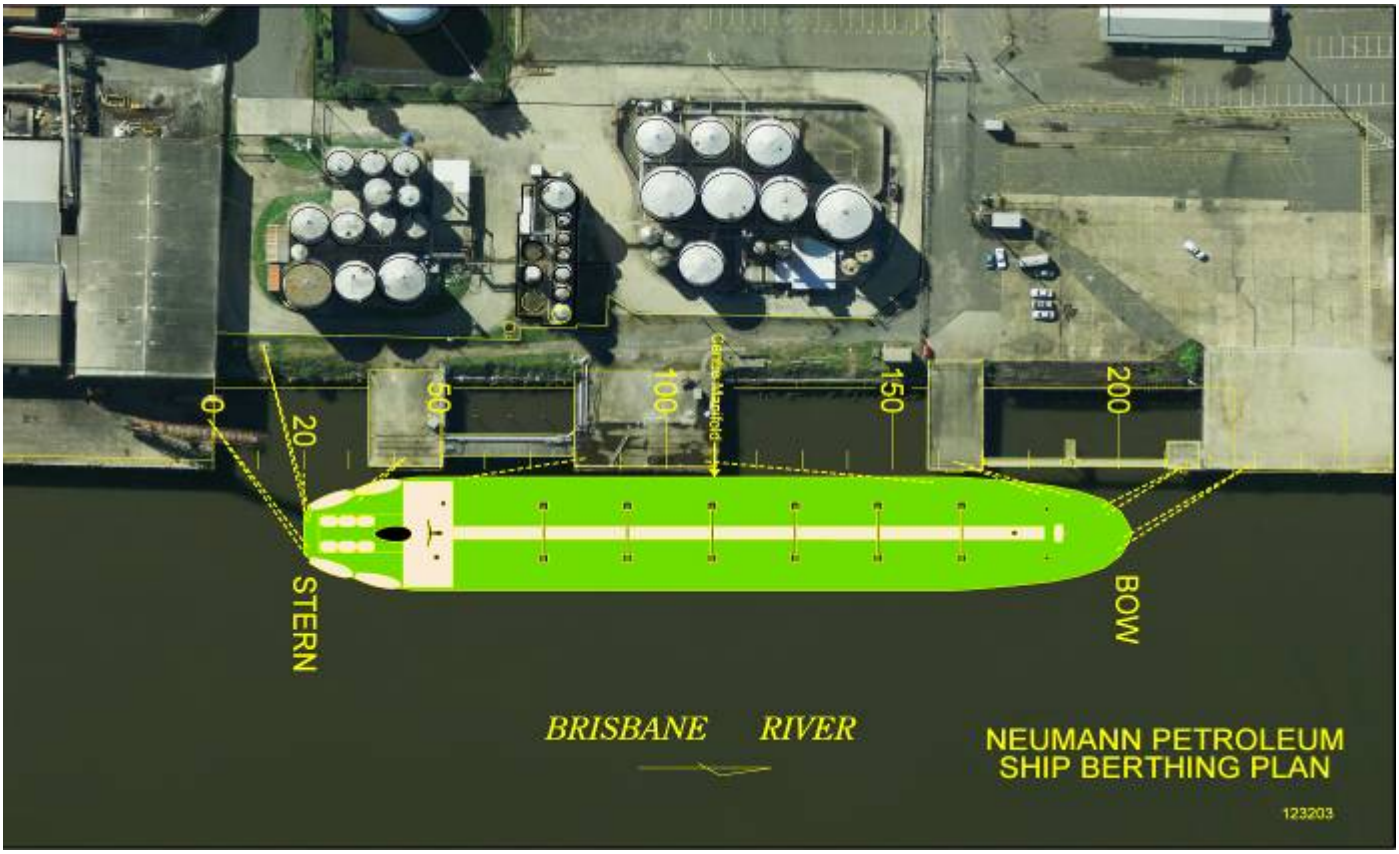
Appendix K

INCDIR 6.1 – Radio procedures

Appendix L

Brisbane Region - Regional Marine Hazard Management 2007 – 2010

6.4 Mooring Procedure



6.5 Bund Release Procedure

PORT of BRISBANE
Here for the future

Version 1

ENVIRONMENTAL OPERATING PROCEDURE

MARITIME WHARF 1

OpMW1 – 001: Bund Release

1 AIM

1.1 To direct the environmentally responsible operation of the bunded area at Maritime Wharf 1.

2 SCOPE

2.1 This procedure applies to emptying of stormwater from the bund around the wharf structure at Maritime Wharf 1.

Note: When Maritime Wharf 1 is leased, it is the responsibility of the tenant to check and appropriately manage water ponded within the bund in accordance with their relevant environmental approval and lease conditions.

3 OPERATING PROCEDURES

3.1 Stormwater ponded within the bunded wharf area at Maritime Wharf 1 can be emptied through four outlet valves.

3.2 The bund valves should be maintained in the **closed** position and locked when not attended.

Note: When Maritime Wharf 1 is leased, the bund locks should be removed to allow the tenant to appropriately manage water ponded within the bund in accordance with their relevant environmental approval and lease conditions.

3.3 The bunded area shall be inspected by the Shipping Operations Executive or delegate on a weekly basis, after heavy rainfall events and as part of the pre-lease and post-lease inspection to confirm that no water has ponded or rubbish and other debris built up within the bund.

3.4 Where excess water remains in the bunded area, the Shipping Operations Executive or delegate shall consult a Duty Officer or Environment Manager to assess the water for hydrocarbons (as evident by a sheen on the water surface), contaminants (as evident by the water clarity, discolouring or level of suspended solids) or other rubbish.

3.5 If contaminants are not present or negligible as determined in consultation with the Duty Officer or Environment Manager, the Shipping Operations Executive or delegate shall unlock the outlet valves and discharge the water. The wharf must be attended at all times when the outlet valves are open and unlocked.

3.6 If the water is contaminated as determined in consultation with the Duty Officer or Environment Manager, it shall be pumped out by a licensed

contractor. The bunded area should be cleaned and swept, as required, to prevent further contamination of ponded water.

4	**APPROVED BY: Damien Garske**	**Date: June 2010**