



**ENVIRONMENTAL MANAGEMENT
SYSTEM MANUAL**

MAY 2019

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PURPOSE

This manual defines the scope of the Aquarama Marinas Environmental Management System (EMS) and provides a linkage of system documents to the various elements of the EMS as required by The Marina Industry Association and The Department of Transport.

The principal elements of the system described in this manual are:

- Environmental Policy
- Environmental Aspects, Legal & Other Requirements
- Environmental Objectives and Targets
- Operational Control
- Emergency and Accident Response
- Resources, Roles, Responsibilities & Training and Awareness
- Communication
- Documentation
- Document Control and Control of Records
- Monitoring and Measuring
- Evaluation of Compliance
- Non conformity
- Internal Audits
- Management Review

SCOPE

Aquarama Marinas EMS provides a mechanism for environmental management throughout all areas and departments. The environmental management system is designed to cover environmental aspects which a facility can control and directly manage, and those it does not control or directly manage but can be expected to have an influence.

ISSUE AND UPDATE

This document will be stored in the Marina office filed in 'General Filing' under EMS and will be reviewed and updated at least annually by the Marina Operations Manager or Managing Director.



Environmental Policy

1 OUR COMMITMENT

Aquarama Marina seeks to ensure that it can contribute to a high quality of life by protecting and enhancing the environment and by supporting the concept of environmentally sustainable practices. We will endeavor to abide by all rules and regulations set out by the government which directly affect the marina and its day to day operations.

Our aim is to work together with local councils and Department of Parks and Wildlife (DPAW), so as to keep the environment as clean and healthy as possible. The Swan River is a very large part of Perth and the boating fraternity.

Our Slipway conforms to waste water discharge management entering the Swan River and is under continual surveillance to ensure the cleanliness of the discharged water. We and DPAW are working together to ensure the health of our river system.

2 OUR GOAL

The Environmental Management System for Aquarama Marina and its clients ensures our commitment and continual improvement to reducing pollution risks such as;

- Hydrocarbon spills.
- Pollution from bilge water.
- Pollution from storm water runoff.
- Pollution from boat maintenance and slipways.
- Pollution due to cleaning of vessels in penned areas.
- Contamination of environment from antifouling.
- Noise pollution causing nuisance or endangering health.
- Contamination of river from fertilizers/pesticides/green waste and erosion.
- Dust generation from vessel maintenance.
- Contamination of environment from stored hazardous goods.

Aquarama Marina relies on the help of its tenants and clients to maintain these risks and contribute to a healthy environment for the years ahead. 'If you see something, SAY SOMETHING'.

Endorsed by Marina Manager on 22nd October 2018

David van Blommestein

Aquarama Marina Environmental Management System

ENVIRONMENTAL ASPECTS & LEGAL REQUIREMENTS

Aquarama Marina identifies the environmental aspects which the facility controls and over which it may be expected to have an influence, and determines which of those aspects are considered significant. These aspects are reviewed at least semi-annually or when there is a new or changed process or activity at the facility.

The very nature of the operation on the river necessitates the management being fully aware of environmental contamination and the effect a large spill into the river could have.

The management strongly reinforce with all employees the need to abide by the prescribed working practices, which minimise as far as practicable the chance of environmental pollution.

If environmental pollution does occur then the manager will inform the following agencies and seek their direction as to the appropriate remediation required.

Department of Fire and Emergency Services (DFES)

The Department of Bio diversity, Conservation and Attractions (DBDCA)

Town of East Fremantle Health Department

The Chamber of Minerals and Energy

The Department of Mines and Petroleum

Aquarama Marina, East Fremantle will comply with their legislative requirements prescribed in the following:

-OHS Act 1984

-OHS Regulations 1996 sections Part 3 division 1 General duties applying to workplaces

- 3.8 Emergency egress from workplaces
- 3.9 Fire precautions
- 3.10 Evacuation procedures

-Australian standard 3745 – 2002 Emergency control organisation & procedures for buildings, structures & workplaces

-Australian standard 2444 – 2001 Portable fire extinguishers and fire blanket –selection and location

-Australian standard 1319 Safety signs for the occupational environment

-Australian standard 1940 – 2004 The storage and handling of flammable and combustible liquids

-Dangerous Goods Safety Act 2004

-Dangerous Goods Safety (Storage and Handling of Non-Explosives) Regulations 2007

-Storage and handling of dangerous goods – Code of practice

-Swan and Canning Rivers Management Act 2006

-Western Australian Marine Act 1982

-Environmental Protection Act 1986

-Marine and Harbours Act 1981

Aquarama Marina Environmental Management System

OBJECTIVES AND TARGETS

Aquarama Marina has developed objectives and targets for each significant environmental aspect. These objectives and targets define:

| ISSUE | OBJECTIVE | TARGET | RESPONSIBILITY |
|--|---|----------------------------------|---------------------------------------|
| Fuel Management | | | |
| Boat Fuelling | Minimise spills | | |
| Fuel and oil waste management | Minimise air and water pollution | No impact on river water quality | Owner, Staff, clients and Contractors |
| Bilge water waste management | Minimise safety risks Promote correct disposal methods | | |
| BOAT MAINTENANCE | | | |
| Cleaning Boats in and out of the water | Meet water quality objectives Minimise impact and promote correct cleaning methods | No impact on river water quality | Owner, Staff, clients and Contractors |
| SOLID WASTE | | | |
| Solid waste management | Reduce the generation of solid waste Ensure the correct disposal of solid waste | No impact on river water quality | Owner, Staff, clients and Contractors |
| LIQUID WASTE | | | |
| Liquid waste management | Reduce the generation of solid waste Ensure the correct disposal of solid waste | No impact on river water quality | Owner, Staff, clients and Contractors |

| ISSUE | OBJECTIVE | TARGET | RESPONSIBILITY |
|---|--|--|--|
| <p>HAZARDOUS WASTE</p> <p>Hazardous waste management</p> <p>Hazardous waste management</p> <p>Engine repair and maintenance</p> <p>Flares and battery management</p> | <p>Reduce the generation of hazardous waste</p> <p>Ensure the correct disposal of hazardous waste</p> <p>Encourage best practice procedures in relation to hull and topside</p> <p>Encourage best practice procedures in relation to engine maintenance and correct disposal of waste</p> <p>Promote correct oil, filters batteries and flare disposal methods</p> | <p>No impact on river water quality</p> | <p>Owner, Staff, clients and Contractors</p> |
| <p>WATER QUALITY</p> <p>Management</p> | <p>Prevent pollutants entering marina</p> <p>Manage run-off into water</p> <p>Monitor water quality within the marina</p> | <p>No impact on river water quality</p> <p>No impact on aquatic eco system</p> | <p>Owner, Staff, clients and Contractors</p> |
| <p>PLASTIC BAGS</p> <p>Management</p> | <p>Prevent plastic pollutants entering marina and waterways</p> | <p>No impact on aquatic eco system</p> | <p>Owner, Staff, clients and Contractors</p> |

| | | | |
|--|--|---|------------------------|
| <p>WASTE WATER</p> <p>Sewage pump outs</p> | <p>Prevent sewage entering Marina Waterways through the provision of Pump-out facilities.</p> | <p>No impact on river water quality</p> | <p>Owner and Staff</p> |
| <p>GREY WATER</p> | <p>To provide adequate onshore Facilities (i.e. showers & toilets)</p> | <p>No impact on river water quality</p> | <p>Owner and Staff</p> |
| <p>GROUND WATER</p> <p>Ground water management</p> | <p>Minimise impacts on ground Water quality and flow paths</p> | <p>Minimal impact on ground water quality</p> | <p>Owner and Staff</p> |
| <p>MARINA MAINTENANCE</p> <p>On-site maintenance (Lighting, recycling facilities, furniture, pedestrian paths, road and car park storm water pits and noise</p> | <p>Maintenance of the Marina's public facilities and infrastructure to a high standard.</p> <p>Reduced environmental impacts through the adoption of best practice maintenance measures.</p> | <p>No impact on river water quality</p> <p>Minimise complaints from residents, public, EPA or council and comply with targets derived from EPA Guidelines</p> | <p>Owner and Staff</p> |
| <p>CLEANER PRODUCTION</p> <p>Water demand and usage</p> | <p>Reduction in water usage</p> | <p>No impact on river water quality</p> | <p>Owner and Staff</p> |

This EMS for the Aquarama Marina recognises the activities that have the potential to impact upon the environment of, or adjacent to, the business premises. The EMS requires activities to be planned and conducted in a manner that protects and preserves the environment and the waterways. The EMS will serve as a tool for environmental protection and management, this will be achieved by specifying monitoring and reporting requirements ensuring that the necessary controls are met. The EMS also makes provision, as appropriate, for unforeseen events by outlining corrective actions, which may be implemented during these situations.

OPERATIONAL CONTROL

The environmental Protection sub-plans as included in this EMS detail the environmental protection measures to be performed during the operation of the Marina. The sub-plans are titled according to the particular management issue, which could be encountered during the operation of the Marina these management issues have the potential to have an impact on the Marina and surrounding environment.

FUEL MANAGEMENT

Issue

Fuel and oil can be accidentally released into the environment during refuelling through spills.

Objectives

To minimise oil and fuel spills to the environment.

To minimise the generation of incomplete combusted hydrocarbon pollutants to the environment during fuelling operations.

Management Action

- Automatic shut-off nozzles have been installed on all pumps to prevent spills occurring during re-fuelling.
- On-water re-fuelling will only be allowed where fuel is stored in a fixed tank on board the vessel.
- An oil and fuel spill response plan has been developed and is available in the Emergency Response Plan.
- Oil and fuel spill containment and clean-up kits are readily accessible in the fuelling area and staff are trained in its use.

Monitoring

Action / Frequency / Responsibility

All fuelling areas and Equipment are inspected on a daily basis by staff to ensure they are in good working order and that no leakages have occurred.

Educational material is available as required to Marina Staff and users regarding the benefits of good Boat and Engine Maintenance practices.

| ACTION | FREQUENCY | RESPONSIBILITY |
|---|-----------|-----------------|
| Oil spill containment and clean-up kits. Inspected to ensure that kits are complete and accessible. | Weekly | Owner and Staff |

WASTE OIL MANAGEMENT

Issue

Waste oil can present environmental and public safety issues if stored and/or disposed incorrectly.

Objective

To minimise negative environmental impacts and safety risks associated with the disposal of waste oil.

Management Action

- Provide controls and information for the disposal of unwanted oil products.
- In case of spillage clearly labelled containers are located in the spill kit area.
- Oil spills will be cleaned utilising absorbent material, which will be then disposed of in the appropriate manner.
- An oil and fuel spill response plan has been developed and is available in Aquarama Marinas Emergency Response Plan.

Monitoring

| ACTION | FREQUENCY | RESPONSIBILITY |
|--|------------------|-----------------------|
| Disposal and storage areas will be Inspected to ensure that waste is being handled correctly | Daily | Owner and Staff |
| Oil and Fuel spill containment and Clean-up kits are inspected to ensure that kits are complete and accessible | Weekly | Owner and Staff |

WASTE WATER MANAGEMENT

Issues

The discharge of wastewater presents a significant source of pollution. Objective To minimise the occurrence of contaminated wastewater and its discharge to the environment.

Management Actions

Boat users are advised not to discharge contaminated bilge water directly to the environment.

Monitoring / Action / Responsibility

Educational instruction is available from marina staff as required for marina users regarding the management of bilge water disposal from vessel.

Management of Landscaped Areas

Issues

Landscaped areas contribute significantly to the Marina's amenity and play an important role in the operation of the Marina's aesthetic appearance and controls ground water run off ongoing maintenance to be carried out to ensure the establishment and continued development of these areas.

Objectives

- To encourage biodiversity within the Marina area where possible.
- To incorporate environmental values into landscaping programs. Management Actions
- All landscaped areas will be maintained. Plants in poor health will be tended to or be replaced with similar species.
- Weeds will be controlled.

Monitoring / Action / Responsibility

Landscaped areas will be inspected weekly by owner. Plants in poor health will be removed and replaced, weed eradication and Lawn controls are also undertaken at the same time.

SOLID WASTE

Issues

Solid waste can create a nuisance and become an eyesore if not managed correctly. The visual appearance of the Marina and waterways can be significantly reduced by the presence of solid waste. Additionally, solid waste can create hazards and pose a threat to human health.

Management to incorporate into the Marina operations a waste avoidance program which is the most desirable option followed by re-use, then recycling and disposal as the final option.

Objective

To reduce amount of solid waste generated within the Marina and to ensure that the waste produced is disposed of correctly.

Management Actions

- Marina staff and users are encouraged to develop new waste avoidance and re-use strategies.
- Interceptor Grates have been installed to capture litter that may drain into the storm water system.
- Interceptor Grates are cleaned at appropriate intervals as a function of the weekly Landscape inspections
- All waste will be disposed of in proper waste receptacles with wind / wildlife proof covers.
- Litter will be collected on a daily basis from both land and waterways.

MONITORING

| ACTION | FREQUENCY | RESPONSIBILITY |
|---|------------------|-----------------------------|
| Litterbins to be inspected to ensure they are in good working condition and that sufficient receptacles are provided. | Daily | Owner and Staff |
| Recycling Contractors are monitored to maintain their standards of practice | Weekly | Owner, Staff and Contractor |
| General site inspections are made to ensure that litter is not entering waterways. | Daily | Owner and Staff |

| | | |
|---|--------------|-----------------|
| Waste deposited in general litter bins Are being monitored to ensure that the receptacles are being utilised correctly. | Daily | Owner and Staff |
| Additional education programs will be implemented, if waste minimisation strategies are not being adopted. | As requested | Management |

LIQUID WASTE

Issues

The release of liquid waste to the environment can significantly reduce water quality, threaten aquatic life and habitats and threaten human health and safety. Liquid wastes can include used oil, unwanted fuels and chemicals, bilge water, contaminated spill control material, used batteries, washing solvents and other hazardous wastes.

Objective

To minimise pollution through the release of liquid wastes to the environment.

Management Actions

- Information will be provided to boat berth/mooring holders and Marina users regarding methods to reduce the occurrence of liquid wastes and their correct disposal methods.
- Signage advising Marina patrons of correct liquid waste management will be displayed in prominent locations.
- Spill control materials are provided for emergency situations.
- A spill contingency plan is provided
- Liquid waste storage areas will be bunded and covered to prevent any leakage from the containers.
- Storage containers are to be clearly marked to avoid mixing incompatible hazardous waste.
- Storm water entry pits will be marked to inform public that the drain enters the waterway.
- Additional education programs implemented, if waste minimization strategies are not being adopted.

MONITORING

| ACTION | FREQUENCY | RESPONSIBILITY |
|--|------------------|-----------------------|
| Marina users will be monitored to Ensure liquid waste is being disposed Of correctly | Daily | Owner and Staff |
| Disposal and storage areas will be Inspected to ensure that | | |

| | | |
|--|-------------|-----------------|
| waste is being handled correctly | Daily | Owner and Staff |
| Spill containment and clean-up kits will be inspected to ensure that kits are complete and accessible | Weekly | Owner and Staff |
| Additional education programs will be implemented, if waste minimisation strategies are not being adopted. | As Required | Owner and Staff |

HAZARDOUS WASTE

Hazardous Waste Management Issues

Incorrect disposal of hazardous waste can threaten human health and safety and can have adverse impacts on the environment.

Objective

To minimise the generation of, and manage hazardous wastes generated within the Marina so as to control negative environmental impacts and threats to human health and safety.

Management Action

- Information to be provided to Marina users regarding methods to reduce the occurrence of hazardous wastes and the correct methods of disposal.
- Signage will be displayed on solid waste receptacles to avoid incorrect disposal of hazardous wastes.
- The use of alternative parts cleaning products will be encouraged.
- Spill control material is provided
- Wastes will be segregated to ensure that domestic waste is not contaminated by hazardous waste.
- A licensed contractor will remove hazardous waste.
- Storage containers are to be clearly labelled to avoid mixing incompatible hazardous wastes.
- Storm water entry pits will be marked in a way that informs the public that the drain eventually discharges into a natural waterway. This may act as a deterrent to illegal discharges.

- Additional education programs will be implemented, if waste minimisation strategies are not being adopted.

MONITORING

| ACTION | FREQUENCY | RESPONSIBILITY |
|--|------------------|-----------------------|
| Marina users will be monitored to Ensure hazardous waste is being disposed of correctly | Daily | Owner and Staff |
| Disposal and storage areas will be Inspected to ensure that waste is being Handled correctly | Daily | Owner and Staff |
| Spill containment and clean-up kits will be inspected to ensure that kits are Complete and accessible | Weekly | Owner and Staff |
| Additional education programs will be implemented, if waste minimisation strategies are not being adopted. | As Required | Owner and Staff |

HULL AND TOPSIDE PAINTING: MAINTENANCE

Issues

Hull painting and topside coating activities may result in the release of liquid solvents and harmful vapours to the environment. Hazardous wastes are often generated from painting activities (especially if solvents and I or heavy metals are contained within the paint materials).

Objective

To minimise the generation of hazardous waste and to manage the disposal of all hazardous waste.

Management Actions

- Vacuum sanders and grinders must be used to minimize dust generation.
- Paints containing low levels of solvents will be encouraged.
- Used solvents from cleaning or painting equipment will be placed in sealed containers and disposed of correctly
- Material Safety Data Sheets will be made available in an easily accessible and visible location.

- Barriers are to be installed if grinding, sanding and spray-painting of boats is conducted outside.

MONITORING

| ACTION | FREQUENCY | RESPONSIBILITY |
|--|------------------|--------------------------|
| Work areas will be inspected to ensure they are in good working order. | Weekly | Owner, Staff and Tenants |
| Random inspections of boat berthing and marine maintenance areas will be undertaken to ensure the preferred maintenance methods are being implemented. | On Going | Owner, Staff and Tenants |
| Marina will stock preferred Paints | Monthly | Owner, Staff and Tenants |

Slipway Management

- Heavy/large shells from vessel hull to be collected and disposed of in trade waste bin
- Filters to be cleaned as required and residue to be disposal of in trade waste bin
- All residue water from vessel cleaning to be put through filtration system
- Do not drink filtered water from the filtration system.

Engine Repair and Maintenance

Issues

Engines that are properly maintained are less likely to emit high levels of carbon monoxide, hydrocarbons, nitrous oxides and particulate matter to the air and aquatic environment. Waste generated during service and maintenance operations can present public health and environmental risks if this waste is not handled correctly.

Objective

To encourage boat owners/operators to maintain their vessels in good repair and to ensure that waste generated during servicing and maintenance is correctly disposed.

Management Action

- Boat owners and operators will be advised of designated boat repair and maintenance areas,

- Designated boat repair and maintenance areas will be provided debris will be captured and disposed of correctly by the boat owner/operator or contractor.
- Engine Maintenance areas will be properly maintained.
- Contractors providing boat maintenance services will be required to sign an agreement as to how boat materials are to be handled within the Marina.
- Absorbent materials are to be supplied by Contractors and Owner/Operators for the work they accomplish, however the Marina will maintain a backup supply on an emergency basis.
- Contractors and boat owners are to clean up their own spill and take full responsibility for their own actions.
- Disposal area will be made available for contaminated absorbent material and waste arising through boat maintenance activities.

Monitoring

| ACTION | FREQUENCY | RESPONSIBILITY |
|--|-----------|-----------------|
| Boat maintenance areas will be inspected to ensure they are in good working order. | Daily | Owner and Staff |
| Waste storage areas will be inspected to ensure that waste is being handled correctly. | Daily | Owner and Staff |

Safety Flare Management

Issue

If disposed of incorrectly, out of date, damaged or water logged flares can create public safety risks.

Objective

To encourage the safe disposal of unwanted flares.

Management Actions

Boat and Marina users are informed by of the prohibition of the disposal of flares, or any hazardous materials in litterbins.

| ACTION | FREQUENCY | RESPONSIBILITY |
|---|-----------|-----------------|
| Litterbins will be inspected for Incorrectly disposed hazardous waste | Daily | Owner and Staff |

Battery Management

Issues

Most Batteries contain an electrolytic sulphuric acid solution and lead. If incorrectly disposed, batteries can have a detrimental impact on both humans and the environment.

Objective

To encourage the safe disposal of unwanted batteries

Management Actions

- Boat Owners and Marina users are to be advised that unwanted Batteries are to be stored in our containment area.
- Workshop Batteries New and In-use will be stored undercover at all times.
- All workshop Batteries will be collected by an approved contractor for recycling.

| ACTION | FREQUENCY | RESPONSIBILITY |
|---------------------------------|------------------|-------------------------------|
| Unwanted Batteries for disposal | Daily | Owners, Staff and Contractors |

Fish Waste

Issues

Disposal of fish waste in high quantities within the Marina can deplete the dissolved oxygen in the water and consequently impact on water quality, Also high quantities of fish waste will lead to odour problems.

Objective

To minimise the impact of fish waste on the Marina environment.

Management Action

- The Marina Precinct has been designated as a fish Sanctuary.
- Boat operators are advised that no cleaning of fish is to be undertaken at the marina Facilities.
- Boat operators are advised that unwanted Bait and Fish Parts are not to be disposed of at the Marina and are encouraged to dispose of unwanted bait offshore.

Monitoring

| ACTION | FREQUENCY | RESPONSIBILITY |
|-------------------------|------------------|-----------------------|
| Inspect the waste areas | Daily | Owner and Staff |

Marina Water Quality

Issues

Maintenance of the water quality within the marina and surrounding areas will be critical to the Marina's long-term sustainability.

Boating and maintenance occurring within the Marina has the potential to impact on water quality through:

- Increased concentration of sediments, nutrients, metals or other pollutants entering the river.
- Contamination of run off waters resulting from spillage.
- Contamination of run off waters resulting from the use and storage of chemicals and oils, greases and fuel.
- Contamination of storm water runoff with salts, nutrients or suspended solids such as litter and anthropogenic floatable materials such as foams or scum.

Objectives

- To ensure that the Marina activities do not result in an increase in the loads or concentrations of pollutants entering the river.
- To monitor water quality.
- To protect aquatic eco-systems and biology.
- To ensure best practices.

Management Actions

- Ongoing water clarity monitoring as a common daily practice.
- Marina maintenance activities will be undertaken in order to ensure proper housekeeping to reduce the incidence of waste entering the waterway.
- The sewer pump out facilities will be in operation and maintained.
- All ground water points will be regularly monitored.
- Maintenance materials and equipment will be kept covered and away from waterways.
- Storm water pits will be regularly inspected and obstacles will be removed as soon as practicable.

Monitoring

| ACTION | FREQUENCY | RESPONSIBILITY |
|--------------------------|------------------|-----------------------|
| Inspect Marina Waterways | Daily | Owner and Staff |
| Inspect storm water pits | Weekly | Owner and Staff |

Waste Water

Issues

The discharge of domestic sewage into Marina waterways has the potential to significantly degrade water quality.

Objective

To provide adequate sewage pump out facilities.

Management Actions

- Pump out connection points are installed at the marina and will be maintained.
- Pump out equipment will be operated by trained marina staff.
- Marina users will be advised of these facilities.

Monitoring

| ACTION | FREQUENCY | RESPONSIBILITY |
|---|------------------|-----------------------|
| Onshore Facilities condition inspection | Daily | Owner and Staff |

EMERGENCY AND ACCIDENT RESPONSE

Notification of Authorities:

Following is a list of Government Departments and company personnel that may need to be notified in the case of an emergency.

| DEPARTMENT OR COMPANY | NAME | POSITION | PHONE NUMBER |
|---|-----------------------|--------------------|---------------------|
| Aquarama Marina | David Van Blommestein | Director | 0407 474 288 |
| Aquarama Marina | Luke Wood | Operations Manager | 0402 507 037 |
| Aquarama Marina | Mitchell Green | Dock Master | 0437 399 748 |
| Aquarama Marina | Justine Nielsen | Admin Manager | 9339 5666 |
| Caltex Energy | - | - | 9358 9200 |
| DOT Maritime Environmental Emergency Response | Duty Officer | - | 9480 9924 |
| EPA | Duty Officer | - | 9222 7000 |
| Police / DFES | Duty Officer | - | 000 |
| Water Authority | Duty Officer | - | 9328 6922 |
| East Fremantle Council – Health Dept | Duty Officer | - | 9339 9315 |
| Wildlife helpline | Duty Officer | - | 9474 9055 |
| Resources Safety | Duty Officer | - | 9358 8002 |

Notification of Neighbours:

The only neighbour to Aquarama Marina is the Sea Scout Hall to the Western side of the marina, mostly unoccupied. On the rare occasion that someone is there and the marina had a potential fuel hazard then the control officer would instruct one of the team members to inform them of the situation and according to the severity would ask them to evacuate their premises.

Emergency Response Team:

First Aid Location: Marina Office

Assembly Area: 1 - Car park in front of office building 2 – Public reserve east side of Marina

| POSITION | NAME | JOB DESCRIPTION |
|--------------------|-----------------------------------|--|
| Control Officer 1) | David van Blommestein | Take control of the whole situation and delegate tasks to others. |
| 2) | Luke Wood | |
| Communication | Justine Nielson Mitchell Green | Effectively communicate to all emergency organisations. |
| First Aid | Mitchell Green Luke Wood | Be responsible for all first aid and accounting for personnel during an emergency. |

| | | |
|---------------------------|--|--|
| Fire and Spillage Control | David van Blommestein Luke Wood Mitchell Green | Use of fire extinguisher and control of spills. |
| Control of Public | Justine Nielson Mitchell Green | Keep onlookers at a safe distance and notify neighbours of any immediate problems. |

In any emergency response team all team members should be trained to handle a variety of tasks that are likely to be needed.

All emergency procedures must be documented, staff must be trained and exercises carried out on a regular basis to ensure the effectiveness of these procedures.

Alarm Initiation:

The definition of an alarm is "a communication act to which there must always be an appropriate response".

An alarm can be made by various methods, eg. bells, sirens, 000 telephone numbers or by verbal communication. It would be expected that at the Marina all alarms would be made verbally.

Exercise, Training and Review:

The emergency response plan is only as good as the training the emergency response team has received. It will be necessary for the manager to train and develop his staff to a high level of proficiency to be able to handle all emergencies likely to occur.

After each training exercise or real emergency, the effectiveness of the response will have to be reviewed and if necessary, modifications to the response plan made.

Description of Emergencies:

Following are types of emergencies most likely to occur at the Marina:

1. Fire
2. Spillage of flammable liquids (inc on jetty)
3. Persons doused with flammable liquids
4. Injuries to staff or customers
5. Natural events - flood, earthquake, cyclones, wind and electrical storms
6. Civil Disturbances
7. Environmental Pollution

In the following sections how to deal with these emergencies will be discussed.

Methods of Handling Emergencies:

Fire

| Fire On Jetty | | Fire at Buildings | |
|--|--|---|--|
| Small Fire | Large Fire | Small Fire | Large Fire |
| 1. Switch off power to all pumps | 1. Switch off power to all pumps | 1. Evacuate customers | 1. Evacuate staff and customers |
| 2. Keep customers from immediate danger area call the fire brigade | 2. Call fire brigade | 2. If electrical equipment is involved, switch off power to the equipment | 2. Call the fire brigade |
| 3. If boat is on fire, move clear of pumps (if safe to do so) | 3. Evacuate customers and staff from danger area | 3. Use the appropriate extinguisher (if safe to do so) | 3. Switch off all electric power |
| 4. Use the appropriate extinguisher (if safe to do so) | 4. Move boat clear of pumps (if safe to do so) Deploy fire hose reel | 4. Call the fire brigade | 4. Attempt to contain and extinguish the fire. Use appropriate extinguishers (if safe to do so) |
| | 5. Attempt to contain and extinguish the fire. Use the appropriate extinguishers and hose reel (if safe to do so) | | |
| AFTER THE FIRE | | | |
| <ul style="list-style-type: none"> • Do not leave the area unattended. • Advise the manager, ascertain damage and loss and arrange clean up procedure. • Arrange for recharging of extinguishers. | | | |

CLOTHING ON FIRE

Smother the flames with a fire blanket or similar articles, or roll the victim on the ground.

Hose the victim gently with a cold water spray for at least ten minutes.

Follow the instructions that appear later in this document. (Item 3 below)

Spillage of Flammable Liquids

Minor Spills and Overflows:

Act immediately if spillage occurs during the filling of a boat tank or container.

- Switch off power to all pumps.
- Advise customers of spillage and request that no boat engine is started until clean-up has been completed and notice given. Do not allow any smoking/naked flames.
- Cover the entire spillage area with an absorbent material, keep customers away from the area and sweep up (stock of absorbent material should be retained on site). Remove the contaminated material to an open, safe area, wash gently with water and allow to dry. Remove the contaminated material to an approved disposal dump.
- If product enters the river deploy fuel spill kit from fuel hut and contain product with absorbent booms and pads. Contact professionals to clean up the spill as soon as possible to prevent spreading.
- When clean up is complete and the area safe, advise customers, thank them for their co-operation and resume filling operations.

Major Spills and Overflows:

Major spillage or overflows are those resulting from incidents such as pump hose rupture or burst pipelines. Which steps to take, and in what sequence, must be assessed according to:

- The volume and location of product spilled.
- The number of trained helpers available.

If more than one person is in attendance, allocate responsibilities to form an emergency task team.

- During daylight hours, use the master switch to switch off all electric power and lighting.
- During night hours, switch off all electric power except for lighting.
- Call the fire brigade.
- Place fire extinguishers to advantage.
- Stop all activities.
- Evacuate all persons from the area.
- Do not allow any engine to be started.
- Eliminate all possible sources of ignition.
- Attempt to contain the spillage and prevent it from entering the river or drains. Use sand, soil or other available materials.
- If product has entered the river deploy fuel spill kit from fuel hut and contain product as much as possible with absorbent booms and pads.
- Give any assistance to fire brigade officials and police as may be required for safety and clean up.

Tanker Discharge Spills and Overflows:

The tanker driver is responsible for organising and carrying out emergency procedures and cleaning up as he sees fit. However, the Marina operator must provide any assistance that may be requested and ensure that the driver has:

- Closed all valves on the vehicle tank.
- Isolated the area and contained the spilt product.

The Marina operator must ensure if possible product is prevented from entering the car park soakwells by barricading with absorbent material and the use of booms and pads. If product does enter the soakwells the operator must arrange a pump out of the interceptor trap as soon as possible.

Overfilling of the storage tanks can cause petrol to leak from a pump. Usually, this leakage can be seen overflowing from the nozzle holster. In such instances:

- Switch off power to the pump.
- Remove the pump cover panels and inspect internally.
- If petrol has accumulated inside the pump, clean up any external spillage, call for service and take appropriate safety precautions.
- If pump is dry internally, clean up any external spillage, replace the cover panels and return the pump to service.

Natural Events

Natural events can be floods, earthquake, cyclones, wind and electrical storms. In the event of any of these happening it will be necessary for the control officer to size up the situation and then decide whether to close down the Marina, shut down all electrical systems, shut all fuel valves make safe premises etc. and determine the safest way to look after his staff.

Civil Disturbance

In the event of civil disturbances it will be necessary for the control officer to size up the situation and then if he feels it necessary to close down the Marina, isolate all electrical equipment and determine the safest way to look after the staff.

Environmental Pollution

The very nature of the installation on the river necessitates the management being fully aware of environmental contamination and the effect a large spill into the river could have.

The management strongly reinforce with all employees the need to abide by the prescribed working practices, which minimise as far as practicable the chance of environmental pollution.

If environmental pollution does occur then the manager will inform the following agencies and seek their direction as to the appropriate remediation required.

DFES

DPAW

The Ampol / Caltex Manager

Town of East Fremantle Health Department

The Chamber of Minerals and Energy

The Department of Mines and Petroleum

Terminating an Emergency:

The only person who can terminate an emergency will be the control officer. If emergency services have been called they will take control from the control officer and will also hand back control at the end of the emergency. The control officer will then alert his team members.

WARNING: DO NOT RE-ENTER THE SITE UNTIL INSTRUCTED BY YOUR CONTROL OFFICER

As soon as possible after the incident the control officer should conduct an incident debrief with the team to define any lesson that may be learned from the incident to improve these procedures (this should not be a session to lay blame)

FUEL SYSTEM WEEKLY CHECKLIST NAME & DATE _____.

| ITEM | CHECKLIST | YES/NO /NA | COMMENTS/ACTIONS |
|------|--|---------------|------------------|
| 1 | Area above underground tanks, fill boxes and dispensing areas are in good condition. | | |
| 2 | Condition of vent pipes: <ul style="list-style-type: none"> Secured and undamaged. Vent caps present and functional. | | |
| 3 | Check emergency shut off turret for leaks and corrosion. Check fittings and pipes. | | |
| 4 | Bowser hosepipes, break away couplings and nozzles free of damage. Look for visible signs of leaks. | | |
| 5 | 'A Stop Engine. No Smoking.' sign is clearly visible at each flammable liquid dispenser. Is this and any other safety sign clearly visible and legible? | | |
| 6 | Fire extinguishers must: <ul style="list-style-type: none"> be a minimum of 2 extinguishers available in the dispensing area and clearly visible in the direction of approach for vessels be charged and ready for use have a maintenance tag attached and embossed with a date mark of last inspection within the last six months. | | |
| 7 | Are there any visible spills in the dispensing area? | | |
| 8 | A spill kit is easily accessible to the dispensing area. | | |
| 9 | The spill kit contains as a minimum, several kilograms of absorbent material, a shovel, a broom and a container to collect waste material for ready-to-go use. | | |
| 10 | Emergency stop switch in the console area is clearly labelled. | | |
| 11 | An up-to-date emergency telephone/contact list is adjacent to the control console. | | |

EMERGENCY RESPONSE – TRAINING PRACTICE

| PRACTICE TYPE: | PERSON ATTENDED: | SIGNED BY: | PRACTICE DATE: |
|----------------|------------------|------------|----------------|
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THIS CERTIFIES THAT I HAVE READ AND UNDERSTOOD THE ENVIRONMENTAL MANAGEMENT SYSTEM

| NAME | POSITION: | SIGNED BY: | DATE: |
|------|-----------|------------|-------|
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To be read and signed at least annually by all Aquarama Staff

FIRE PUMP TEST REGISTER - 2019

| MONTH | RUN DATE | CHECK FUEL | NAME | SIGNITURE |
|------------------|----------|------------|------|-----------|
| JANUARY | | | | |
| FEBRUARY | | | | |
| MARCH | | | | |
| APRIL | | | | |
| MAY | | | | |
| JUNE | | | | |
| JULY | | | | |
| AUGUST | | | | |
| SEPTEMBER | | | | |
| OCTOBER | | | | |
| NOVEMBER | | | | |
| DECEMBER | | | | |