

WASTE MANAGEMENT PLAN

**TO ACCOMPANY AN APPLICATION FOR A 50 BERTH MARINA AND CARPARK
RECONFIGURATION AT KOOLEWONG
CROWN LAND ABOVE AND BELOW MEAN HIGH WATER MARK OFF BRISBANE
WATER DRIVE, Lot 519 DP 729020**

Applicants Name and Address:	Gemsted Pty Ltd C/- ADW Johnson P.O. Box 3717 TUGGERAH NSW 2259		
Phone:	(02) 4305 4300	Fax:	(02) 4305 4399
Buildings and Other Structures currently on site:			
Existing development on site includes: <ul style="list-style-type: none"> • Two storey mixed used building (restaurant and offices); • Timber jetty (approx 30m); and • Paved car park (33 spaces). 			
Brief Description of Proposal:			
The Project comprises the following components: <ul style="list-style-type: none"> • Upgrade of the existing timber jetty from 1 metre to 1.5 metres in width; • Construction of a fifty (50) berth marina extending approximately 100 metres into Brisbane Water from the end of the existing timber jetty; • The main walkway of the proposed marina will be 2.5 metres wide, with two arms, in a "reverse F" formation; • The proposed marina will be in the form of a floating pontoon held in place by a number of piles. The pontoon will have rollers surrounding the piles to allow the marina to rise and fall with the tide; • Upgrade and reconfiguration of the existing car park to provide eleven (11) additional car parking spaces; and 			
Objectives:			
The intent of this document is to identify all potential waste streams associated with the proposed Koolewong Marina development. The document identifies both the waste currently generated on site and that which will be produced following the completion of the development			

associated with the operation of the working marina and the waste produced by private vessels.

Wastes produced during the demolition and construction phases of the development will also be detailed.

The objectives of this document are:

- To identify all potential sources of liquid and non liquid wastes generated at the Koolewong Marina site, as defined in the Waste Classification Guidelines (EPA 2008).
- Identify all wastes that will be stored, separated or processed on the site and identify the procedures to be adopted to manage these wastes.
- Identify and assess all potentially hazardous waste received at the site.
- Spill management and containment.
- Management of waste produced by privately owned vessels

Current Operations:

The site currently operates as a restaurant facility on the ground floor and vacant offices on the first floor.

Materials On-Site		Destination		
		Re-Use & Recycling		Disposal
Type of Material	Estimated Volume (m ³)	On Site	Off Site	
General Waste	Approx 3m ³	Waste to on-site waste bin (volume 3m ³)	N/A	Waste Contractor Transpacific (1-2 times per week depending on need).
Paper, Cardboard & Recyclables	Approx 3m ³	Recyclables to on-site recycling bin (volume 3m ³)	N/A	Waste Contractor Transpacific (1-2 times per week depending on need).

Section 1: Subdivision, Demolition Stage (Site preparation stage)

The appointed contractors will be responsible for the management of waste generated during the demolition stage of the development; however the following plan will be similar to that implemented by the appointed contractors.

Materials On-Site		Destination		
		Re-Use & Recycling		Disposal
Type of Material	Estimated Volume (m ³)	On Site	Off Site	
Excavation Material	None	N/A	N/A	N/A
Garden Organics/Trees	Approx 3m ³	N/A	Tree removal contractor	Tree removal contractor
Bricks	Approx 1m ³	N/A	N/A	Local Waste Facility
Concrete	< 1m ³	N/A	N/A	Local Waste Facility
Timber	Approx 3m ³	N/A	Removed by licenced contractor to be re-used in smaller jetties	N/A
Metals	< 1m ³	N/A	Local metal Recycler	N/A
Other	N/A	N/A	N/A	N/A

Section 2: Construction Stage

The appointed contractors will be responsible for the management of waste generated during the construction stage of the development; however the following plan will be similar to that implemented by the appointed contractors.

Materials On-Site		Destination		
		Re-Use & Recycling		Disposal
Type of Material	Estimated Volume (m ³)	On Site	Off Site	
Excavation Material	None	N/A	N/A	N/A
Garden Organics/Trees	None	N/A	N/A	N/A
Bricks	< 1m ³	N/A	N/A	Local Waste Facility
Concrete	None	N/A	N/A	N/A
Timber	None	N/A	N/A	N/A
Metals	None	N/A	N/A	N/A
General constructional packaging waste	Approx 1m ³	N/A	N/A	Local Waste Facility

Section 3: Use of Premises

An estimation of general waste and recyclable material generation on site during the operation of the proposed marina was calculated by using Boating Industry of Australia average boat use being approximately 50 hours per year with the majority of this being "on the water" as opposed to within the marina

There will be no waste generated through boat maintenance and repair operations as no on-site facilities will be provided for this practice.

There will be no waste generated through holding tank pump-out as no on-site facilities will be provided for this practice.

Type of Waste Generated	Estimated Volume (m ³)	Proposed On Site Storage & Treatment Facilities	Destination
General Recyclables from recreational boat users	< 1m ³ per week	Recyclables to on-site recycling bin	Waste Contractor Transpacific (1-2 times per week depending on need).
General Waste from recreational boat users	< 1m ³ per week	Waste to on-site waste bin	Waste Contractor Transpacific (1-2 times per week depending on need).
Pump-out Waste from berthed boats	5 boats. Max 10 pump-outs (10 uses per year @ 5hr per session)	N/A	Gosford Wharf free 24 hour pump-out service
Liquid Waste from recreational boat users: <ul style="list-style-type: none"> • Paint products • Anti-fouling agents • Maintenance chemicals • Cleaning agents 	NIL	N/A	N/A

Section 4: Ongoing Management

Given that the proposed marina does not include any pump-out facilities, recreational boat users will be required to use off-site facilities for waste water.

Taking the above into consideration, the only waste likely to be produced will be from general recreational boat use such as drink containers, food wastes, etc. These can be disposed of in existing recycling and general waste containers already in place.

Boat users wishing to wash boats will be required to use environmentally friendly cleaning products which will not damage the water quality of Brisbane Water.

No mechanical operations or general maintenance will occur on site either above or below the mean high water mark.

The marina will provide no slip-way and as such no possible way of removing boats from Brisbane Water from this site in order to maintain them. Maintenance of boats will have to be undertaken off-site and can be done at the numerous existing locations within Brisbane Water such as Empire Bay Marina, Machan's Marina, Booker Bay Marina, Killcare Marina or Anderson's Marina – all facilities which accommodate maintenance and are located away from oyster farms.

An external contractor will collect all on-site wastes 1 to 2 times per week for both the existing and proposed operations.

Summary

The design of waste management infrastructure and the management of all waste generated on site will be in accordance with Gosford City Council Development Control Plan 106: Waste Management, Waste Classification Guidelines (EPA 2008), Environmental Guidelines: Best Management Practice for Marinas and Boat Repair Facilities (EPA 1999) and in accordance with the requirements of the Marine Industries Association of Australia: Clean Marinas Handbook. A commitment has been included with the Statement of Commitments to be adopted within the Operational Environmental Management Plan (OEMP).

A purpose designed waste storage area located on the hardstand will be constructed as part of the proposed development. The area will encapsulate all waste streams generated on site including general waste, recyclable materials such as paper and cardboard. Labeled waste bins will be located throughout the site to ensure the segregation of waste streams suitable for recycling is maximized.

Education of both staff and customers regarding waste management practices employed on site will contribute to the efficiency of the waste management strategy.