

Safe work method statement

To improve the effectiveness of SWMS employees should follow the TAKE 2 process to assess and manage risk.

Job Task Summary: <h2>Boating operations</h2>
Applicable to the following worker type: employee, contractor
SWMS completed by: Emergency Management Unit
Site: Preparedness activities, emergency operation centres (EOC's), temporary work sites
Date: 31 January 2018
PPE required: (mandatory) Sunscreen, Safety footwear and Other – EPIRB, personal flotation device (PFD), sunglasses, other as appropriate for task

WHS RISK MATRIX							HIERARCHY OF CONTROLS		
		Likelihood							
		E. Rare	D. Unlikely	C. Possible	B. Likely	A. Almost Certain			
Consequence	5. Extreme	Medium	High	High	Very High	Very High	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Level of health and safety protection</div> <div style="text-align: center;"> <p>Level 1 Eliminate the hazards</p> <p>Level 2 Substitute the hazard with something safer Isolate the hazard from people Reduce the risks through engineering controls</p> <p>Level 3 Reduce exposure to the hazard using administrative actions Use personal protective equipment</p> </div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Reliability of control measures</div> </div>		
	4. Major	Low	Medium	High	High	Very High			
	3. Moderate	Low	Medium	Medium	High	High			
	2. Minor	Low	Low	Medium	Medium	Medium			
	1. Insignificant	Low	Low	Low	Low	Medium			

PROCEDURAL STEPS	POSSIBLE HAZARD(S)	R1	SAFETY CONTROL(S)	PERSON RESPONSIBLE	R2
Preparation for boating operations – check: <ul style="list-style-type: none"> vessel & equipment trailer & launching apparatus PPE fuel licences communication equipment GPS – EPIRB, Spot tracker food & water weather first aid kit personnel 	<ul style="list-style-type: none"> Manual handling Crush injuries Strains/sprains Cuts/abrasions/superficial Slips/trips/falls Fatigue Hazardous chemicals Exposure resulting in sunburn, dehydration, heat stress 	L	<ul style="list-style-type: none"> Vessel to be suitable for response/area of operation eg size and engine type (diesel or 4 stroke engines only for oil/chemical spill responses) Check trailer condition – rollers, safety chains, wheel bearings etc PPE required: protective non-slip footwear. Day work PPE - hat, sunscreen, long sleeve shirt, sun glasses. Cold/wet exposure PPE – gloves, jacket, wet weather gear PFD for all persons on board PPE for task eg disposable overalls, gloves Carry adequate food & water for task Use funnel when refuelling; refuel away from ignition sources Check navigation (electronic GPS & maps) and communication equipment is working and suitable for the area of operation and incident Plan for task to be conducted (including weather check, safety equipment check). Only operate the vessel in conditions that are safe and allows crew to perform the required task Permission from appropriate authority (eg Incident Mgt Team) to operate in affected area Log in with coastguard if operation in oceanic waters before leaving (or embarking) – vessel details, trip destination, departure & arrival times, passenger & contact details. Ensure master of vessel/skipper holds current boat licence Ensure certified first aid officer on board Ensure that all drivers/skippers are in a fit state to operate vehicles/vessels eg not affected by tiredness/fatigue, drugs, alcohol or illness. 	Supervisor Vessel master/skipper Crew/passenger	L
Prepare vessel for launching <ul style="list-style-type: none"> Park at launch site Check conditions 	<ul style="list-style-type: none"> Slips/Trips/Falls Vehicle impact injuries – crush injuries Strains & sprains Cuts, abrasions & scratches 	M	<ul style="list-style-type: none"> Ensure vehicle is in safe location. Keep watch for & clear of other vehicles and pedestrians. Do not launch if weather conditions are hazardous. Brief crew/passengers on launching task. Wear appropriate PPE. Correct manual handling & back-care techniques. Store items correctly in vessel. Ensure appropriate safety gear available, bungs in place and prop-guard fitted to engine, where applicable. Inspect and check the operation of all on-board systems before launching. If required for launch, skipper to board whilst vehicle parked. Check for location of drop-off at end of ramp. 	Vessel master/skipper Crew/passenger	L

PROCEDURAL STEPS	POSSIBLE HAZARD(S)	R1	SAFETY CONTROL(S)	PERSON RESPONSIBLE	R2
Launch vessel <ul style="list-style-type: none"> Reverse trailer Secure vessel Park vehicle & trailer 	<ul style="list-style-type: none"> Slips/Trips/Falls Vehicle impact injuries – crush injuries Boat impact injuries – crush injuries Strains & sprains Cuts, abrasions & scratches Stings Boat inundated with water Vehicle inundated with water Water causing drowning 	M	<ul style="list-style-type: none"> Ensure path clear prior to reversing. Drive slowly. Position trailer to safely launch vessel Correct manual handling & back-care techniques. Ensure personnel are clear of vehicle and trailer whilst reversing and launching. Stay clear of propeller Move vessel to access point safely, avoiding obstacles and secure Drive slowly & park in safe location. Wear appropriate PPE – e.g. non-slip footwear 	Vessel master/skipper Crew/passenger	L
Loading equipment & passengers	<ul style="list-style-type: none"> Slips/Trips/Falls Boat impact injuries – crush injuries Strains & sprains Cuts, abrasions & scratches Water causing drowning Obstacles in water & at landing sites Seasickness Hazardous chemicals Boat inundated with water Contact with propeller Fall from boat/wharf 	M	<ul style="list-style-type: none"> Ensure weather and area of operation is safe for boating/boarding Ensure vessel stable and secure before loading & unloading. Correct manual handling & back-care techniques. Passengers to be briefed – conduct of task, location of safety & comms equipment, emergency procedures & other safety aspects (eg reducing exposure to spilt oil/chemical including issue of relevant safety data sheet(s)). Maintain 3 points of contact if climbing in/out of vessel Passengers to move around on-board carefully & be positioned safely for travel. Persons on board to not exceed capacity of vessel. Equipment to be stowed securely and safely – coil & stow ropes & cargo away from traffic areas; store chemicals in non-spill containers Equipment should not impede the safe operation of the vessel eg overweight, cause leaning Wear appropriate PPE Test engine function, check fuel levels, tanks and lines Before leaving notify on-land contact (eg supervisor, duty officer) of launch and passengers on board as per task plan 	Vessel master/skipper Crew/passenger	L
Vessel operation <ul style="list-style-type: none"> Travel to task location Task conduct 	<ul style="list-style-type: none"> Slips/Trips/Falls Boat impact injuries – crush injuries Strains & sprains Cuts, abrasions & scratches Water causing sea sickness, drowning Submerged objects Oil/chemical spill – hazardous chemical Boat inundated with water/ overturned Contact with propeller 	H	<ul style="list-style-type: none"> Log in with coastguard if operation in oceanic waters Follow NSW RMS - Maritime regulations Use correct manual handling techniques. Follow correct first aid procedures for seasickness. Have appropriate PPE for task eg potential oil/chemicals in water – refer to incident safety data sheet Only enter areas permitted by Incident Management Team Maintain communication with land contact (eg supervisor, duty officer) as planned and any vessels in area (as appropriate) Skipper to select safe route and speed and keep proper watch for hazards Approach swells at safe angle and speed 	Vessel master/skipper Crew/passenger	M

PROCEDURAL STEPS	POSSIBLE HAZARD(S)	R1	SAFETY CONTROL(S)	PERSON RESPONSIBLE	R2
	<ul style="list-style-type: none"> • Collision with other vessels • Fall from boat • Mechanical failure/marooning • Hypothermia • Sunburn • Fire on-board • Wave impact 		<ul style="list-style-type: none"> • Ensure crew/passengers/cargo stable and secure • Don PFD and remain with capsized vessel. • Reduce speed in wash to prevent pounding • Conduct task according to task plan • Ensure contingency plan exists in case of marooning. • Travel speeds to be consistent with hazardous areas of operation (eg submerged objects, oil/chemical in water) & speed restrictions • Wear appropriate PPE – eg. non-slip footwear, PFDs • A Level 100+ PFD must be worn when a vessel is crossing a coastal bar 		
Landing <ul style="list-style-type: none"> • Return to launch site • Landing on shore • Secure vessel to access point 	<ul style="list-style-type: none"> • Slips/Trips/Falls • Boat impact injuries – crush injuries • Vehicle accident injuries • Strains & sprains • Cuts, abrasions & scratches • Water causing sea sickness, drowning • Submerged objects • Oil/chemical spill – hazardous chemical • Boat inundated with water/overturned • Contact with propeller • Collision with other vessels/wharf • Fall from boat • Mechanical failure/marooning • Hypothermia • Sunburn • Fire on-board • Wave impact 	H	<ul style="list-style-type: none"> • Follow NSW RMS - Maritime regulations • Skipper to instruct all on board of landing procedure. • Occupants positioned safely and maintain firm handhold. • Identify and assess landing site prior to approach • Keep a proper lookout for hazards (eg submerged objects) • Approach at slow speed (<=4 knots) • Prior to approaching shore, observe landing conditions (currents, wave surge, height and behaviour for) for at least 5 minutes. • Approach to land only when safe • Consider current and wind when landing • Take care with hand placement when tying lines • Secure boat using appropriate boating knots (eg. clove hitch with half hitches). • Do not place limbs/appendages between rope and boat/mooring especially in swell or surge • If using an anchor ensure connection to chain/rope secure at both ends and anchor rope feed and angle adequate to hold boat (ie feed angle <30degrees from level) • Wear appropriate PPE 	Vessel master/skipper Crew/passenger	M
Unload vessel	<ul style="list-style-type: none"> • Slips/Trips/Falls • Vessel impact injuries – crush injuries • Strains & sprains • Cuts, abrasions & scratches • Drowning • Stings/bites • Contact with propeller • Collision with other vessels/wharf • Crush injuries – between boat/wharf 	H	<ul style="list-style-type: none"> • Log off with coastguard if operation was undertaken in oceanic waters before disembarking. • Ensure vessel secure and stable before unloading. • Disembark only after approval from skipper & follow their direction to disembark & unload. • Disembarking - 1 crew member to hold and stabilise boat and 1 to receive cargo from boat to shore • Do not disembark carrying a load or luggage – pass loads to shore and disembark unencumbered. • Do not wear packs or heavy clothing while transferring between boat and shore 	Vessel master/skipper Crew/passenger	M

PROCEDURAL STEPS	POSSIBLE HAZARD(S)	R1	SAFETY CONTROL(S)	PERSON RESPONSIBLE	R2
	<ul style="list-style-type: none"> • Fall from boat • Hypothermia • Sunburn • Fire on-board • Wave impact 		<ul style="list-style-type: none"> • Do not lift weights >20kg without assistance • Ensure secure footing when lifting weights • Maintain proper watch for waves. • Stay clear of propeller. • Ensure personal and safety equipment travel with crew • Wear appropriate PPE 		
<p>Completion of task</p> <ul style="list-style-type: none"> • Retrieve vehicle & trailer • Reverse trailer • Vessel onto trailer • Remove vessel from water • Clean vessel/trailer • Restock vessel eg fuel 	<ul style="list-style-type: none"> • Slips/Trips/Falls • Vessel impact injuries – crush injuries • Vehicle accident injuries • Strains & sprains • Cuts, abrasions & scratches • Drowning • Stings • Contact with propeller/ barnacles • Collision with other vessels/ wharf • Crush injuries – between boat/ wharf • Rope burns/splinters • Hypothermia • Sunburn • Wave impact 	M	<ul style="list-style-type: none"> • Notify on-land contact (eg supervisor, duty officer) of return (as per task plan) including any incidents • Ensure path clear prior to vehicle movements. • Drive slowly. • Position trailer correctly to retrieve vessel • Secure vessel to trailer before removal from water. • Disinfect/clean vessel to maintain biosecurity and health/safety requirements eg oil contamination cleaned from vessel. Refer to relevant chemical SDSs • Debrief crew/passengers 	<p>Vessel master/skipper</p> <p>Crew/passenger</p>	L

OTHER JOB REQUIREMENTS

List staff skills/competencies and licences required for safe job performance:

- Drivers licence (vehicle operator) – suitable for towing trailers
- Experience launching & retrieving vessels
- Experience working on-board vessels
- Master - boat handling skills; boating licence/waterways certificate of competency (i.e. coxswains, master V) according to the size and type of vessel and the waters the vessel is operating in.
- First aid certification

List items of plant/equipment/tools required:

- Vessel & trailer, winch handle, jockey wheel
- First aid kit
- Tools; safety equipment appropriate to vessel, location & personnel numbers including PFD, wet weather gear, deck pants. Note PFD (lifejacket) are to be selected for buoyancy requirements of activity & conditions
- If travelling or working in open waters then staff need to carry a personal EPIRB
- Equipment required for task/s carried out on-board vessel
- Vessels fitted with all safety equipment appropriate for their survey class & the number of personnel aboard

Relevant codes of practice, legislation standards or critical risk controls that may be applicable:

- [Roads & Maritime Boating Handbook](#)
Critical risk control – Working on watercraft

Maintenance checks, site/workplace inspections required:

- Vessel inspection pre & post field trip
Regular vessel maintenance

Additional approvals, certificates, WorkCover approvals/permits required e.g. confined spaces, working at heights, hot works etc:

- Boat & trailer registration
- Ensure vessel has appropriate survey plate attached (commercial vessels only)

Has a risk assessment been completed for any work involving confined spaces, electrical work or diving work Yes No N/A

APPROVAL (Officer, Manager, Supervisor i.e. person responsible for ensuring compliance with SWMS)

Name: State Emergency Coordinator

Signature: *S Oliver*

Date: 1 February 2018

I have read and understood this safe work method statement (attach a separate sheet if required)

NAME	SIGNATURE	DATE