Guide to burials at sea in New Zealand

JUNE 2018
Acknowledgements

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We are grateful to the Funeral Directors Association of New Zealand (FDANZ) for sharing their insights and expertise, and for their thoughtful contribution and peer review of this guidance.

The generosity of the families and funeral directors who allowed us to share the photos in this guide is also much appreciated.

Content warning

Some photographs in this document were taken during preparation for burial at sea, and contain content that may be disturbing to readers.
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Guide to burials at sea in New Zealand

When the ocean has played a special part in a person’s life or career, there may be a request for a burial at sea.

This guide covers the rules and the practical considerations for organising sea burials in New Zealand’s exclusive economic zone (EEZ). It gives information to help professionals in funeral direction and palliative care, and is also for family members considering this option.

New Zealand’s EEZ is the area of sea from 12 nautical miles to 200 nautical miles from the shore. The area of sea less than 12 nautical miles offshore is under the jurisdiction of regional councils, and is not covered by this guide.

This burial practice is legal in New Zealand, but please be aware that some ethnicities, particularly Māori, may have different spiritual, cultural and environmental views about this practice.

Figure 1  Authorised burial sites in New Zealand’s Exclusive Economic Zone (EEZ). See Table 1 for the exact coordinates for each location. Please note, the area shown by the location symbol is not to scale.
Māori concerns about burial at sea

Some iwi and Māori groups consider burials at sea as culturally inappropriate. The reason for this relates to two cultural principles: tapu and rāhui. Both of these principles come from the social order which guides the way that Māori interact with the natural world.

In this context, tapu means ‘to set apart’ and is about the separation between life and death. Hygiene is a key part of this separation. Someone who has passed away recently has a high level of tapu, as does the container they are buried in and the place where they are buried. Māori customs support this separation of life and death.

The entire sea is considered a source of food by Māori. The deliberate act of placing a tapu container into the food chain through a burial at sea is not considered by Māori to be appropriate or hygienic for the living, or respectful to the deceased. A rāhui may be placed as a way to manage resources when they are exposed to tapu. Rāhui is a form of tapu that restricts the use of food sources such as the land, sea and forests. In the context of the sea, rāhui would be a temporary ban on collecting food from, or visiting, an area until the tapu is dispersed. A rāhui might be established in an area for a while, for example, if someone drowned there.

From a non-Māori perspective, the nearest analogy could be that, for many people, food stored in the same mortuary fridge as the deceased would not be attractive to eat, nor would crops grown directly on top of a local grave. This discomfort arises from hygiene and/or spiritual concerns, depending on a person’s cultural background.
What are the rules for burials at sea?

The regulations for burials at sea in New Zealand were prepared following consultation with Māori and other interested parties. They allow these burials under certain circumstances. If you wish to perform a burial at sea within New Zealand’s EEZ, you need to follow the rules.

Please note, the scattering of ashes from human remains in the EEZ is not restricted by New Zealand law.

The five authorised burial sites

On land, people are usually buried in locations set aside for cemeteries. It’s a similar concept for the sea. If you plan a burial more than 12 nautical miles offshore, it must happen at one of five authorised places (see Table 1 and Figure 1). All five sites are in water deeper than 500 metres. They are not suitable for trawling activities and are clearly defined in maritime charts.

<table>
<thead>
<tr>
<th>Location</th>
<th>Coordinates</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>38 nautical miles northeast of Cape Brett</td>
<td>34°40’S 174°50’E</td>
</tr>
<tr>
<td>B</td>
<td>27 nautical miles east of Cuvier Island</td>
<td>36°28’S 176°20’E</td>
</tr>
<tr>
<td>C</td>
<td>30 nautical miles south of Wellington</td>
<td>41°44’S 175°01’E</td>
</tr>
<tr>
<td>D</td>
<td>55 nautical miles northeast of Lyttelton</td>
<td>43°15’S 174°00’E</td>
</tr>
<tr>
<td>E</td>
<td>25 nautical miles southeast of Otago Harbour</td>
<td>46°00’S 171°13’E</td>
</tr>
</tbody>
</table>

1 Burials at sea in this area are covered by the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (section 20J) and the Exclusive Economic Zone and Continental Shelf (Environmental Effects—Burial at Sea) Regulations 2015.

2 One nautical mile is about 1.8 kilometres.
What do I need to do?

Before a burial can take place in one of the five sites, you need to get confirmation from the EPA and provide details about the burial. This timeline shows what you need to do:

The funeral director, or person responsible for the burial, must send us:

- a copy of the doctor’s certificate (i.e. medical certificate cause of death) or coroner’s authorisation
- a proposal outlining where and how the burial would take place.

This proposal is an outline of your plans for the burial with details about how you will ensure (in the words of the regulations) that ‘the casket or container… will sink to the sea floor’, and in the right place. Use the Burial at Sea proposal form on our website to make sure you include everything needed.

[Download a copy of the Burial at Sea proposal form from the EPA website](#)

If your proposal meets the rules, we will issue and send you a ‘certificate of compliance’ to allow the burial to happen. If it looks like the proposal won’t meet the rules, or if you haven’t given us enough information, there may be delays in gaining approval while we collect more information.

When we issue the certificate of compliance, we at the EPA must notify every affected iwi, hapū, customary marine title group, and protected customary rights group about the planned date and location of the burial. This notification does not prevent the burial from happening.

The burial must follow your approved proposal.

The funeral director, or person responsible for the burial, must send us evidence that the burial took place at the agreed location, and that the casket or container:

- remained in one piece when it entered the sea
- sank to the sea floor straight after the burial, and did not resurface.
Planning the burial

The following information will help you plan the burial. If you are preparing a proposal for a burial at sea, you can also contact us to talk through your plans. Our contact details are on the last page.

While planning the burial and putting together your proposal, we recommend that you consider how you will:

- make sure that the casket or container sinks quickly and will not resurface
- ensure the casket or container will stay in one piece when it enters the water
- show the EPA that the burial took place at the right location.

You might also like to think about:

- Is there a suitable boat or helicopter available?
- Would the boat or helicopter need to be adapted to ensure that the burial is performed safely?
- If close relatives or family members wish to travel to the site, is an appropriate vessel or helicopter available to carry the passengers? Please talk with the skipper or pilot to check.
Practical notes for funeral directors

Preparation
The regulations do not require embalming, so there is freedom to decide whether to embalm, or not.

Choosing the casket or container
The regulations state that a ‘casket or container’ must be used. The regulations don’t limit the type of container: only that it must withstand marine conditions prior to burial and remain intact as it enters the water. It should not float and should sink quickly to the seafloor.

Wooden coffins are more often used in New Zealand funerals, but these can be problematic for sea burials because their shape and materials makes them particularly buoyant. Whichever shape or material is used, it needs to meet the rules. We will give you some recommendations about this below.

It is fine to bury people at sea in shrouds or similarly soft materials. This may be a preferred option as there is a long tradition of sailors being wrapped and sewn into a sailcloth for their burial. However, the fabric must be strong enough to remain intact when it enters the water and descends to the seafloor. The shrouded body could additionally be secured to a board, to assist handling during transport and during the burial.

Staying intact on entering the sea
Weather and sea surface conditions on the open ocean are variable and sometimes rough. Depending on how the casket or container is lowered, there may be a significant height between the craft and the water.

We recommend the container is secured with additional strapping to keep it intact during the burial (see Figure 2 as an example). You could use cargo webbing or ratchet straps, chains or ropes. In Britain and the United States, steel bands are used to secure caskets, placed width-wise and lengthwise. Please also ensure that the strapping cannot slip off the container during handling.

Shrouds or sail cloths should be securely fastened. These could be sewn, tied shut or strapped around the outside (see Figure 3 for an example of strapping).

In New Zealand, many people have a connection with, or feel an affinity towards, flax garments or woven flax matting. Materials woven from flax may be considered as a suitable shroud provided they are strong enough to withstand the burial process.
Ensuring the casket or container will sink

The casket or container needs to sink to the seafloor and not resurface. It must sink quickly so it does not drift far from the recorded burial location or drift outside of the authorised burial location. Sinking is achieved by adding extra weight and by allowing any air in the container to escape easily.

The amount of weight depends on whether a casket or shroud is used. For caskets, we recommend that additional weights are added that are equivalent to, or more than, the mass of the person to be buried, to offset the buoyancy of the casket. For burials in shrouds, we recommend adding additional weights equivalent to half of the body mass.

Ensure that the integrity of the casket or covering is not compromised by adding the weights, and that the weights will not obstruct the handling before and during the burial. Placing more weight at the foot end assists feet-first sinking. Weighting materials should be non-toxic. For example, you could use iron, steel, sand or concrete weights, but not lead.

If there is air in the container, make sure it can escape quickly. For an average-sized casket or coffin, we recommend drilling twenty to thirty 50-mm holes (Figure 2). For a shroud or sail cloth, ensure there are holes in the fabric where the air can escape. These could be reinforced with eyelets (see Figure 3). Ensure that escaping air will not cause damage during sinking.

Figure 2  Suggested configuration of strapping and holes to allow air to escape quickly

Image provided courtesy of the United States Environmental Protection Agency and the United States Navy
Locating the burial
In advance of the burial, we recommend asking the skipper or pilot about their navigation equipment and agreeing on how you are going to record the burial location. Accepted forms of evidence for the burial location are listed later. It is the responsibility of the funeral director or organiser to supply evidence of the location to the EPA after the burial.
Practical notes for skippers and pilots

Preparing the vessel or helicopter for the burial

Think in advance about how the casket or container will be lowered into the ocean. Plan to ensure that the action of lowering the casket or container into the water does not inadvertently cause damage and is dignified.

For example, helicopters may need to add a platform and roller set that extends outside of the cabin to ensure that the casket or container does not clip the skid as it leaves the aircraft (Figure 4). For burials in shrouds, a board may need to be secured underneath or inside of the shroud to assist handling and a smooth transition from the vehicle. Aim to release the container as low as possible above the water, preferably at a standstill or hovering over the site.

You will need to work closely with the helicopter provider as to the weight of the casket to ensure the correct size helicopter is secured for the transport.

Personnel safety

The usual risks to personnel operating on ships and during low-altitude aircraft operations on the ocean apply. Think about, and prepare for, any additional risks that may arise as a result of meeting the rules for burials at sea, and include planning to mitigate them.

We are happy to discuss questions from skippers and pilots about the logistics of burials at sea via our contact details on the back page. For specific queries about health and safety, please contact either WorkSafe New Zealand, or Maritime New Zealand for ship operations and Civil Aviation Authority for helicopter operations.
Figure 4 Extended roller set fitted into a Eurocopter EC 130 helicopter for a burial

Photo credit: used by kind permission of Michael Wolfram, Invocare NZ Limited
Evidence of the burial

Within ten working days after the burial, the funeral director or person responsible must send evidence to the EPA that:

- the burial took place at the authorised site (Figure 1)
- the casket or container sank to the sea floor soon after it was released into the sea, and did not resurface.

The evidence supplied must be enough to show that the rules were followed. Ideally, provide a video with a time and date stamp, showing the casket or container being lowered into the sea and sinking, and then panning to show the coordinates displayed on the on-board navigation or GPS instrument (Figure 5). Photographs are also acceptable provided they show that the rules were followed.

A signed statement from the captain, pilot, clergy or celebrant is also acceptable, as long as it and any accompanying evidence show that the burial complies with the rules.

Please supply all location data in latitude and longitude coordinates (using WGS84, the default datum for global positioning systems, GPS).

How much does it cost?

We charge a fee, based on how long it takes us to assess your burial at sea proposal and process the certificate of compliance. In 2018, the cost was around NZ$200-$300.

If you have any questions about this, please contact us.