BoatSafe PWCL Competency Standard

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Introduction

The *BoatSafe PWCL Competency Standard* outlines the additional skills and knowledge required to operate a Personal Watercraft (PWC) in Queensland.

The standard quantifies what a licence candidate must be able to do and how well it must be done.

A BoatSafe Training Organisation (BTO) must comply with the *BoatSafe PWCL Competency Standard* when developing and delivering a BoatSafe course. A BTO must use the *BoatSafe PWCL Competency Standard* as a basis for developing a training program as required in the *BoatSafe Manual* and *BoatSafe Management Standard*. The training program developed by the BTO must be used by the endorsed BoatSafe Training Provider (BTP) when training and assessing a licence candidate who undertakes PWC training and assessment with a BTO.

This training program must be approved by Department of Transport and Main Roads (the department) before a BTO is approved to provide PWC training and assessment.

During the competency assessment, or a Recognition of Prior Learning (RPL) assessment, all of these competencies must be assessed.

The teaching and learning strategy will be a mixture of practical and theoretical learning. The licence candidate maybe undertaking the PWC course in conjunction with the BoatSafe course for an RMDL or subsequent to obtaining their RMDL. In either case the teaching and learning strategy and percentage of practical versus theoretical learning will differ.

Note: This unit may be taken as a single unit to qualify for a PWC licence (PWCL), or as part of the BoatSafe course to qualify for both a Recreational Marine Driver Licence (RMDL) and a PWCL.

Prerequisites for PWCL training and assessment

The participant must either:

a) Be the holder of a RMDL or its recognised equivalent in terms of Section 95 of the *Transport Operations (Marine Safety) Regulation 2016;*

b) Be deemed competent, in Units 1 to 5 of a BoatSafe course; or

c) Be able to demonstrate recent experience in the competencies of the BoatSafe competencies if an applicant is seeking RPL.

What are competency standards

Competency standards specify the level of knowledge and performance to be achieved by the licence candidate before they are deemed to be competent to operate a PWC. They define what knowledge is required and what manoeuvres need to be performed to be deemed competent.

PWC competency standards are based on a concept of:

- Application of the skills, knowledge and ability to perform the task
- Responding and reacting appropriately to the unexpected
- Fulfilling the standard in the practical assessment.

When assessing the licence candidate, the BTP will use the *PWC Consistent Assessment Process* (CAP). Each licence candidate must have a completed CAP Assessment Record.

1. Unit 1 – Equipment and preparing for activity

1.1 Learning outcomes

At the completion of this unit, the learner will be able to:

- Understand the important aspects of safety equipment and maintenance.
- Understand the law as it relates to carrying safety equipment and legal requirements.
- Ensure the PWC is seaworthy and suitably equipped for a trip.

1.2 Assessment criteria

1. Select equipment and prepare for activity	
1.1	Identify and describe the main parts of a PWC and its equipment using correct terminology.
1.2	Safety equipment is worn/carried in accordance with legislation: • Demonstrate knowledge of the type of lifejacket to be worn based on the types of water areas. • Indicate why a lifejacket level 100, 150 or 275 cannot be worn. • State the safety equipment for smooth, partially smooth and beyond partially smooth waters and night operations.
1.3	Test equipment for correct operation (e.g. throttle, steering and drain plugs, navigation lights (as required), fuel leaks, all compartments are sealed and seats are locked down).
1.4	Perform pre-launch checks and brief passengers (drain plugs secured, safety lanyard attached with wrist strap, correct lifejackets are available and passengers are briefed on safety requirements).
1.5	Refuelling procedures.
1.6	Launching and retrieval, boat ramp etiquette and courtesy.
1.7	State local area requirements.
1.8	Identify what the main causes of on water breakdown are and how to prevent them occurring
1.9	Display registration numbers and label in accordance with the regulations.
1.10	Understand the licencing requirements to operate a PWC.

1.3 Teaching and learning strategy

This unit is concerned with the safety aspects of the PWC that should be considered before undertaking the activity. These elements are essentially about the equipment you need to take, the legislation that covers the equipment and the master's obligations and the seaworthiness of the PWC.

The consequences of not being prepared should be stressed and reference should be made to real life tragedies and incidents to reinforce the theme.

Any equipment demonstrated in the theory component should be reinforced by viewing the same equipment and its placement on the PWC. This will contextualise the theory and increase the apparent relevance of the material. A discussion prior to commencement of the practical assessment relating to this unit is required.

1.4 Resource requirements

The following minimum teaching resources must be available:

- Lifejackets for smooth, partially smooth and open waters
- EPIRB (Emergency Position Indicating Radio Beacon) (dummy unit is acceptable)
- Flares: red, orange and rocket (dummy units are acceptable)
- V-sheet
- Illustrations of other forms of safety equipment
- General illustrations of faults and instances of unseaworthiness.

1.5 Assessment strategy

This unit is assessed by written assessment using the PWC Common Assessment Tool (CAT) (i.e. BoatSafe Assessment sheets provided by the department.

2. Unit 2 – Legislative requirements

2.1 Learning outcomes

At the completion of this unit, the learner will be able to:

- Apply the COLREGS to ensure safe navigation.
- Understand the IALA buoyage system 'A' and use aids to navigation not covered by IALA
- Understand the obligations of operating a PWC responsibly.
- Know the legal requirements in regards to the use of alcohol and drugs.

2.2 Assessment criteria

1. Demonstrate knowledge of legislative requirements	
1.1	Compliance with relevant regulations is demonstrated in relation to: • International Regulations for Preventing Collisions at Sea (COLREGS) • *Transport Operations (Marine Safety) Regulation 2016* • Any local waterways management plan/s • Any other regulatory restrictions on PWC operations, such as exclusion zones.
1.2	Responsibility for reporting marine incidents as set out in terms of the *Transport Operations (Marine Safety) Act 1994.*
1.3	Provisions of the *Transport Operations (Road Use Management) Act 1995*, relating to drug and alcohol use, are clearly defined.
1.4	Knowledge of the following (as a minimum): • Lateral and cardinal marks • Isolated danger marks • Safe water marks • Blue middle channel marks

1. Demonstrate knowledge of legislative requirements	
	• Lead marks • Special marks • Speed signs • Cable crossings • Measuring distance • 'Distance off' requirements for people, shoreline, infrastructure, moored vessels, boundaries of bathing reserves and other vessels.
1.5	Knowledge and understanding of behaviours and characteristics which are annoying to others and those characteristics which demonstrate responsible use of a PWC.
1.6	Knowledge and understanding of general safety obligations when operating a PWC when wave jumping.

2.3 Teaching and learning strategy

This unit relates to the safe operation of a PWC. To operate a PWC safely the 'rules of the road' need to be known and understood. While these are largely based on common sense, the buoyage system is counter-intuitive requiring a person to apparently drive on the wrong side of the road. This needs to be stressed during the learning process.

The content is directly relevant to PWC operation.

Models and photographs of buoys and beacons are invaluable aids and can effectively be used to present the reality of navigational marks to the learner.

2.4 Resource requirements

The following minimum teaching resources must be available:

- MSQ charts that show navigational buoys and beacons
- Slides or pictures of actual buoys and beacons
- Models of PWCs or objects to demonstrate COLREG requirements.

2.5 Assessment strategy

This unit is assessed by written assessment using the PWC CAT.

3. Unit 3 – Manoeuvring

All candidates must undertake a practical assessment of proficiency.

BTPs are able to conduct the practical training and assessment from either their commercially certified vessel or PWC or on board the PWC with the licence candidate. Refer to section 9 of the *BoatSafe Manual*.

3.1 Learning outcomes

This BoatSafe unit deals with the knowledge and skills required to manage the safe operation of a personal watercraft (PWC), or 'jet ski', and to anticipate, prepare for and react appropriately to changed conditions.

At the completion of this unit, the learner will be able to:

- Start a PWC correctly
- Operate a PWC in favourable conditions
- Operate a PWC in adverse conditions
- Exercise seamanship
- Apply emergency procedures

3.2 Assessment criteria

1. Start a PWC correctly	
1.1	Demonstrate and understand the controls of the PWC
1.2	Start engine in accordance with manufacturer's instructions and maintain control.
1.3	Assess, interpret and plan for prevailing conditions.
1.4	Ensure sufficient depth of water to prevent engine damage from sand (e.g. not less than 600mm).
1.5	Test cut off switch to ensure it is working.

2. Operate a PWC in favourable conditions	
2.1	Effect a smooth departure from ramp/jetty, maintain control and demonstrate collision avoidance requirements.
2.2	Demonstrate ability to manoeuvre a PWC smoothly while operating at various speeds, including turns to port and starboard.
2.3	Demonstrate ability to perform a figure 8 Manoeuvre.
2.4	Demonstrate knowledge of the different handling properties of a PWC (e.g. loss of steerage when power is taken off and turning at high speed).
2.5	Demonstrate ability to bring a PWC alongside a floating object.
2.6	Demonstrate ability to bring a PWC alongside a fixed platform, if practicable.
2.7	Assessment of wind conditions, wave and current to determine the most favourable approach.
2.8	Demonstrated ability to adequately determine a distance of thirty (30) and sixty (60) metres.
2.9	Demonstrated ability to adequately determine a speed of six (6) and ten (10) knots.
2.10	Maintain situational awareness, safe speed and lookout.
2.11	Monitors water depth during operation
2.12	Can describe the procedure to swap seats with a passenger while on the water and when not safe to do so.

3. Operate a PWC in adverse conditions	
3.1	PWC is controlled in confined waters and collision avoidance requirements are demonstrated.
3.2	PWC is controlled through the wash of another vessel.
3.3	Techniques for manoeuvring and controlling a PWC in adverse conditions are demonstrated.
3.4	Passenger safety is considered at all times.

Adverse conditions may need to be simulated by using any available environmental conditions or by manufacturing the conditions.

4. Exercise seamanship	
4.1	PWC is operated within the manufacturer's limitations.
4.2	Local noise abatement requirements are observed.
4.3	Allowance is made for water traffic conditions.
4.4	Right of way procedures are followed.
4.5	Proper lookout is maintained during manoeuvres.
4.6	Fuel and speed status is monitored.
4.7	Weather conditions are monitored and responded to accordingly.
4.8	Contingencies are anticipated.
4.9	Situational awareness is maintained.
4.10	Passenger safety is maintained.

Weather conditions may need to be simulated by using any available environmental conditions or by manufacturing the conditions.

5. Apply emergency procedures	
5.1	Potential hazards which could lead to emergencies are identified.
5.2	Corrective procedures for potential and identified hazards are implemented.
5.3	Knowledge of proper righting procedures for a capsized PWC is understood.
5.4	Understands the importance of keeping the pump intake clear of obstructions. .
5.5	The learner is able to stop and dismount the PWC.

3.3 Teaching and learning strategy

The practical assessment concerns the physical control of the PWC. It requires the candidate to practice those things most necessary when in command of a PWC.

3.1 The instructor is to demonstrate all tasks first with an explanation as to why a task is done in a particular way. An example: 'reverse lever on some makes and models should not be engaged while the PWC is moving forward to prevent damage to the reverse bucket and costly repairs'.

3.2 Candidates learn in a variety of ways which include doing it themselves and observing others doing it. Both these forms of learning are important in PWC handling.

3.3 After being shown how to do the task, the candidate is able to satisfactorily demonstrate the task a minimum of two times before then watching other candidates (if available) do the same thing.

3.4 Tasks should be sequenced so that easier ones precede more difficult ones. This will build the confidence of the candidate and give them a better foundation for the more difficult skills.

Note: In addition to the usual instruction on the COLREGS, it is important to emphasise that the additional speed of the PWC considerably reduces the time in which assessment of risk of collision can be made and evasive action can be taken. Therefore, the need for increased situational awareness and forward thinking is critical.

3.4 PWC practical assessment time frames

There are guideline time frames for the practical assessment which must be adhered to. These times are guidelines and it is expected that practical delivery and assessment may take longer to determine a candidate's competency. These time frames are contained in the *BoatSafe Management Standard*.

4. Resource requirements

The assessment environment may include the following resources or conditions:

- Varying tidal conditions
- Confined or open waters
- Various weather conditions
- Suitable training environment (theory)
- Relevant rules and regulations
- Varying tidal conditions
- Navigation lights and markers
- EPIRBs
- Ramps, fixed platforms and/or moorings.

Sources of information may include:

- Small Ships Manual
- Guide to Recreational Boating and Fishing Handbook (current edition)
- Weather and tide information
- Manufacturer's manuals and handbooks.

Regulations/legislation referred to may include, but are not limited to:

- *Transport Operations (Marine Safety) Act 1994*
- *Transport Operations (Marine Safety) Regulation 2016*
- *International Regulations for Preventing Collisions at Sea (COLREGS)*
- Local noise abatement or nuisance regulations/by-laws
- Local waterways management plans.

5. Assessment strategy

Assessment must confirm that the specified performances can be repeated to show competency of underpinning knowledge and skills under operating conditions. Application of skills and knowledge must include maritime knowledge and any applicable legislation.

Oral and/or written assessment on aspects of underpinning knowledge not involving competency of actual operation may be considered.

Assessment should confirm knowledge of emergency procedures (determined by questioning or observation of application). The licence candidate will need to successfully complete the department's applicable CAT.

Assessment should also confirm knowledge of (determined through questioning or observation of application):

- Types of lifejackets and their application to PWC operation
- Equipment maintenance
- Safety equipment required for PWCs
- Relevant marine regulations and rules
- Emergency procedures applicable to a PWC
- Local boating conditions
- Weather information sources
- Interpretation of tide charts
- Operating procedures relevant to a PWC
- Recovery procedures for an overturned PWC (certain PWC should only be righted by rolling the correct way, i.e. left to right).

Demonstrated knowledge of difference in handling properties of a PWC to other vessels.

6. Assessment requirements

5.1 The BTO is required to only use the department's applicable PWC CAT.

5.2 All assessment instruments for each course must be retained. This may be electronic but needs to be easily retrievable to be able to be produced upon request.

5.3 All candidates must undertake a practical assessment of proficiency. This must be conducted as per the CAP to ensure learners are consistently assessed. The CAP must be signed by the licence candidate and the BTP who conducted the training and assessment.

5.4 BTOs must ensure that all candidates undertake PWCL BoatSafe training on either a commercially certified vessel, appropriate for training for a recreational licence (for example a vessel with a Certificate of Operation for a Class 2E) *or* a recreationally registered PWC provided by the candidate.

5.5 At the completion of training and assessment, candidates must be provided with a course evaluation form and given the opportunity to provide feedback about the conduct of training and assessment to the BTP and BTO.

5.6 At the completion of training and assessment, candidates must also complete, sign and date, the PWCL Practical Assessment form to confirm that they have been given sufficient opportunity to practice the required tasks and demonstrate proficiency. This form is to be retained by the BTO with the candidates training records.

7. Alternative training delivery

The department will consider alternative training tools or methods such as on-line delivery, for the theory components of the *BoatSafe RMDL Competency Standard* and the *BoatSafe PWCL Competency Standard*.

Such alternative tools or methods must be approved by the department prior to its use. In approving an on-line or alternative training delivery package, the department would expect the package to deliver an equal or greater quality training experience than that offered through a face to face training environment.

For further information see section 11 of the *BoatSafe Manual*.

If for example on-line delivery is used, minimum training times will be replaced by the appropriate time it takes to complete the on-line training tool.

If an alternative training delivery strategy is approved by the department, the BTO will still be required to conduct a written assessment of the candidate using the PWC CAT.