

Code of Practice

for duty holders who manage boating activity events



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Preamble

- 1 Section 25A of the *Marine Safety Act 2010* (Vic) (**the Act**) imposes a duty on employers and self-employed persons (**duty holders**) who manage boating activity events to, so far as is reasonably practicable, ensure the safety of participants in the boating activity event or persons affected by the boating activity event (**Boating Event Safety Duty**). Failure to comply with this duty is an indictable offence subject to significant penalties.
- 2 This Code of Practice for duty holders who manage boating activity events (the **Code**) provides guidance for a duty holder to review and assess their level of compliance with the Boating Event Safety Duty. The Code recommends duty holders adopt a risk management approach and sets out a step-by-step process to follow.
- 3 The key steps are:
 - a. applying a risk management approach to the planning, preparation and operation of boating events;
 - b. developing a boating activity event safety plan to document and communicate the risk management process, and the resulting risk control measures; and
 - c. adhering to the boating activity event safety plan.
- 4 This Code is made under section 272 of the Act and approved by the Minister for Fishing and Boating, the Hon Jaala Pulford MP.

1. Overview of the Code

Background

- 5 Section 25A of the Act aims to improve safety outcomes at boating events in Victoria. New safety laws were introduced in 2017 in response to several incidents that occurred on State waters where safety of participants and others was compromised.
- 6 Duty holders who manage boating activity events are best placed to identify hazards and control the risks that may arise in the course of an event. The Boating Event Safety Duty seeks to assign the obligation to ensure the safety of such events, and the burden of associated costs, to the appropriate person.

Purpose of the Code

- 7 The purpose of the Code is to provide practical guidance on how to meet the requirements of the Boating Event Safety Duty.
- 8 While guidance provided in the Code is not mandatory, a person is taken to have complied with a duty or obligation under the Act, or regulations made under the Act, if the obligation is provided for in the Code and the person complies with the Code (section 299 of the Act).

Structure of the Code

- 9 The Code is made up of ten sections. It recommends employing a risk management process to aid a duty holder in working through their safety obligation, documenting their actions and implementing and reviewing risk controls.
 - Section 1: Overview of the Code
 - Section 2: Duty to ensure the safety of boating activity events
 - Section 3: What is a boating activity event and who is a duty holder?
 - Section 4: The concept of ensuring safety under the Act
 - Section 5: Applying a safety risk management approach
 - Section 6: Consideration of hazards and risks
 - Section 7: The boating activity event safety plan
 - Section 8: Worked examples
 - Section 9: Further reading
 - Section 10: Example hazard and risk checklists

2. Duty to ensure the safety of boating activity events

- 10 The Boating Event Safety Duty requires a duty holder who manages a boating activity event (**Boating Activity Event**) to ensure, so far as is reasonably practicable, the safety of participants in the boating activity event, or persons affected by the event.
- 11 A duty holder 'manages' a Boating Activity Event if that duty holder organises, facilitates or controls the event.
- 12 The Boating Event Safety Duty applies irrespective of whether a duty holder, who manages the boating activity event, has applied for or obtained an exemption, or the establishment of an exclusion zone under Part 5.3 of the Act.
- 13 Failure to adequately address the safety duties may result in high penalties.

25A Duty of a person who manages a boating activity event to ensure safety of participants and other affected persons

(1) A duty holder who manages a boating activity event must, so far as is reasonably practicable, ensure the safety of participants in the boating activity event or persons affected by the boating activity event.

Penalty: In the case of a natural person, 1800 penalty units;

In the case of a body corporate, 9000 penalty units.

(2) An offence against subsection (1) is an indictable offence.

(3) Without limiting subsection (1), a duty holder contravenes that subsection if the duty holder fails to do any of the following—

(a) provide, so far as is reasonably practicable, participants with information to enable those participants to participate in the boating activity event safely;

(b) comply, so far as is reasonably practicable, with accepted safety standards or manuals that are specific to the type of boating activity event being undertaken;

(c) ensure, so far as is reasonably practicable, that rescue and first aid capabilities or services are available to participants in boating activity events.

3. What is a boating activity event and who is a duty holder?

What is a boating activity event?

- 14 A *Boating Activity Event* is defined as an event on State waters that directly or indirectly involves vessel operations.¹
- 15 Section 25A(a) of the Act provides the following examples of the kinds of activities that may be a Boating Activity Event:
- a. a boat race (e.g. a personal watercraft or paddling race)
 - b. open-water swimming race (e.g. the swim leg of a triathlon)
 - c. water sports competition or exhibition (e.g. a water skiing competition)
 - d. filming a promotional event (e.g. for a television program which includes a boating demonstration)
 - e. school kayak excursion.

What is not a boating activity event?

- 16 The following activities are expressly excluded from the definition of a ***Boating Activity Event***:²
- a. a pyrotechnic display or show on State waters (e.g. New Year's Eve fireworks being launched from a barge on the Yarra River); or
 - b. groups of people cruising together in vessels on State waters in an informal manner (e.g. a group of friends going sailing).
- 17 In addition, the following activities are not considered by Maritime Safety Victoria (**MSV**) to be a Boating Activity Event:
- a. a retailer taking a prospective buyer for an on-water demonstration of a vessel
 - b. a private charter (e.g. fishing or diving)
 - c. a function on a floating restaurant.
- 18 Persons responsible for these activities should be aware that they may still be subject to safety duties under other legislation, including the *Marine Safety (Domestic Commercial Vessel) National Law* and the *Occupational Health and Safety Act 2004* (Vic) (**OHS Act**).

Scale of boating activity event

- 19 A Boating Activity Event may involve one or many vessels.
- 20 Operating a vessel in the normal course of operation is not captured by the section 25A safety duty, as it is not an 'event'. Operating a vessel in the normal course of operation could include the day-to-day operations of a floating restaurant, ferry services, a travel business that uses a sea plane, or a jet ski hire company. Operating a vessel for non-commercial recreational activities is also unlikely to constitute a boating activity event in most cases.
- 21 The operation of a vessel does not need to be the main purpose of an event for it to be considered a Boating Activity Event attracting a Boating Event Safety Duty. For example, operating a vessel for a

¹ Section 25A(5)(a) *Marine Safety Act 2010* (Vic)

² Section 25A(5)(b), *Marine Safety Act 2010* (Vic).

boat stunt in the course of filming would create a boating activity event, despite the main purpose of the event being to film a movie rather than operate a vessel.

- 22 The operation of a single vessel for a promotional activity may also attract the duty under section 25A.

Example

A company, which is an employer, hires out luxury yachts in the ordinary course of its business. A business, which is also an employer, hires a luxury yacht from that company for a product launch party. The product launch party is a boating activity event for the purpose of section 25A as it directly involves the operation of a vessel. Any person that is a duty holder (an employer or self-employed person) that manages the event has safety duties under section 25A. There may be several duty holders depending on the degree of management each person has over the product launch party.

Scope of boating activity event

Duration

- 23 The purpose of the imposition of the Boating Event Safety Duty is to ensure responsibility and costs for safety lie with the appropriate person(s) so far as is reasonably practicable. A broad approach is taken in determining the scope of a boating activity event to give effect to this, as risks to the safety of participants or others affected by a boating activity event may occur at any stage of an event, from training, practice, bump in, the main event and bump out.
- 24 Training or practice activities may also constitute a Boating Activity Event (or part of) where those activities are part of, or undertaken to prepare for, an event. For example, a duty holder may organise, facilitate or control pre-event training for performers or participants, or practice runs of a race course.
- 25 Where activities are undertaken to prepare for the main part of a Boating Activity Event, the Boating Event Safety Duty applies and duty holders who manage those activities need to ensure that they implement appropriate safety strategies to eliminate or reduce risks to participants, and others affected by the activities, so far as is reasonably practicable.

Activities on and off the water

- 26 A Boating Activity Event's scope will vary according to the particular circumstances.
- 27 The definition of **boating activity event** requires that the event be 'on State waters'. However, an event on State waters may affect persons on land, and the duty to ensure the safety of participants, or persons affected by the boating activity event, is not limited to their safety whilst those persons are on State waters. There must be some link between the event on State waters and the risks arising to participants or affected persons on land for the Boating Event Safety Duty to apply and require consideration and control of those risks.
- 28 For example, there will likely be safety risks to participants, event staff or volunteers of a rowing event in the course of loading and unloading rowing boats into the water. This activity forms part of the boating activity event as it is undertaken in the course of setting up for the race, and so a duty holder must manage the risks so far as is reasonably practicable. The degree to which a duty holder has control over how participants manage their set up will vary according to the nature of the event. In this example, a duty holder could meet their obligation by ensuring participants have information regarding the safe handling of rowing boats.
- 29 Some risks that may arise in relation to spectators may be unrelated to the boating activity event. For example, boat races may attract spectators that can view the event on land from a considerable

distance and are not subject to any terms or conditions of entry to an event. Some risks to such spectators may not be related to the boating activity event, and so are not the responsibility of a duty holder to control under section 25A. For example, excessive alcohol use by spectators on public land may not be caused by the event itself.

Who does the Code apply to?

- 30 The Code applies to any duty holder who manages a boating activity event. A duty holder is taken to manage a boating activity event if they organise, facilitate or control the event.
- 31 Duty holders can include individuals, corporations, government entities or volunteer organisations who are employers.
- 32 Depending on the circumstances, there may be more than one duty holder for a boating activity event.

Example

As an example, a retail company, which has several employees, may engage a self-employed event manager to run a boating activity event which that company is sponsoring. The company retains overall control of the event but contracts the event manager for practical arrangements. Both the company and the event managers are duty holders for the purposes of that event.

- 33 It is fundamental to the definition of 'duty holder' in section 25A that a person is either self-employed or an employer. An organisation made up entirely of volunteers, that only enters into contracts for service, is not an employer or a self-employed person, and so is not subject to section 25A of the Act. Volunteer organisations may have a variety of contracts for service with businesses and professionals, such as cleaners and accountants. It is the responsibility of organisations to determine whether they are an employer under the OHS Act definition.
- 34 It is important to note that volunteers and employees of duty holders are not taken to be managing the event themselves and are not subject to the Boating Event Safety Duty.
- 35 Duty holders should be aware of other obligations they may have under marine safety legislation, for example Harbour Masters' Directions in port waters³ or local waterway rules.⁴
- 36 Duty holders may also have obligations under the *Marine Safety (Domestic Commercial Vessels) National Law* and the OHS Act, which prevail over the Act to the extent of any inconsistency.⁵

Parties not directly involved in managing the boating activity event

- 37 The safety duty is best complied with by those persons who have direct responsibility for, and influence in the direction and conduct of the Boating Activity Event. Depending on the circumstances, a person may not be a duty holder despite exerting some control or management over an aspect of a Boating Activity Event. For example:
 - a. Waterway managers may facilitate, in a broad sense, a boating activity event in the course of performing their functions under Part 5.3 of the Act but are not considered Boating Event Duty Holders when performing these functions.⁶

³ <https://transportsafety.vic.gov.au/maritime-safety/recreational-vessel-operators/powerboat/safe-operation/operating-rules/transit-zones-and-shipping-channels>

⁴ <https://transportsafety.vic.gov.au/maritime-safety/recreational-vessel-operators/powerboat/safe-operation/operating-rules/waterway-rules>

⁵ sections 9(2) and 11(2), *Marine Safety Act 2010* (Vic)

- b. Boating peak bodies or associations could be considered facilitators of a Boating Activity Event conducted by their affiliated clubs. For example, where a club conducts an event under the rules, standards or guidelines established by the peak body. However, without direct involvement in the Boating Activity Event, the peak body will generally not be considered to be a duty holder in this scenario.⁷

Who does a duty holder owe a duty of safety to?

- 38 A duty holder owes a duty of safety to 'participants in the boating activity event or persons affected by the boating activity event'.
- 39 Persons affected by a Boating Activity Event may include spectators, race officials or other staff, volunteers, other users of the waterway and passers-by at the event. The duty holder needs to consider who are the participants and who else may be affected by the event, to accurately determine what risks and hazards are associated with the event and appropriate control measures.
- 40 Section 25A of the Act defines **boating activity event** and **duty holder** as below:

boating activity event—

- (a) means an event on State waters that directly or indirectly involves vessel operations⁸; and

Examples

Boat race, open water swimming race, water sports competition or exhibition, filming a promotional event, school kayak excursion.

- (b) does not include—

- (i) a pyrotechnic display or show on State waters; or
- (ii) groups of people cruising together in vessels on State waters in an informal manner;

duty holder means an employer or self-employed person (within the meaning of the **Occupational Health and Safety Act 2004**) but does not include—

- (a) an employee (within the meaning of that Act) of a duty holder who manages a boating activity event; or
- (b) a volunteer (within the meaning of that Act).

- 41 The OHS Act defines **employer** and **self-employed person** as below:

employer means a person who employs one or more persons under contracts of employment or contracts of training;

self-employed person means a person, other than an employer, who works for gain or reward otherwise than under a contract of employment or training.

⁶ Waterway managers may consider adding a statement to application forms for a boating activity exemption, exclusion zone application or any other documentation in relation to on water events, advising that the managers of some events may be under a safety duty, if they are a duty holder.

⁷ However, it is recommended that associations and peak bodies that provide rules, standards or guidelines related to boating activity events ensure that such documents are up-to-date and consistent with the law, to assist members in identifying and complying with their duties.

⁸ Section 3(1) of the Act defines vessel operations as operating a vessel, or the actions of a pilot when the pilot has conduct of a vessel, including the navigation of the vessel.

4. The concept of ensuring safety under the Act

Ensuring safety

- 42 The Boating Event Safety Duty is based on an objective of ensuring safety by eliminating risks to safety so far as is reasonably practicable. In order to determine what safety measures are reasonably practicable, section 23(2) of the Act provides a list of the matters that must be considered by duty holders.

23 The concept of ensuring safety

- (1) To avoid doubt, a duty imposed on a person under this Act or the regulations to ensure, so far as is reasonably practicable, safety requires the person to—
- (a) eliminate risks to safety so far as is reasonably practicable; and
 - (b) if it is not reasonably practicable to eliminate risks to safety, to reduce those risks so far as is reasonably practicable.
- (2) To avoid doubt, [...] regard must be had to the following matters in determining what is (or was at a particular time) reasonably practicable in relation to ensuring safety —
- (a) the likelihood of the hazard or risk concerned eventuating;
 - (b) the degree of harm that would result if the hazard or risk eventuated;
 - (c) what the person concerned knows, or ought reasonably to know, about the hazard or risk and any ways of eliminating or reducing the hazard or risk;
 - (d) the availability and suitability of ways to eliminate or reduce the hazard or risk;
 - (e) the cost of eliminating or reducing the hazard or risk.

- 43 Determining what is 'reasonably practicable' is an objective assessment of what a reasonable person would do in the duty holder's position. A reasonable standard requires that the duty holder is:
- a. committed to providing the highest level of protection for people against risks to their health and safety; and
 - b. proactive in taking measures to protect the health and safety of people.
- 44 The best way to accurately assess potential risks associated with a Boating Activity Event is to apply a structured risk management process.

Safety risk management overview

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graph TD; C[Communicate and consult] <--> I[Identify the risks]; C <--> A[Conduct a risk assessment]; C <--> I2[Implement controls]; I <--> M[Monitor and review]; A <--> M; I2 <--> M; I --> A; A --> I2; I2 --> I;
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49 Four key steps should be undertaken sequentially as part of an effective risk management process:  
identifying risk, undertaking a risk assessment (including risk identification, risk analysis and risk  
evaluation), implementing risk controls, and monitoring and review.

- 50 Consultation with stakeholders should occur at each stage of the risk management process. Staff, volunteers, contractors (e.g. event managers), industry associations, safety regulators, and potential participants may all have valuable insights into risks and reasonably practicable controls for an event.
- 51 Duty holders should liaise with the relevant waterway manager when planning their event to find out what risk mitigation measures managers of similar events have put in place.
- 52 Effective risk management is responsive to changing conditions. Monitoring and review of risks and controls leading up to, and during the event will help duty holders ensure the safety of participants and persons affected by the event so far as is reasonably practicable.

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## 6. Consideration of hazards and risks

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- 53 Duty holders must consider each of the items specified in section 23(2) of the Act as follows to determine what measures are able to ensure safety, to the extent reasonably practicable, during a Boating Activity Event.

### ***Identify hazards and risks associated with the boating activity event***

- 54 The Boating Event Safety Duty is not limited to hazards and risks that occur on the water. A duty holder needs to identify all hazards and risks associated with the event. For example, risks to the safety of spectators on-shore.
- 55 A hazard or risk may occur at any time during the event, including during set up.

### ***The likelihood of the hazard or risk eventuating***

- 56 Duty holders should assign higher significance to hazards and risks that are more likely to occur. Duty holders should note this in their boating activity event safety plan.

### ***The degree of harm that would result if the hazard or risk eventuated***

- 57 When assessing potential hazards and risks, duty holders should assign greater significance to the hazards and risks that could result in greater levels of harm.
- 58 Some risks may have a low chance of occurring but have extreme consequences. For example, it may be very unlikely that a high-powered boat will crash into spectators during a demonstration, but the consequences of such a risk occurring could be extreme (multiple injuries, possible fatalities). A risk matrix assessment can help duty holders weigh up risks and consequences when determining which risks and hazards need to be prioritised and what degree of control is reasonably practicable.

### ***What the person concerned knows, or ought reasonably to know, about the hazard or risk and any ways of eliminating or reducing the hazard or risk***

- 59 Duty holders must demonstrate that they understand the likelihood of any hazards or risks occurring, and how the hazard or risk can be eliminated or reduced. This should be documented in the boating activity event safety plan.

### ***The availability and suitability of ways to eliminate or reduce the hazard or risk***

- 60 A means of eliminating or reducing a hazard or risk is considered available if it can be sourced in Australia.
- 61 Finding a way to eliminate or reduce a hazard or risk may be reasonably practicable if:
- it is feasible to implement;
  - it is effective in eliminating or reducing the likelihood or degree of harm so far as is reasonably practicable;
  - it does not introduce new and higher risks;
  - it is a practical measure having appropriate regard to the circumstances.
- 62 If it is not reasonably practicable to eliminate the hazard or risk, duty holders must consider all ways of reducing the risk, so far as is reasonably practicable.

- 63 A duty holder may need to use a combination of different controls to ensure a hazard or risk is reduced so far as is reasonably practicable.
- 64 In assessing risk controls, a duty holder should apply the hierarchy of risk controls. This hierarchy helps a duty holder determine which controls are the most effective at controlling risks. A duty holder should employ and rely on controls at the lower end of the hierarchy only if it is not reasonably practicable to use the higher order controls.

| <b>Hierarchy of risk controls</b>   |                                                                                                                                                                                                                                             |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Risk control</b>                 | <b>Boating activity event example</b>                                                                                                                                                                                                       |
| Elimination                         | <ul style="list-style-type: none"> <li>Cancel the event if the risk cannot be controlled (e.g. adverse weather conditions)</li> </ul>                                                                                                       |
| Isolation                           | <ul style="list-style-type: none"> <li>Set up an exclusion zone</li> <li>Spectator stands are a safe distance from high-powered vessels and fuelling stations, to manage risk of injuries to spectators in event of explosion</li> </ul>    |
| Substitution                        | <ul style="list-style-type: none"> <li>Move location of event</li> <li>Change the course</li> <li>Reduce the number of vessels</li> </ul>                                                                                                   |
| Engineering controls                | <ul style="list-style-type: none"> <li>Ensuring support vessels are adequate for the conditions on the course</li> <li>Require in-built safety features in vessel designs (e.g. a five point harness or fire smothering systems)</li> </ul> |
| Administrative controls             | <ul style="list-style-type: none"> <li>Breath testing masters of vessels</li> <li>Safety briefings</li> <li>Buoys used to mark race course to manage risk of participants getting lost and fatigued at sea</li> </ul>                       |
| PPE (personal protective equipment) | <ul style="list-style-type: none"> <li>Ocean swimmers required to wear wetsuits as part of event rules, to manage risk of hypothermia</li> <li>High visibility clothing for competitors and officials</li> <li>Tracking devices</li> </ul>  |

### ***The cost of eliminating or reducing the hazard or risk***

- 65 When determining the cost of eliminating a hazard or risk, there must always be a clear presumption in favour of safety.
- 66 Duty holders must understand the likelihood and degree of harm from a hazard or risk and the availability and suitability of relevant safety measures to eliminate or reduce the risk. They should then implement the measure unless the cost of doing so far outweighs the benefit and it would be clearly unreasonable to justify the expenditure.
- 67 When determining whether the level of expenditure is reasonable, duty holders must have regard to:

- a. the likelihood and degree of harm; and
- b. the reduction of the likelihood and/or degree of harm that will result if the control measure is adopted.

- 68 If the duty holder determines that a high degree of harm would result from a hazard or risk occurring, the duty holder would have to assess that the likelihood of the risk occurring is low, and the cost of implementing the control is disproportionately high to justify not implementing a suitable and appropriate risk control.
- 69 Duty holders should determine the question of what is reasonably practicable objectively, and not by reference to their capacity to pay. Duty holders should not continue with an event, which has a high likelihood of a hazard or risk or serious harm occurring, in cases where they cannot afford to implement reasonable or appropriate measures or controls.
- 70 In some cases the only acceptable control may cost more than a duty holder can afford. In that case, the duty holder should cancel the event or revise its scope to eliminate, or reduce to the extent reasonably practicable, the relevant risk.

### **Example of the risk management process: Kayaking event**

'Kayak Koalas', an adventure excursion company, decides to host an open-water long distance kayaking event off the Surf Coast. Kayak Koalas is an employer as defined by in the OHS Act and a duty holder.

Kayak Koalas identifies the risk of competitors getting into difficulty, because of fatigue, and determines the risk as being likely to occur. This risk should be given a high level of attention and care when determining risk mitigation.

If one or more competitors became fatigued and got into difficulty during the event, a high level of harm (i.e. serious injury or death to a competitor) could result.

Kayak Koalas, as the duty holder, can identify and apply risk control measures. While it may be impossible to completely eliminate the risk (unless the duty holder cancels the event), the risk can be minimised through various factors including:

- making rescue vessels available at the event;
- ensuring that competitors are experienced and physically competent to participate in the event;
- having policies in place in case of adverse weather conditions – for example moving the event to a more sheltered waterway or cancelling the event altogether.

After the duty holder has identified the risk control measures, it needs to assess their suitability for the event using step 4 of the risk management process. Only after this should Kayak Koalas consider the cost of the preferred risk control. If the manager of the event determines that the provision of rescue services covering the entire event will be too expensive, they have not managed the risk so far as is reasonably practicable. The duty holder would have to look at other controls, including conducting laps over a shorter distance, so that fewer rescue services would be required.



## 7. The boating activity event safety plan

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- 71 A boating activity event safety plan (**Safety Plan**) is a structured, detailed, comprehensive, written plan. It needs to be easily understood by all parties with a role in implementing it.
- 72 A duty holder may have general safety policies and plans in place. However, these alone may not be sufficient for the purposes of identifying, eliminating or reducing risks as far as is reasonably practicable for a particular Boating Activity Event– duty holders will need to consider local conditions and other circumstances unique to the event.
- 73 Duty holders are encouraged to prepare a safety plan ahead of each boating activity event. A safety plan should include the following information at a minimum:
- a. a detailed risk assessment which demonstrates that the duty holder has identified and attempted to eliminate hazards and risks so far as is reasonably practicable, or reduce the hazards and risks so far as is reasonably practicable if they cannot be eliminated;
  - b. a detailed communications plan which clearly sets out roles and responsibilities, how communications to participants will be managed, and how communications on the day of the event will be managed; and
  - c. an escalation plan which sets out procedures to be put in place in the event of an emergency.
- 74 All aspects of the safety plan should be reviewed and signed-off by the relevant parties to ensure that everyone is aware of their responsibilities on the day of the Boating Activity Event.
- 75 Duty holders should also review an event's safety plan in the week leading up to the event to ensure that it is still current. If any aspect of the safety plan has changed, duty holders should consider whether the scope of the event needs to change, and whether the event can still go ahead.
- 76 The cost of risk controls is a factor in any decision. However, an inability to pay for a measure to reduce risk is not a defence under the Act. If the cost of an effective control is prohibitive, that must be documented, along with alternative measures which were undertaken. Record any relevant assumptions, options, uncertainties and limitations. The safety plan must include how and why a safety decision was taken or not taken.
- 77 Duty holders should retain a copy of the safety plan for their records. A copy does not need to be forwarded to MSV, unless it is a required part of an application for a boating activity exemption.

### **Example of risk assessment: An open-water swimming club event**

Risk: The propellers of a support boat striking a participant.

Consequence: potential to cause serious injury, or death of the participant (e.g. by drowning).

Risk control options identified by the club:

- do not use support boats (elimination)
- replace current boats for boats without a propeller at a total cost of \$40,000 (substitution); or
- install propeller guards on current boats at a total cost of \$1,500 (isolation)
- impose a minimum distance between swimmers and support boats (administrative control)

The open-water swimming club is a not-for-profit club (who is an employer), with all funds contributing to maintain the building and facilities provided for members. There are two annual fundraising events and membership fees that generate \$3,000 annually for the club.

The elimination option creates new risks, as without support boats there are increased risks of injury or drowning if participants get into difficulties and cannot be rescued quickly.

The substitution option does not introduce new risks but has an extreme cost.

The isolation option is an acceptable cost and controls the risk. The club has discovered other clubs of a similar size have installed propeller guards to address this risk.

The administrative control is subject to human error, as swimmers may stray off course and operators may make an error in judgement regarding distance. It also creates a new risk that the support vessel is too far away to assist participants in the event they are in trouble, increasing the risk of injuries or drownings.

After weighing up the options, the club decides the propeller guards are the best option and reduce the identified risk as far as is reasonably practicable. They document the risk and control in their safety plan.

## 8. Worked examples

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- 78 The following examples show how a duty holder can work through a risk management process to discharge the Boating Event Safety Duty and ensure the safety of participants and other people affected by a Boating Activity Event so far as is reasonably practicable.

### Water ski race event

#### The event

- 79 The duty holder is conducting a water ski race event on a popular inland lake in Victoria. The event involves powerboats towing water-ski competitors at speed and features different races, including an event for junior competitors. The duty holder applies for an exclusion zone for the event, to prevent other waterway users from entering the race area.

#### Identifying risks

- 80 When planning for the event, the duty holder must identify and assess all the risks and hazards that may arise and note them in the safety plan. Potential hazards and risks include: hazards under the water; low water depth due to drought; inclement weather; the risk of collisions between competitors.
- 81 Risks and hazards with a higher risk of occurring will be given greater consideration during the identification process.

#### Eliminating or reducing the risks

- 82 Having identified the risks, duty holders will need to consider how each of the risks can be eliminated or reduced, so far as is reasonably practicable. There are many points to consider when reducing risk for a water ski race:
- a. Cancellation policy - the policy should include objective criteria for determining which weather conditions would require cancellation of the event, and how to communicate the cancellation to competitors prior to and during the event (e.g. social media, radio).
  - b. Conditions in the lake – are there any submerged objects that may pose a risk? If there has been low rainfall, is the depth of the lake sufficient to run this event? Other boaters use the lake and may increase the risk of collision if they come near the event. Therefore, an exclusion zone will reduce the risk of collision to competitors and other boaters.
  - c. Preparing a detailed escalation plan, clearly setting out actions to be taken in the case of an emergency during the event.
  - d. The need to change the scope of the event. For example, holding heats or staged time trials, if there are too many competitors for the size of the waterway.
  - e. Whether the vessel operators are qualified to drive powerboats in ski races – it may be necessary for them to be a member of a specific organisation, or to have undertaken club based training courses, and/or to provide proof of their qualifications.
  - f. Developing a detailed communications plan as part of the safety plan which:
    - i. defines the exact roles of all race officials and what each role does (flags, phone calls);
    - ii. lists who to contact and how (race officials, rescue);

- iii. explains radio use (for example, in an emergency, the radio channel may be limited to specific persons);
  - iv. specifies a method of calling off a race while it is in progress (flag, siren, lights);
  - v. outlines the back-up arrangements if one communication tool (i.e. radio) stops working.
- g. Periodically reviewing the safety plan leading up to the event – has anything changed, does the event need to be reviewed? Ensuring that all relevant persons sign-off on the safety plan on the day of the event.
  - h. The need for compulsory safety briefings for competitors, vessel operators and volunteers before the event. This might be done via the Notice of Race, if the event involves racing, as well as on the day of the event. These briefings will include information about what to do in an emergency.
  - i. Adequacy of the means of communicating with competitors, spectators, or those taking part in events. Duty holders may want to consider the use of email or alternative communication means, such as messaging apps to provide updates to competitors and those associated with the event.
  - j. Provision of adequate rescue services – if the duty holder cannot afford rescue vessels across the entire course, they may wish to consider other effective alternatives – for example fewer competitors, time trials, conducting laps across a shorter distance, seeking assistance from other clubs to provide rescue services.
  - k. Provision of adequate first aid and medical services – because of the nature of possible injuries from high-speed ski racing a paramedic is required to provide on water first aid. Is more than one paramedic required? If the duty holder cannot afford more than one paramedic, they may wish to consider having fewer participants in each race.
  - l. Giving all relevant persons a condensed copy of the safety plan on the day of the event (recommended to be no more than 2 sides of A4 paper) which lists the key steps to be followed.
  - m. Holding a post event review – what went well and what did not go so well? How can lessons learned inform safety and risk planning for the next event?

## **Open-water kayaking event**

### **The event**

- 83 A kayaking business is running an open-water kayaking event from Angelsea to Torquay. A boating activity exemption or exclusion zone is not necessary for the purposes of this event.

### **Identifying risks**

- 84 When planning the event, the duty holder will need to identify and assess all the risks and hazards that may arise and note these in the safety plan. Examples of risks include competitors becoming fatigued, inclement weather, and collisions between competitors, as well as other waterway users.
- 85 Risks and hazards with a higher risk of occurring (such as competitors becoming fatigued because of challenging weather conditions near the end of the event) will be given greater consideration during the identification process.

### **Eliminating or reducing the risks**

- 86 After identifying the risks, the duty holder will then need to consider how each of the risks can be either eliminated or reduced so far as is reasonably practicable. There are many points for the duty holder to consider to reduce risks, such as:
- a. Contacting the relevant waterway manager and other experts to see what risk mitigation measures persons organising similar events have put in place – is there something additional that should be in place for this event?
  - b. Informing services such as Lifesaving Victoria and the Coastguard – maybe consider paying a small fee for Lifesaving Victoria to have a rescue boat on standby.
  - c. Ensuring the competency of participants to compete – such as requiring them to be experienced kayakers, with proof they can swim in open-water conditions.
  - d. Giving each competitor a tracker equipped with a means of raising the alarm, so that competitors can be tracked during the event.
  - e. Checking the kayaks on the day of the event – are they fit for purpose? Are the lifejackets to be worn by competitors of a required standard?
  - f. Having a cancellation policy as part of the safety plan which specifies weather conditions that will trigger automatic cancellation of the event, including how to communicate cancellation of the event to competitors.
  - g. Changing the scope of the event – for example if there are high winds, it may be necessary to postpone commencement, cancel the event, or move it to a more sheltered area.
  - h. Holding compulsory safety briefings for competitors, vessel operators and volunteers on the day of the event, including information about what to do in an emergency.
  - i. Providing adequate rescue services – if it is not practicable to have rescue vessels across the entire course it may be necessary to consider alternatives – for example, rather than a point-to-point race, competitors could race laps over a shorter distance. The duty holder could also consider having different types of rescue vessels for different parts of the open-water course.
  - j. Holding a post event review – what went well and what did not go so well? How can lessons learned inform safety and risk planning for the next event?

## 9. Further reading

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[australianaas.org.au](http://australianaas.org.au) - information about severe weather definitions and planning

[transportsafety.vic.gov.au/msv/news](http://transportsafety.vic.gov.au/msv/news) - lessons learnt from Anglesea, angels of the sea

[bom.gov.au/marine/index.shtml](http://bom.gov.au/marine/index.shtml) - up-to-date maritime weather and wind forecasts

[bom.gov.au/marine/knowledge-centre/reference/resources.shtml](http://bom.gov.au/marine/knowledge-centre/reference/resources.shtml) - weather guide for marine outdoor activities

[worksafe.vic.gov.au](http://worksafe.vic.gov.au) - WorkSafe Victoria provides extensive guidance to employers and self-employed persons regarding occupational health and safety, including general guidance on risk management and assessment of risk controls.

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## 10. Example hazard and risk checklist

This checklist includes some common risks and hazards associated with undertaking Boating Activity Events. It may be used as a guide to assist duty holders to identify hazards and risks relevant to their events. However, each Boating Activity Event will likely have risks and hazards that are unique to that event. A duty holder may not discharge the Boating Event Safety Duty by only following this checklist.

| Hazard or risk                                                              | Addressed in safety plan? |
|-----------------------------------------------------------------------------|---------------------------|
| Risks in setting up (e.g. risk of crane collapse lowering boats into water) |                           |
| Adverse weather conditions, including sudden change in conditions           |                           |
| Submerged objects under water                                               |                           |
| Communication tools between participants and field officials fail           |                           |
| Depth of the body of water (e.g. lake, timing of high/low tides)            |                           |
| Other users of the body of water                                            |                           |
| Capsize                                                                     |                           |
| Person overboard                                                            |                           |
| Vessel operators not qualified for the vessels used in the event            |                           |
| Rescue boats fail without back up plan                                      |                           |
| Spectator hazards                                                           |                           |
| Unsafe vessels (e.g. risk of motor explosion, fuel leaks)                   |                           |
| Risk of collisions (e.g. with both participant and spectator vessels)       |                           |

### Planning checklist

Once a duty holder has identified and assessed hazards and risks associated with their Boating Activity Event, the following checklist may assist in planning for the elimination or reduction, so far as is reasonably practicable, of those risks and hazards. A duty holder may not discharge their Boating Event Safety Duty by only following this checklist.

| Action                                                                                                                                                                                           | Completed? |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Hazards and risks associated with the event identified and assessed                                                                                                                              |            |
| Controls identified to eliminate risks, so far as reasonably practicable                                                                                                                         |            |
| If risks remain, controls identified to reduce the risks so far as is reasonably practicable <ul style="list-style-type: none"><li>Including decision whether event can safely proceed</li></ul> |            |
| Safety Plan prepared <ul style="list-style-type: none"><li>Document decisions and actions to be taken</li></ul>                                                                                  |            |
| Safety controls in place prior to event                                                                                                                                                          |            |
| Provide, so far as is reasonably practicable, participants with information to enable them to participate in the boating activity event safely                                                   |            |

|                                                                                                                                                                                                                                                               |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Safety controls and safety plan assessed for compliance, so far as is reasonably practicable, with accepted safety standards or manuals that are specific to the type of boating activity event being undertaken                                              |  |
| Review the safety plan before the event: <ul style="list-style-type: none"> <li>• has anything changed?</li> <li>• does the event need to be reviewed?</li> <li>• have all relevant persons signed-off on the safety plan on the day of the event?</li> </ul> |  |
| Reliable means of communicating with participants, spectators, volunteers, staff                                                                                                                                                                              |  |
| Arrange safety briefings for participants, vessel operators, volunteers and staff before the event. <ul style="list-style-type: none"> <li>• include information about what to do in an emergency.</li> </ul>                                                 |  |
| Prepare a detailed escalation plan, clearly setting out actions to be taken in the case of an emergency during the event                                                                                                                                      |  |
| Provision of adequate rescue services                                                                                                                                                                                                                         |  |
| Provision of adequate first aid and medical services                                                                                                                                                                                                          |  |
| All relevant persons to have a condensed copy of the safety plan on the day of the event                                                                                                                                                                      |  |
| Post event review <ul style="list-style-type: none"> <li>• lessons learned to improve safety of the next event</li> <li>• if part of a network or association, share those lessons with other organisations</li> </ul>                                        |  |