1 Introduction

The following HSE Slipway Guidelines (**Guidelines**) outline the occupational health and safety (**OHS**) and environmental obligations for slipway users when storing vessels, undertaking work or conducting other activities at the slipway.

The Port Slipway Terms and Conditions, which are available on the KPA website www.kimberleyports.wa.gov.au/, outline the specific obligations for slipway users which include;

- ensuring safe work practices are adopted;
- maintaining a safe work environment for themselves and other users;
- not allowing any contaminants to be discharged into the environment; and
- not causing pollution.

In the event a slipway user contravenes these Guidelines or the Slipway Terms and Conditions KPA reserves all of its rights in relation to the incident and without limiting those rights may put the slipway user on notice, seek further action or revoke the user's access to use the slipway.

KPA have provided the following information as a guideline only and requests that Slipway users seek their own advice into the activities that they wish to carry out.

1.1 Undertaking activities at the Slipway:

Any persons undertaking works at the slipway must ensure they comply with the relevant OHS and environment legislation, regulations and Australian standards. A summary of relevant legislation is provided in **Appendix A** of this document.

Some works required at the slipway require a general works permit to be completed and lodged at the operations department prior to these works commencing. A condition of the permit is to complete a job hazard analysis (**JHA**), or similar document, which outlines how the work will be done safely and how environmental impacts will be controlled and avoided. A summary of the types of works that require a permit is provided in **Appendix B.**

All works that occur at the slipway that have the potential to discharge waste materials into the marine environment must have an encapsulation method in place, i.e. tarpaulin ground sheet and bund and a method to remove and dispose of the waste. The hardstand area is the preferred area for activities that have the potential to discharge to the environment to occur. The preferred process for slipway users is for vessels to be slipped, moved to hardstand where external hull works are completed and then transferred to individual bays for storage and minor works. In the event that potential discharge activities such as boat washing are required in individual bays, KPA may authorise these works to occur where the slipway user can demonstrate that appropriate controls and encapsulation measures are in place.

2 General Guidance for Slipway use

Slipway users are required to comply with the following:

- ensure only authorised personnel have access to the slipway area;
- slipway users shall ensure that all rubbish and trade waste is removed by the individual and not to be left, stored or abandoned on site. Note: KPA does not provide waste facilities at the slipway;
- good housekeeping practices must be complied with on site. This includes ensuring the site is clean and tidy, that items are stored appropriately when not in use, that items cannot be displaced during extreme weather conditions and that items cannot leak resulting in contamination to the site;
- not undertaking any activity which disturbs the soil or any excavation activities. This type of activity may only occur if the slipway user has supporting documentation that addresses how asbestos and contamination issues at the slipway will be managed and has received specific approval by KPA;
- all hazardous substances, chemicals and paints must;
    - be used in compliance with the safety data sheet (**SDS**);
    - cannot be stored at the slipway;
    - when in use must be handled and stored appropriately, i.e. in a bund to prevent spillage; and
    - must be disposed of appropriately;
- if vessels are being cleaned of marine growth a system to capture the residue and growth must be implemented and then the waste appropriately disposed of. For example a tarp/shade cloth could be laid below the craft to capture all waste;
- if vessels are being maintained then a system to capture any waste for example paint flecks, metal swarf etc. must be implemented and the waste appropriately disposed; and
- if vessels are being maintained using chemicals, acid or detergents then a system to capture the liquid must be installed. For example, a plastic bunded plastic sheet could be laid below the vessel and the liquid then collected and disposed of to an approved waste removal specialist.

In addition, KPA's Alcohol and Other Drugs Procedure applies at the slipway which includes that the consumption of alcohol and other drugs at the slipway is prohibited, that persons at the slipway are required to be in a fit state to work and that they may be required to participate in screening when required.

Smoking can only occur in the designated smoking area at the slipway which is located near the entrance of the slipway.

2.1 Reporting HSE Hazards, Incidents and Emergencies

To report a hazard contact KPA via:

- Email: operations@kimberleyports.wa.gov.au ;or
- KPA Office during office hours (08) 9194 3100.

To report an incident or emergency contact KPA via:

- On-call officer 0417 173 679; or
- Gatehouse 0419 044 765.

If you are involved in or witness an incident you must report this to KPA as soon as possible. If you identify a safety, health or environment hazard on KPA lands, if possible fix the hazard and then report it to KPA. If it is not possible to fix the hazard straight away do the following:

- alert others to the hazard and if appropriate consider ceasing work until the area can be made safe;
- alert KPA of the hazard;
- isolate the area through barricades or tagging out equipment;
- if appropriate use signage; and
- report the hazard to KPA and detail the actions already taken and suggest possible solutions.

In the event of spill:

- stop the source (if safe to do so);
- prevent it from running to other areas, stormwater drains or off-site;
- clean-up the spill. Note if there are contaminated soils this must be reported to KPA prior to removing the contaminated soils; and
- report the spill to KPA.

KPA has a First Aid unit at the KPA gatehouse which has a defibrillator, an emergency response first aid pack and an oxy port.

3 Guidance for specific slipway activities

3.1 Filling Fuel Tanks

Filling of fuel tanks is prohibited in the slipway area, unless undertaken by a licensed provider. Closed containers of fuel may be taken off or on board but transference from one container, or tank, to another is forbidden within the Slipway.

All fuel transported within the slipway area should be done so in accordance with relevant legislation, including

- contain all fuel transported within the slipway area in tanks or jerry cans that comply with Australian and New Zealand Standard AS/NZS 2906;
- ensure the fuel container lid seals securely and is unable to shake loose during transport;
- where transport inside a vehicle is necessary, ensure the fuel container is securely restrained on the floor and ventilation is provided; and
- locate a spill response kit in the slipway area for the management of fuel spills.

3.2 Boat washing

When washing boats, operators must ensure they do not discharge any pollutants listed in the *Environmental Protection (Unauthorised Discharges) Regulations 2004* onto the slipway hardstand or into the marine environment, e.g. hydrocarbons, degreasers. Any pollutants classified as dangerous goods in the *Dangerous Goods Safety (General) Regulations 2007* must be controlled, transported and disposed of correctly in accordance with the *Dangerous Goods Safety Act 2004*.

The following measures should be undertaken when boat washing:

- oil, fuel and dirt should be wiped from the engine as much as possible before cleaning;
- outboard motors should be washed and rinsed in a work area where the run-off into a fully encapsulated area on top of a sealed surface;
- where possible, boat decks should be rinsed with water only;
- it is recommended that environmentally sensitive detergents only (e.g. low phosphate, biodegradable) are used;
- boats with antifouling material applied to the hull may only be washed down in the over the hardstand area on the slipway, unless authorised by KPA;
- only wash boats on the slipway with bunded encapsulation in place. This work is to be done over the hardstand area, unless authorised by KPA; and
- keep water use to a minimum when washing boats.

3.3 Surface preparation and cleaning

3.3.1 Removal of antifouling paint

Antifouling coatings are applied with the aim of either inhibiting the settlement or the attachment of marine biota to vessel hulls. Marine biota settlement is inhibited through the application of paints containing toxic chemicals, such as or copper (application of tributyltin (TBT) and Irgarol is banned on recreational vessels), which are leached into the water column. Inhibiting the attachment of marine biota is achieved by coating vessel hulls with silicon or other chemicals containing non-stick surface bound properties. Conventional antifouling paints contain biocides that are harmful to marine life. The removal of antifouling paints results in

paint debris, sludge, dust and other particles that may contribute towards water, soil and/or air pollution in the absence of appropriate environmental management measures.

The following recommendations apply to the general removal of antifouling paint:

- paint removal activities should always take place with bunded encapsulation in place to ensure that the paint residues are collected and disposed of properly and are not washed into the water. This work is to be done over the hardstand area on the slipway, unless authorised by KPA;
- it should be assumed that any removed antifouling coating:
  - is contaminated with biocides;
  - may contain TBT or lead based compounds; and vessels constructed before the 1970s may possibly comprise a variety of hazardous chemicals including arsenic, mercury and DichloroDiphenylTrichlorethane (**DDT**)

  Therefore, antifouling coating should be removed within a controlled environment and within areas that have equipment for collection of potentially contaminated wastes. Contaminated waste must not be stored on site;
- before removing antifouling paint, it is recommended that the person should be aware of the formulation and type of antifouling paint to be removed, as the paint wastes may be considered hazardous. If uncertain about the formulation and type of the paint wastes, it is recommended that you dispose of paint wastes in accordance with the Australian Standards and the products "safety sheet" provided by the manufacturer; and
- antifouling coatings should not be burnt off as this may generate highly toxic emissions.

If the paint being removed contains more than 0.5% lead content then the area being cleaned should be totally encapsulated with a waterproof membrane and operators working inside the encapsulating membrane should be completely protected from contact with all wastewater.

3.3.2 Removal of biological hull foulants and marine biota

Marine pests are often present on the hull of vessels and when marine biota is removed can result in odours. There may be a water quality impact if disposed of in the marine environment.

Removal of biological hull foulants and marine biota can only occur with bunded encapsulation in place. This work is to be done over the hardstand area, unless authorised by KPA. When removing biological hull foulants and marine biota from boats, operators must ensure they do not discharge any pollutants listed in the *Environmental Protection (Unauthorised Discharges) Regulations 2004* onto the slipway hardstand or into the marine environment, e.g. chemicals used to remove biological hull foulants and marine biota. Measures should be implemented to contain and dispose of biological material removed from vessels if undertaken on the slipway. Solids should be disposed of at the Shire of Broome Waste Management Facility. Use environmentally sensitive detergents when removing hull foulants and marine biota.

Any pollutants classified as dangerous goods in the *Dangerous Goods Safety (General) Regulations 2007* must be controlled, transported and disposed of correctly in accordance with the *Dangerous Goods Safety Act 2004*.

If it is suspected that an introduced marine pest has been found outside known existing locations during removal of biological hull foulants from a vessel, report the finding to the Department of Fisheries.

3.3.3 Manual and mechanical scraping, scrubbing and cleaning

Hull and deck sanding and scraping produces a range of solid wastes, including paint chips, dust and other hull and deck sweepings. Pollution prevention and control measures should be adopted to avoid the release of contaminants into marine waters, bottom sediments, soil and air.

Sanding and scraping:

- mechanical buffing, scraping and manual scraping methods are recommended over pressure water blasting for hull cleaning as they allow the solid wastes to be swept or vacuumed up for disposal.
- sanders, grinders and other power tools should be fitted with dust extraction and collection systems.
- tarpaulins or rigid sheeting should be placed under the boat area being scraped or sanded to catch the paint scrapings and dust.
- work area should be vacuumed or swept regularly. Be aware of weather by wind, rain and water runoff.
- when hull repair and maintenance works are completed, the work areas must be cleaned up by the owner or contractor and wastes should be stored and disposed. If KPA staff are required to tidy/clean up after contractors or members a fee may be charged.

Scrubbing and using chemical cleaners:

- detergents, degreasers, strong acid or alkaline cleaning agents can be toxic to marine life, so chemicals should only be used for severe staining that cannot be removed by water or biological sensitive cleaners.
- chemicals should not be used where they can directly enter the water. Wherever possible, rags or a brush should be used instead.
- corrosion and rust removers are strong acids and should follow manufacturers' recommended instructions before use. Refer to manufacturers data sheets.
- use of degreasers should be avoided as emulsified oils are harder to trap and treat.
- it is recommended that:
    - water-based or biodegradable strippers, cleaners and degreasers are used;
    - phosphate free detergents are used wherever possible and scrubbed with a soft brush to absorb the detergent;
    - biodegradable spray-type cleaners that do not require rinsing are used.

3.3.4 Pressure water blasting

The use of water-based pressure cleaners to clean the exterior of boats has the potential to cause environmental harm. High-pressure water blasting also presents containment problems caused by the wide dispersion of biological and physical materials removed from the vessel hull during the cleaning process.

Pollutants and contaminants originating from pressure water blasting activities include:

- chemicals and additives, including detergents, solvents, caustic or acids, used in the cleaning solution;
- materials removed from the cleaning surface including biological hull foulants, antifouling paint sludge, dirt, oil and grease; and

- compounds produced as a result of reactions between the cleaning solution and the materials removed from the boats.

It is therefore important to prevent pollutants originating from pressure water blasting activities from entering the environment to the maximum extent practicable by:

- only conducting pressure water blasting activities with bunded encapsulation in place. This work is to occur over the hardstand area on the slipway, unless authorised by KPA;
- before commencing with pressure water blasting activities, the work surface should be clean (i.e. free from loose material) and all solids should be swept up and binned'
- moveable waterproof screens should be located alongside and behind the people operating the hull water blasting to prevent spray drift from escaping from the work area and settling on freshly completed work on vessels or motor vehicles in the area;
- pressure water blasting operations should be avoided during windy conditions;
- minimise the amount of wastewater produced during pressure water blasting by recycling and reusing the water, if practical; and
- high temperature water rather than chemicals should be used for cleaning activities.

If the surface to be cleaned contains paint with more than 0.5% lead content then the area being cleaned should be totally encapsulated with a waterproof membrane and operators working inside the encapsulating membrane should be completely protected from contact with all wastewater.

When pressure water blasting boats, operators must ensure they do not discharge any pollutants listed in the *Environmental Protection (Unauthorised Discharges) Regulations 2004* onto the slipway hardstand or into the marine environment, e.g. cleaning solutions containing solvents and/or acids, materials removed from boats such as oil and grease. A tarpaulin should be placed under the boat when water blasting if using cleaning solutions containing solvents, acids or other dangerous goods.

Any pollutants classified as dangerous goods in the *Dangerous Goods Safety (General) Regulations 2007* must be controlled, transported and disposed of correctly in accordance with the Dangerous Goods Safety Act 2004.

3.4 Surface coating.

3.4.1 Manual painting

Painting vessel hulls and applying topside coatings may result in the concentrated release of harmful vapours and liquids. Wastes generated by painting activities are considered hazardous where they contain solvents and/or heavy metals.

Spray painting is not permitted at the slipway and paints cannot be stored at the slipway.

The following is suggested to reduce the potential for paint products, including the release of harmful vapours, from entering the environment.

- manual painting, using brushes and rollers is permitted.
- the application of TBT or Irgarol is banned. This ban applies from 1991 in WA;
- the ANZECC Code of Practice for Antifouling and In-Water Hull Cleaning and Maintenance is available online www.daff.gov.au/animal-plant-health/pests-diseases-weeds/marine-pests/anti-fouling-and-inwater-cleaning-guidelines;

- before applying antifouling paints, consideration should be given on using alternative technologies, particularly those that rely on the coating's physical properties rather than its toxicity to prevent fouling;
- mix or preparation of antifouling paints on sites should be avoided at the Slipway;
- paints should be mixed in drip trays under cover and in a sealed, bunded and well ventilated area;
- tarpaulins/drop sheets should be spread under the entire boat work area to collect wastes and prevent paint drips and spills from entering the marine/land environment;
- spilt paint (particularly water-based paint) should be cleaned and the remaining paint should be allowed to dry rather than washing it;
- when cleaning up after painting, it is suggested to wipe/squeeze as much paint as possible from the brushes, trays and rollers back into the paint tin for future use;
- excess paint should be painted out onto an absorbent material such as an old rag or newspaper, and it should be allowed to dry before disposal;
- when using containers filled with water to clean water based paint from brushes and rollers, the paint solids should be allowed to settle by leaving the container overnight;
- empty paint and thinner containers should be allowed to air-dry before disposal;
- all paint waste, particularly antifouling paint waste, should be disposed by a license chemical waste collector;
- ensure manual painting of boats takes place at least 50 metres from the tide line;
- consider using less toxic materials, e.g., water-based paints and biodegradable paint strippers/cleaners;
- switch to long-lasting, low toxicity antifouling paints; and
- locate a spill response kit in the slipway area for the management of paint spills.

3.4.2 Abrasive/Grit Blasting

Abrasive or grit blasting is not permitted at the Slipway.

3.4.3 Fibre glassing

Fibre glassing activities are a source of hazardous volatile emissions to the environment. Acetone (a solvent used to clean tools and other surfaces contaminated with resin) and styrene (the volatile component of the polyester resin) are the largest contributors of volatile emissions caused by fibre glassing activities. Fibreglass trimming, grinding, sanding and drilling activities may also give rise to air pollution in the form of dust and other particulate emissions.

Persons undertaking fibre glassing activities must ensure that the products they are using comply with the following:

- any pollutants classified as dangerous goods in the *Dangerous Goods Safety (General) Regulations 2007* must be controlled, stored, transported and disposed of correctly in accordance with the *Dangerous Goods Safety Act 2004;* and
- some substances used in fibre glassing (e.g. methyl ethyl ketone peroxide) are not compatible for storage in the same location as flammable and other dangerous goods (e.g. fuel).

When engaging in fibre glassing activities, slipway users must ensure they do not discharge any pollutants listed in the Environmental Protection (Unauthorised Discharges) Regulations 2004 onto the slipway hardstand or into the marine environment, e.g. solvents, resins, styrene.

The following actions are suggested to protect air quality and minimise volatile solvent and particulate emissions, and to protect water quality and prevent landfill contamination by ensuring proper disposal of hazardous wastes:

- a tarpaulin should be placed under work areas during fibre glassing to contain spilt resins etc.;
- recommended methods include working in an enclosed area with ventilation. If dust produced during fibre glassing work cannot practicably be contained in an enclosed and
- ventilated area, consider establishing buffers instead;
- hand lay-up methods are approved only as hand lay-up releases less styrene. Note: spray gun application methods are not permitted;
- The amount of grinding and sanding should be reduced as much as possible by trimming with a knife or mechanical cutter when articles have solidified but not yet hardened;
- surface finishing (sanding and washdown) shall only be done over the hardstand area, unless authorised by KPA;
- surface finishing (sanding and washdown) should not be done in areas where the resultant waste (fine dust particles) may contaminate soil, storm-water or the marine surface waters;
- containers of resins and solvents should be kept in areas that are capable of containing spills and Containers of resins and solvents should be kept closed when not in use
- for fibre glassing waste management:
    - all sanding and grinding dusts must be securely wrapped prior to disposal; and
    - all contaminated and spent solvents used to clean equipment must be collected in a sealed drum or container for disposal by a licensed chemical waste collector.

3.5 Welding and metal fabrication

Welding activities may contribute towards air pollution and cause metal contamination of soil, storm-water and marine waters through the generation of airborne dusts and the emission of fumes and smoke.

When undertaking welding and metal fabrication activities, operators must encapsulate as best as possible and ensure they do not discharge any pollutants listed in the *Environmental Protection (Unauthorised Discharges) Regulations 2004* onto the slipway hardstand or into the marine environment, e.g. metals.

Any pollutants classified as dangerous goods in the *Dangerous Goods Safety (General) Regulations 2007* must be controlled, transported and disposed of correctly in accordance with the Dangerous Goods Safety Act 2004.

Pollution prevention measures should be adopted and the following is suggested:

- welding and thermal cutting activities should be conducted in a well ventilated area;
- all metal cutting operations should be conducted in a screened area to minimise the horizontal dispersion of metal fragments
- use of oxy-acetylene torches should be kept away from possible ignition sources such as oils, grease and rubber to avoid accidental combustion and the generation of dangerous fumes and smoke;

- dust and grinding wastes should not be accumulated where they may cause a nuisance to neighbours or be washed into storm-water drains or the receiving marine environment;
- all dusts and other grinding wastes should be securely wrapped prior to disposal and filings should be swept or vacuumed; and
- hot work practices should be adopted for all welding jobs, i.e. two people present, fire extinguishers nearby.

3.6 Engine maintenance and repair

Engine maintenance and repair activities can result in spills and leaks that are costly to clean up, degrade water quality and threaten aquatic plant and animal life.

The following measures are recommended to prevent or minimise the adverse environmental impacts associated with engine service and repair activities.

General engine maintenance:

- absorption materials must be placed in bilge/under motors to trap oil/fuel leaks, particularly in vessels with automatic bilge pumps;
- engines should be maintained regularly to prevent oil and fuel leaks to the bilge.
- a drip tray or groundsheet should be used under the engine to collect oil, grease, solvents or detergents;
- when cleaning the drip tray or groundsheet, methods that do not result in water or soil contamination should be used;
- adequate supplies of absorbent materials and other rags should be kept for cleaning up small fuel spills; and
- locate a spill response kit in the slipway area for the management of hydrocarbon spills.

Cleaning engine parts:

- parts cleaning and degreasing should take place in a properly designated wash bath provided by the slipway user;
- where possible, engine parts should be cleaned with a brush rather than with solvents or aqueous degreasers such as alkaline or caustic soda; and
- water-based or biodegradable strippers, cleaners or degreasers should be used wherever possible.

Replacing engine parts and oils:

- old or damaged batteries which are intended for recycling should be disposed of appropriately;
- mercury switches, thermostats and fluorescent tubes should be collected and packaged for disposal by a licensed chemical waste collector;
- bilge water should not be pumped onto the slipway if it contains high concentrations of hydrocarbons or other wastes including sanitary and detergent wastes;
- all waste grease, sump oil, contaminated bilge water and waste oil filters should be collected for recycling or disposal by a licensed chemical waste collector; and
- drain oil filters before disposal.

Appendix A Summary of relevant legislation and guidelines

Legal or other requirement	Relevance to slipway area
Port Authorities Act 1999 (WA)	Operation of the slipway must comply with management measures described in the KPA environmental management plan (EMP) 2015-2016, Version 8.0_101950.
Environmental Protection (Metal Coating) Regulations 2004 (WA)	Must comply with metal coating and waste disposal procedures described in the regulations.
Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)	Discharge to the environment of any of the following is prohibited: • acid with a pH less than 4; • alkali with a pH more than 10; • animal waste; • oil, fat or grease; • compounds or solutions of cyanide, chromium, cadmium, lead, arsenic, mercury, nickel, zinc or copper; • degreaser; • detergent, engine coolant or engine corrosion inhibitor; • food waste; • laundry waste; • mineral oil; • organic solvent; • paint; • petrol, diesel or other hydrocarbon; • sediment or sewage.
Dangerous Goods Safety Act 2004 (WA)	• All reasonably practicable measures must be taken to store, handle or transport dangerous goods so that risks to people, property and the environment are minimised.
Dangerous Goods Safety (General) Regulations 2007 (WA)	• Defines dangerous goods that require management under the *Dangerous Goods Safety Act 2004 (WA)*.
Dangerous Goods Safety (Goods in Ports) Regulations 2007 (WA)	• The handling and transport of dangerous goods in port areas must comply with Australian Standard AS 3846-1998. • A Dangerous Goods Declaration must be submitted to the Harbourmaster for approval for all vessels carrying or intending to load hazardous cargoes. • Dangerous goods must be stored according to the procedures prescribed in the regulation.

Appendix B Summary of Permitted Slipway Activities

To minimise the environmental impacts at the slipway the following activities are not permitted:

- Spray painting;
- Abrasive/Grit Blasting;
- Activities which involve disturbing the soil at the slipway, unless authorised by KPA prior to the works being undertaken; and
- Filling fuel tanks, unless undertaken by a licensed provider.

The following tables outline the permitted activities at the slipway and whether they are to be undertaken on the hardstand. The tables also provide information on the potential environmental risks and receptors associated with each task, the permits required and the controls in place that slipway users must comply with.

Table 1: Activities to be undertaken over the Hardstand Area), unless authorised by KPA. Note: if the works identified in Table 1 are required to be done in individual bays then the controls specified below must be met at a minimum and the slipway user must demonstrate to KPA the method of carrying out the works. KPA may then authorise for these works to be done outside of the hardstand area.

Activity	Environmental Risks	Controls and Guidelines	Permit required
Pressure water blasting	• Emission to land • Emission to waterways	• Works must have bunded encapsulation. • Only permitted on the Hardstand, unless authorised by KPA. • Do not discharge pollutants into environment. • Refer to section 3.3.4 of the Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work
Boat Washing	• Emission to land • Emission to waterways	• Works must have bunded encapsulation. • Only permitted on the Hardstand, unless authorised by KPA. • Do not discharge pollutants into environment. • Refer to section 3.2 of the HSE Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work

Activity	Environmental Risks	Controls and Guidelines	Permit required
Removal of antifouling paint	• Emission to land • Emission to waterways	• Works must have bunded encapsulation. • Only permitted on the Hardstand, unless authorised by KPA. • Do not discharge pollutants into environment. • Refer to section 3.3.1 of the HSE Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work
Removal of biological hull foulants and marine biota	• Emission to land • Emission to waterways	• Works must have bunded encapsulation. • Only permitted on the Hardstand, unless authorised by KPA. • Refer to section 3.3.2 of the HSE Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work
Fibre glassing	• Emission to land • Emission to waterways	• Works must have bunded encapsulation. • Only permitted on the Hardstand, unless authorised by KPA Refer to section 3.4.3 of the HSE Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work

Table 2: Activities permitted over the hardstand area and in bays

Activity	Environmental Risks	Controls and Guidelines	Permit required
Welding and metal fabrication	• Emission to air • Emission to land	• Refer to section 3.5 of the HSE Slipway Guidelines. • JHA outlining HSE controls to be completed	• Hot Work
Engine maintenance and repair	• Emission to land	• Refer to section 3.6 of the HSE Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work
Filling fuel tanks	• Emission to land	• Refer to 3.1 • Only by a licenced provider • JHA outlining controls	• Bunker permit
Manual and mechanical scraping, scrubbing and cleaning	• Emission to land	• Refer to section 3.3.3 of the HSE Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work
Manual painting	• Emission to land	• Refer to section 3.4.1 of the Slipway Guidelines. • JHA outlining HSE controls to be completed	• General Work