



# ENVIRONMENT AND RESOURCES COMMITTEE

## The environmental impacts Of conventional burials and cremations

*Issues Paper No. 3*

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### The aim of this paper

In this paper the committee sets out the key issues for its inquiry into the environmental impact of conventional burials and cremation based on the submissions it has received and its preliminary research.

### Chair's Foreword

This paper presents a summary of the committee's work to date on its inquiry into the environmental impacts of conventional burials and cremations in Queensland. It sets out the main issues and options that need to be considered. Completion of this work will involve public consultation and work with the key stakeholders from the funeral industry on these issues, as well as government agencies, and I hope that a committee or individual MP will complete this work and provide recommendations to government.

How the dead are cared for is one of the defining marks of a society and its people, and the values they hold.

For most groups in Queensland, the tradition has long been a conventional funeral, probably involving a memorial service, and ending in either a burial of the remains underground at a designated local cemetery or cremation.

Every human activity has an impact on the environment, and this includes funerary practices. These impacts are becoming more apparent with the growth and gentrification of the population, as in other parts of Australia and in other countries. They will become particularly important in South East Queensland.

Within Queensland, the primary environmental impact of conventional funerary practices is the demand for grave sites in the greater Brisbane area. Without some form of intervention, grave sites in Brisbane cemeteries will become significantly more difficult and expensive to provide and acquire. As death rates continue to rise, there is a need to explore other options that will take up less land and have better environmental outcomes. One possibility is bio-cremation or Aquamation. This process uses alkaline hydrolysis, which has been recognised in parts of the United States by broadening legislation to cover this process (see <http://www.biocremationinfo.com/legislative.aspx>)

We have also discussed options to reduce the impacts of burials and cremations on the environment through green or natural burials. I have held a number of funeral information sessions in the Pumicestone Electorate, and they have been well attended. What people definitely want to know is more information about the funeral industry. They want options and they want value for money. They want to be able to make the right choice for their loved ones when the time comes.

I encourage every Member to consider the committee's findings and for those who want to learn more about the 'death-care' industry in Australia, I recommend reading *Funeral Rights* by Robert Larkins (Penguin 2007). Finally I thank all submitters, Dr Boyd Dent and Mr Tony Tilden who have assisted the committee. My special thanks to the committee and secretariat for their dedication.

Carryn Sullivan MP  
Chair

### The Environment and Resources Committee

The Environment and Resources Committee is a select committee of the Queensland Parliament appointed to monitor and report on issues in the policy areas of environmental protection, climate change, land management, water security and energy.

### The Inquiry

In March 2011, the committee resolved to examine and report on the environmental impacts, including land management impacts, of conventional funeral practices.

As part of the inquiry, the committee considered the role that alternative funerary practices could play to achieve better environmental outcomes and reduce pressure on cemetery land in heavily urbanised areas. These unconventional practices include:

- The use of coffins and caskets made from materials other than solid or manufactured wood;
- Burials or cremations without the use of coffins or caskets; and
- Natural or bush burials.

The committee wrote to Queensland Government Ministers, councils, funeral industry peak bodies, churches and individual funeral directors inviting submissions. These are listed at the back of this paper, and are published at <http://www.parliament.qld.gov.au>

### Definitions

'Conventional burials' include land burials of remains in wooden coffins or caskets, or their placement in aboveground mausoleums or crypts, in designated cemeteries. It also includes sea burials.

'Conventional cremation' refers to the high-temperature incineration of human remains in a wooden coffin or casket. This is carried out in a purpose-built cremator. The cremated ashes may then be safely stored, buried or dispersed.

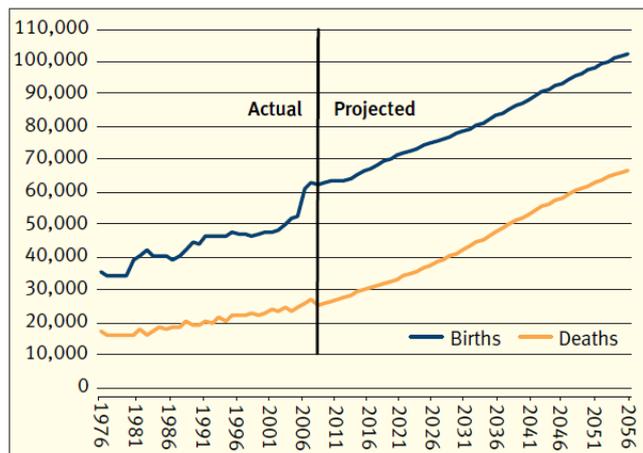
'Human remains' means the remains after death of a human body, and includes the body of a stillborn child.

## Queensland's growing and ageing population

The state's population is projected to increase and age significantly over the coming decades. A consequence of these changes and consistent with the rise in births, there will be a sharp rise in the numbers of deaths.

Figure 1 charts Queensland's actual and projected births and deaths from 1976 and projections to 2056 based on data compiled by the Queensland Government's Office of Economic and Statistical Research.<sup>1</sup>

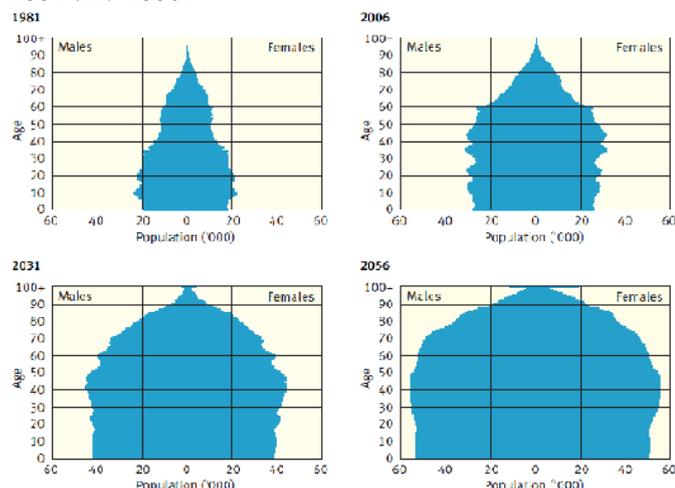
**Fig. 1: Births and deaths, Queensland, 1976 to 2056.**



Source: Queensland Treasury, 2011, p.4.

Figure 2 presents actual and projected age pyramids for Queensland males and females between 1981 and 2056. These diagrams give a breakdown of populations for gender and each age sub-group in four snapshots.

**Fig. 2: Population Pyramids, Queensland, 1981, 2006, 2031 and 2056.**



Source: Queensland Treasury, 2011, p.4.

### Key Points

- Between 2006 and 2031, the number of older people (aged 65 years and over) in Queensland is projected to more than double (an increase of 161.0 per cent) to reach 1.3 million people.<sup>2</sup>
- By 2056, the number of people aged 65 to 84 years is projected to be almost four times larger than in 2006,

<sup>1</sup> Queensland Treasury, *Queensland Government Population Projections to 2056: Queensland and Statistical Divisions*, 2011 edition.

<sup>2</sup> Queensland Treasury, 2011, p.3.

while the 85 years and older age group is projected to be more than nine times larger.<sup>3</sup>

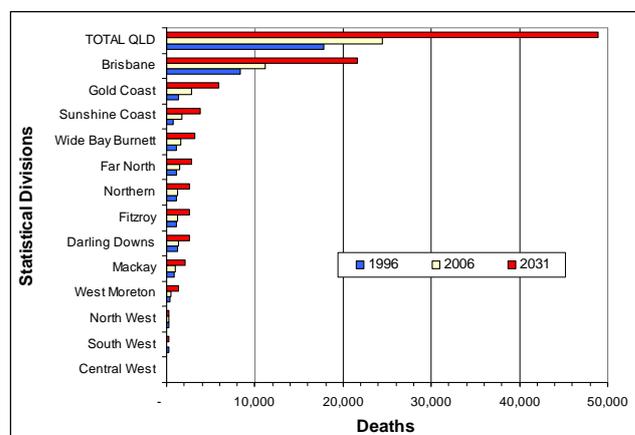
- Despite improvements in life expectancy, the growth and ageing of the Queensland population is projected to result in a doubling of the number of deaths over the next 30 years (from around 24,500 deaths in 2006 to more than 49,000 deaths in 2038). By 2056, the number of deaths is projected to rise to 66,800 (2.7 times the 2006 level).<sup>4</sup>

## Impacts across Queensland

Some parts of Queensland will experience a greater increase in population, ageing and death than others.

Figure 3 presents a snapshot of actual and projected deaths for 1996, 2006 and 2031 broken down for the state's 13 statistical divisions.

**Fig. 3: Actual and projected deaths, Queensland, by statistical division 1996-2031.**



Source: Based on data contained in Queensland Treasury, 2011, p.4.

### Key Points

- The largest projected increases will occur in the statistical divisions that make up South East Queensland. These divisions are: Brisbane (21,609 in 2031, an increase of 94 per cent on 2006 figures); the Gold Coast (5,929 in 2031, an increase of 113 per cent); the Sunshine Coast (3,773 in 2031, an increase of 114 per cent); and West Moreton (1,323 in 2031, an increase of 157 per cent).
- Collectively, two thirds (16,445 deaths or 67 per cent) of the projected increase in deaths for the whole state in 20 years will be in one region - South East Queensland. This will have a profound impact on the demand on the region's funeral industry.

## Burials and cremations

In Queensland, cremation is by far the most popular method of disposing of human remains, and more than twice as common as burials. During 2010, two thirds (67 per cent) of the state's 27,534 recorded deaths were cremated, and one third (32 per cent) were buried.<sup>5</sup> In Brisbane the ratio of cremations to burials is closer to

<sup>3</sup> Queensland Treasury, 2011, p.5.

<sup>4</sup> Queensland Treasury, 2011, p.4.

<sup>5</sup> Registrar of Births, Deaths and Marriages, Correspondence, 14 February 2011. Note: bodies donated to the School of Anatomy, taken outside of Queensland, or subject to open Coronial matters make up the remaining one per cent.

70:30, and this ratio has been steady for the past 25-30 years.<sup>6</sup>

In addition to religious beliefs, proximity to a crematorium and the cost and availability of grave plots are likely to be key factors behind the preference for cremation. Cremations are more common in city areas where there is access to crematoria, and burials are more common in rural and remote regions where crematoria and cremations are simply not an option.<sup>7</sup>

Within 20 years, using the Brisbane City Council's ratio and the projected deaths for the Brisbane Division, demand for cremations in Brisbane could exceed 15,000 per annum, and burials could exceed 6,000 per annum. This is a significant increase on present levels. The Brisbane City currently services 1,500 burials and 1,300 cremations annually at its cemeteries and crematoria.<sup>8</sup>

The sharp rise in demand for grave sites in Brisbane will occur at the same time that the availability of new sites in existing cemeteries will be drawing to an end. The Brisbane City Council's submission warns that council's supply of new graves will be exhausted in as little as 10-15 years.<sup>9</sup> This is a problem facing more and more cities around the world where conventional burials are practiced.

The shortage of local grave sites will likely lead to higher costs, and may make cremation a more attractive option in South East Queensland. Alternatively, if no new cemeteries are opened in the region, Brisbane families could be travelling to cemeteries well outside their local area to pay their respects.

### Options for a more sustainable approach to cemetery lands

There are a number of options to avert a future shortage of grave sites in South East Queensland. They include:

- Extinction of tenure for old graves;
- The development of family graves;
- The use of vacant/partially used graves;
- Renewable tenure for graves;
- Better utilisation of cemetery lands;
- The promotion of cremation and other alternatives; and
- The opening of new cemeteries including new land sources for future cemeteries.

#### Extinction of tenure for old graves

Most cemeteries have graves that are over 100 years old, unmarked and have no records that enable the cemetery manager to identify living descendants of the interred. In these circumstances, the cemetery manager could be allowed discretion to reuse the graves.

#### Family graves

Many graves are only prepared for one or two burials, though they could accommodate multiple graves. In some countries, family graves have been developed for use and reuse by multiple members and generations of family members and/or their friends. This would involve re-excavation of grave sites after a prescribed or agreed

period, and the reburial of remains from previous burials within the gravesite. This process of recycling grave sites is known as 'lift and deepen', and is used in South Australia and Western Australia.

#### Encourage the take-up of vacant/partially used graves

Burial rights are generally purchased for a specific site, and often many years before the grave is likely to be used. As a consequence of changes to family circumstances, pre-purchased sites may not be utilised to their capacity, or may not be utilised at all. Other family members could use these graves but are often unaware of their ownership rights. This could be alleviated by better informing the general public about the ownership of burial rights.

A further option is to allow cemetery managers to revoke burial rights after a reasonable period where all reasonable efforts to locate the owners or living relatives have been exhausted.

#### Renewable tenure for graves

In Queensland, grave sites are purchased by making a one-off payment. This gives the owner perpetual burial rights to that site. In South Australia and Western Australia, the tenure is limited and sites are purchased for an initial set period of 25-50 years. After this period, the family of the deceased has the option of renewing the burial tenure. This would involve the payment of a further fee. If the rights are not renewed, the cemetery manager is able to reuse the grave at some time in the future with any remains uncovered during reuse transferred to an ossuary.

War graves and graves of historical significance could be exempted from renewable tenure.

#### Better utilisation of existing cemetery lands

There are a range of options for cemetery lands to be used more efficiently to maximise the number of grave sites that can be accommodated. These practices may also reduce the ongoing maintenance costs for cemetery managers.

For new cemeteries, setting tighter controls on the design of grave sites and the size and alignment of headstones can help to minimise spacing requirements and significantly reduce the costs to maintain the grounds.

For existing cemeteries, there may be opportunities to place new graves between existing graves as well as other parts of the cemetery not previously used for graves.

#### Encourage cremation and other alternatives

While cremation is not accepted by all religions, actively promoting cremation as an alternative to burials would reduce demand for grave sites and extend the life of existing cemeteries. Cremation offers a number of benefits compared to burials. Cremations are less expensive, and storing the ashes in columbaria occupies a fraction of the space required for graves.

Among the alternatives to conventional burials and cremations, 'natural', 'green' or 'bush' burials are the most established. These terms cover a variety of low impact burial options such as burials at a shallower than normal depth in bushland settings, or in cleared fields that are revegetated, the use of biodegradable shrouds, coffins and liners and the use of plants or rocks to mark the location instead of concrete or stone memorials.

<sup>6</sup> Brisbane City Council, Submission No. 18, p.2.

<sup>7</sup> Australian Funeral Directors Association, General Information, <http://www.afda.org.au> accessed 4/6/11.

<sup>8</sup> Brisbane City Council, Submission No. 18, p.2.

<sup>9</sup> Brisbane City Council, Submission No. 18, p.2.

Alternatively, no physical marker is used and the location is simply recorded as a set of map coordinates.

The South Australian Parliament's Environment and Resources Development Committee inquired into natural burial grounds in 2008. That inquiry found that a natural burial ground can contribute to a number of social and environmental objectives including more urban green space for passive recreation, enhanced local environments and biodiversity, reduced carbon emissions, as well as the burial of human remains.<sup>10</sup>

The Natural Death Centre suggested in their submission that natural burial grounds are a solution to the land issues presently facing shires, and that the burial grounds could eventually revert to parkland.<sup>11</sup>

Similarly, Swanborough Funerals suggested that green or natural burials could give government the opportunity to restore decimated or contaminated land that cannot be used for other purposes, and that this could also protect land that is at risk of over-development and putting endangered species at risk.<sup>12</sup>

### **The opening of new cemeteries including new land sources for future cemeteries**

An obvious option is to open new cemeteries in Brisbane and other areas of South East Queensland, but suitable large parcels of land are becoming increasingly difficult to find and expensive.

To address this problem the BCC suggested releasing publically owned land of low environmental significance for cemeteries.<sup>13</sup>

The BCC also suggested that more work could be undertaken in making provision for future cemeteries during regional infrastructure planning, and that opportunities to meet both future environmental objectives and future cemetery needs should be investigated.<sup>14</sup>

#### **FOR CONSIDERATION:**

1. What options should the government and councils pursue to meet the expected rise in demand for grave sites in South East Queensland?
2. Should planning for cemeteries and crematoria be addressed as part of regional infrastructure planning process, or should it be the sole responsibility of councils?

### **Addressing other environmental impacts**

The following section discusses other aspects of conventional burials and cremations that could impact adversely on the environment.

#### **Embalming**

The preparation of the body for the funeral may include embalming or partial embalming. Embalming involves the replacement of body fluids with formaldehyde-based liquids or other liquids to preserve and/or improve the appearance of the body and delay the normal

<sup>10</sup> Parliament of South Australia, *Natural Burial Grounds*, Sixty-second report of the Environment Resources and Development Committee, 2008.

<sup>11</sup> Natural Death Centre, Submission no. 9, p.2.

<sup>12</sup> Swanborough Funerals, Submission no.19, p. 2.

<sup>13</sup> Brisbane City Council, Submission no. 18, p.3.

<sup>14</sup> Brisbane City Council, Submission no.19, p.3.

putrefaction process. Formaldehyde is a known carcinogen and poses a risk to funeral industry workers. When it leaches from buried corpses, formaldehyde may also affect the microbes in soil that promote decomposition.

#### **FOR CONSIDERATION:**

3. Are there less toxic and non-carcinogenic alternatives to formaldehyde-based embalming fluids that could be used by the Queensland funeral industry? If so, is there justification for the prohibition of formaldehyde-based embalming solutions in Queensland?

#### **Heavy metal contamination**

Bodies contain small amounts of lead, cadmium, mercury and other heavy metals which vaporise during cremation and may be emitted in minute quantities into the atmosphere. Similarly, these same substances have the potential to contaminate soils and groundwater from burials. Some heavy metals such as mercury are cumulative toxins. Emissions of mercury into the atmosphere from silver amalgam fillings, could find their way into the waterways and food chains.

The extent of the risk and the benefits of requiring cremators to minimise emission in Queensland are unclear.

Several European nations have legislated tougher standards on emissions from crematoria to address this problem. The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) is the legal instrument guiding international cooperation on the protection of that region's marine environment.<sup>15</sup> The Convention is managed by the OSPAR Commission, which is made up of 15 governments (Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom) and the European Commission representing the European Union.

In 2000, OSPAR published a background document on mercury and organic mercury compounds. The paper identified crematoria as a significant source of mercury. The paper contained information submitted by countries including, Norway, Sweden, Denmark, Germany, UK, Switzerland, Belgium, Portugal and the Netherlands.

In 2003, the OSPAR Commission followed up the 2000 background document with a further paper "Mercury emissions from crematoria and their control in the OSPAR Convention Area". This document identified:

- crematoria as a significant source of mercury to the environment;
- several options for preventing mercury from reaching the environment, and
- examples of mercury removal efficiency of different types of abatement technology.

Recommendation 2003/4 under the OSPAR Convention refers to the 2003 document and recommended that the contracting parties (OSPAR countries) should ensure that the operators of crematoria apply best available techniques at their crematoria to prevent the dispersal into the environment of mercury from human remains,

<sup>15</sup> OSPAR Commission, 2011. <http://www.ospar.org> accessed 4/6/11.

especially from dental silver amalgam.<sup>16</sup> The Recommendation took effect from 27 June 2003.

The concerns about the emissions of mercury from crematoria appear to be based on:

- an increasing number of silver amalgam fillings at cremation;
- other mercury emissions were falling or steady; and
- the long atmospheric half-life of mercury.

In contrast to concerns by European nations to reduce the risk of mercury emissions from crematoria, it has not been considered an issue in North America or Australia. In Queensland, regulation of the emissions from crematoria ceased in 2008.

A number of submissions commented on the mercury issue. According to the Brisbane City Council, modern cremators are capable of operating at temperatures which ensure the emission of harmful substances is below levels set by environmental authorities.<sup>17</sup> Connolly noted that the 2010 cremator owned by his company has "...so many emissions controls that it actually uses 50 per cent more gas than earlier models."<sup>18</sup> In their submission, the National Funeral Directors Association (NFDA) noted that changes to industry usually incur increases in costs as new infrastructure, equipment and training are introduced.<sup>19</sup>

There are differing views of the environmental benefits of cremation compared to burial, and scepticism within the funeral industry of the need for, and benefits of, increased filtration of emissions.

#### FOR CONSIDERATION:

4. Is there scientific evidence that the level of mercury emissions emitted from cremators in Queensland is safe and does not pose a hazard to the environment?

#### Migration of pathogens

According to Dr Boyd Dent, a hydro geologist and engineering geologist with the Monash University, and expert on the hydrogeology of cemeteries in Australia, the amounts of decomposition products leaving cemeteries are very small, however, almost all cemeteries have some potential for pollution. The most serious situation is the escape of pathogenic bacteria or viruses from interred corpses into the environment at large.<sup>20</sup> In other work, Dent noted that pathogens can survive for decades in the soil after burial.<sup>21</sup> For example:

- Anthrax (*Bacillus anthracis*) has survived for up to 200 years in shallowly buried bone in Africa; and up

<sup>16</sup> Section 3.1, OSPAR Recommendation 2003/4 on Controlling the Dispersal of Mercury from Crematoria. <http://www.ospar.org/documents> accessed 4/6/11.

<sup>17</sup> Brisbane City Council, Submission No. 18, p.3.

<sup>18</sup> Connolly, Submission No.3, p.1

<sup>19</sup> National Funeral Directors Association of Australia, Submission No. 14, p. 2.

<sup>20</sup> Dent, B. *The hydrological context of cemetery operations and planning in Australia*, 2002, p.iii.

<sup>21</sup> Dent, B. and M. Knight (1998) 'Cemeteries: a special kind of land fill. The context of their sustainable management'. Conference paper [http://www.science.uts.edu.au/des/StaffPages/BoydDent/Cemeteries specialkindlandfill.pdf](http://www.science.uts.edu.au/des/StaffPages/BoydDent/Cemeteries%20specialkindlandfill.pdf). accessed 4/6/11.

to 40 years in moist peaty soil in Scotland (following WW II experiments);

- Smallpox (Variola virus) has been found as inactive spores in a sealed coffin 150 years old (exhumed in a crypt in the UK); and
- Clostridia botulinum (the bacterium responsible for botulism) is thought to persist as infectious, highly resistant spores in surface soil for at least 20 years.

The risk of pathogens migrating into surrounding areas and water systems is dependant on a number of factors specific to each cemetery such as the volume of graves, terrain, soil type, proximity to groundwater flows and the effectiveness of the buffer zone around the site.

There has been no comprehensive study of the survival of highly infectious pathogens in Australian soils, nor of the potential for their migration outside of cemetery boundaries. A more logical approach to managing risks could be to identify high risk pathogens and to cremate bodies infected with these pathogens instead of burial.

#### FOR CONSIDERATION:

5. Should burial be excluded as an interment option for bodies infected with high risk pathogens?

#### Cremations

Cremating at the optimum temperature (760° to 1150°C) takes on average 70 minutes to 2.5 hours. The cremation of an average sized male uses 160 kg of gas and emits some 50 kg of greenhouse gases.<sup>22</sup> Further gas and emissions are involved in the pre-heating of cremators.

The energy consumption and emissions from cremators could be reduced by using them more efficiently. The Brisbane City Council submission suggested this could be achieved by continuous operation (ie run once or twice a week, instead of immediately a body is received).<sup>23</sup> The NFDA suggested that improving efficiency by keeping the heat constant would require cremating more than one deceased at a time (which is illegal in some countries).<sup>24</sup> The NFDA also supported harnessing and recycling the heat and power produced by cremators into power sources.<sup>25</sup>

Environmental options include: biodegradable caskets (made of wood, cardboard, wicker or bamboo, materials that are easily replenished); plant-based embalming fluids, or no embalming at all; and burial in natural cemeteries.

#### FOR CONSIDERATION:

6. Should crematorium managers be permitted to hold for a period and cremate bodies in succession to minimise energy use? If so, for what period?

#### Reducing the wastage of resources

Conventional coffins and caskets are resource-intensive and designed for a single use. Most are imported. The materials used in coffins include: medium-density

<sup>22</sup> R. Short, 'Earth to Earth, Not Ashes to Ashes', *Australasian Science*, June 2007, p 8.

<sup>23</sup> Brisbane City Council, Submission No.18, p. 3.

<sup>24</sup> NFDA, Submission No. 14, p. 1.

<sup>25</sup> NFDA, Submission No. 14, p. 1.

fibreboard (MDF) with a veneer, timber, cardboard, plastic and/or cloth linings, plastic handles, metal plaques, nails or staples and other fittings, glues, paint and lacquer. Coffins and caskets are also expensive.

Reducing the need for coffins or caskets or making them from materials that are less resource intensive or toxic offers direct benefits to the environment and consumers. The use of natural plant and animal materials also offers a potential supplementary income stream for primary producers.

One of the most progressive markets for alternative coffins/caskets is the United Kingdom. Options in use there include:

- Single use inner coffins with reusable coffin lids;
- Coffins made from bamboo, wicker, wool, banana leaf, and recycled cardboard with biodegradable plastic linings; and
- The use of burial shrouds in lieu of coffins.

A range of barriers can delay or impede the uptake and social acceptance of environmental burials and cremations. They include:

- Insufficient information on environmental alternatives, their benefits, and the costs involved;
- Religious and cultural practices;
- Lack of 'green' standards;
- Resistance to change;
- Low public awareness; and
- The lack of expertise and advice.

#### Addressing 'green washing' with better information

As in other industries, it is an offence under the *Trade Practices Act 1974* and state fair trading legislation for suppliers and retailers to make misleading claims about products and services, and this includes environmental claims about funeral goods and services.

It is imperative that funeral directors, as the main source of information for consumers about funerary arrangements, are well informed about merits and otherwise of the products and services they offer. Both the National and Queensland Funeral Directors Associations identified in their submissions that there is confusion in the industry about the green credentials of coffins and the alternatives from different suppliers, as each side of the debate claims their own product is the "greener" choice. They also note that many of their members are yet to see products such as wool or wicker coffins that are being developed.<sup>26</sup>

As noted by the NFDA, consumers are the final arbiters:

*The issues raised are strong from both sides, and only the consumer can make the decision on the type of coffin that they choose to use. This decision quite often comes down to the aesthetic appearance of the coffin and the price, over any environmental considerations.*<sup>27</sup>

In the United States, the Green Burial Council which an independent, non profit organisation, offers certification to funeral businesses who meet their standard for

<sup>26</sup> QFDA, Submission No. 13, p. 1.

<sup>27</sup> NFDA, Submission No. 14, p. 2.

environmental' end-of-life practices', and acts as an information source on ways to improve environmental burials and cremations.<sup>28</sup> There is no such body in Australia.

#### FOR CONSIDERATION:

7. Is there a need for tighter enforcement of fair trading laws relating to the funeral industry?

#### Queensland laws governing the disposal of human remains

At common law, the obligation to bury a body is based upon considerations of decency and respect, as well as in the interest of the protection of public health to promptly bury a dead person's body.<sup>29</sup> The common law has been amended to some extent by Queensland statute and changes to departmental policies.

Generally, the disposal of human remains occurs either by cremation or burial, including burial in a cemetery or outside a cemetery. Cremations are governed by the *Cremations Act 2003* (Qld) as well as by local government local laws and subordinate local laws. Local government laws also govern burials, including regulating for the possible health and nuisance aspects of burials. Various other laws indirectly regulate burials and cremations in Queensland.

#### Births, Deaths and Marriages Registration Act

Section 26 of the *Births, Deaths and Marriages Registration Act 2003* (Qld) requires the death of a person to be registered. Where a spouse or relative of a deceased person does not apply to register the death, the registrar may require the person arranging for the disposal of the deceased person's body to apply to register the death.<sup>30</sup> Generally, a doctor must provide a cause of death certificate and gives the certificate to the person arranging for the disposal of the deceased person's body.<sup>31</sup>

#### Burials Assistance Act

Section 3 of the *Burials Assistance Act 1965* (Qld) provides for the burial or cremation of any deceased person in Queensland where it appears that no suitable arrangements for the disposal of the body have been made.

#### Coroners Act

One of the objects of the *Coroners Act 2003* (Qld) is to require the reporting of particular deaths.<sup>32</sup> Section 26(1) provides that unless a person's death is reported to the coroner after burial, the coroner has control of the body when the coroner's investigation begins. Section 26(2) sets out the circumstances in which the coroner stops

<sup>28</sup> Green Burial Council. <http://www.greenburialcouncil.com/> accessed 24/2/11.

<sup>29</sup> Halsbury's Laws of Australia, [395-4140], Queensland Law Reform Commission, 'A review of the law in relation to the final disposal of a dead body: Information paper WP 58, June 2004, p.15.

<sup>30</sup> Section 28(1)&(2)(c).

<sup>31</sup> Section 30.

<sup>32</sup> Section 3 and see sections 7&8.

having control of the body, such as where the coroner decides that it is not necessary for the coroner to keep the body after an autopsy and the coroner orders the release of the body for burial.<sup>33</sup> In this case, the coroner is obliged to release the body for burial as soon as practicable after autopsy.<sup>34</sup>

### Cremations Act

The *Cremations Act 2003* (Qld) regulates the process of cremating human remains. The Cremations Act does not apply to certain cremations such as Aboriginal or Torres Strait Islander human remains.<sup>35</sup>

Human remains may not be cremated unless permission has been issued by:

- *the coroner*, where an autopsy was conducted under the Coroners Act 1958, or
- *an independent doctor*.<sup>36</sup>

A permission to cremate human remains may be issued where the human remains do not pose a cremation risk.<sup>37</sup> A cremation risk is where remains, if cremated, may contain something that may expose a person to the risk of death, injury or illness, such as a pacemaker or radioactive implant.<sup>38</sup>

### Land Act

Chapter 3 of the Land Act 1994 (Qld) regulates reserves and division 10 of Part 1 provides for cemeteries. The trustee of trust land for cemetery purposes (which may be a local government) may ask that a cemetery be closed to further burials.<sup>39</sup>

### Public Health Act

Chapter 3 of the *Public Health Act 2005* (Qld) provides for matters relating to the notifiable conditions. A notifiable condition is a medical condition prescribed under a regulation as a notifiable condition.

The purpose of Chapter 3 is to protect persons from notifiable conditions through balancing the health of the public and the right of individuals to liberty and privacy.<sup>40</sup> Section 67 provides for the establishment and keeping of the notifiable conditions register. Sections 68 sets out the purposes of the register which includes the planning of services and strategies to prevent or minimise the transmission of notifiable conditions.

The requirements to notify or give information as to notifiable conditions are contained in sections 70-75. Section 69 provides that the requirement to notify or give information as to notifiable conditions relating to a person also applies to deceased persons. The various categories of notifiable conditions are set out in Part 2 and Schedule 1 of the Public Health Regulation 2005 (Qld).

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33 Section 26(2)(f.)

34 Section 26(3).

35 Section 4.

36 Section 5.

37 Section 6(6), 6(8).

38 Section 6(7).

39 Section 81(1), see also section 82.

40 Section 65.

### Local Laws

Section 28 of the *Local Government Act 2009* (Qld) provides that a local government may make and enforce any local law that is necessary or convenient for the good rule and local government of its local government area. Where there is any inconsistency between a local law and a law made by the State, the State law prevails to the extent of the inconsistency.<sup>41</sup>

Many local governments throughout Queensland have similar Cemeteries' Local Laws. The Ipswich City Council Local Law (Cemeteries) is an example.

### Ipswich City Council Local Law 13 (Cemeteries) 2005

The objects of the Ipswich City Council Local Law include:

- Providing for the proper management and control of public cemeteries in the local government's area; and
- Regulating the disposal of human remains in the local government's area; and
- Ensuring that proper records are kept about the disposal of human remains.

Section 10(1) of the Local Law provides that a person must not dispose of human remains in a local government cemetery unless approved by the local government. Approval is required even if the remains are to be placed in a private columbarium, mausoleum or vault.<sup>42</sup>

The approval of the proposed disposal of human remains may be granted on conditions the local government considers appropriate and may be prescribed by subordinate local law.<sup>43</sup>

The undertaker who arranges for the disposal of human remains in a local government cemetery must ensure the conditions of the approval are met.<sup>44</sup> Section 15 of the Local law provides that a person must not bring human remains into a local government cemetery unless:

- Approval has been granted for disposal of the human remains in the cemetery; and
- the remains are enclosed in a coffin or other form of container appropriate to the proposed form of disposal and protected in such a way to prevent a health nuisance or risk, and
- complies with any requirements under subordinate local law.

The local government may prescribe standards for the disposal of human remains in cemeteries; such as

- Standards with which coffins must comply;
- Minimum dimensions for graves;
- Limitations on numbers of bodies which can be buried in a grave.<sup>45</sup>

A cemetery authority must ensure the standards are complied with, however, exemptions may be granted.<sup>46</sup>

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41 Section 27 *Local Government Act 2009* (Qld).

42 Section 10(2).

43 Section 13.

44 Section 14.

45 Section 30(1).

The Local Law also provides that a person must not dispose of human remains (with the exception of cremated human remains) *outside* of a cemetery without approval.<sup>47</sup>

An approval may be granted for disposal of human remains outside a cemetery, if implementation:

- Will not create a risk to health or other nuisance; and
- Will not cause reasonable offence to others; and
- Is consistent with criteria laid down by subordinate local law.<sup>48</sup>

Approval may be granted subject to conditions, such as:

- Regulating the preparation of a grave; and
- Requiring disposal of the remains to take place at a particular time.<sup>49</sup>

The undertaker who arranges for the disposal of human remains outside a cemetery must ensure that the conditions of the relevant approval are complied with.<sup>50</sup>

### Other Legislation

Other Queensland legislation which may have some bearing on the transportation and burial of human remains include the *Criminal Code Act 1899*, *Aboriginal Cultural Heritage Act 2003* and *Torres Strait Islander Cultural Heritage Act 2003*.

SUB NO:	SUBMITTER:
1.	Heritage Brothers Funeral Services
2.	Mr F Gee
3.	Newhaven Funerals
4.	Leaving Lightly
5.	Moreton Bay Regional Council
6.	Alex Gow Funerals
7.	Lismore Memorial Gardens
8.	Mr K West MBE
9.	Natural Death Centre
10.	Mr R Grattidge
11.	Queensland Congregational Fellowship
12.	Ms A Lourigan
13.	Queensland Funeral Directors Association Inc
14.	National Funeral Directors Association of Australia
15.	Mrs R Quigley
16.	Aquamation Industries
17.	Catholic Diocese of Townsville
18.	Brisbane City Council
19.	Swanborough Funerals
20.	Australian Funeral Directors Association Limited (Queensland Division)
21.	The Uniting Church in Australia, Queensland Synod
22.	Hon Kate Jones MP, Minister for Environment and Resource Management

### Committee Members

Mrs Carryn Sullivan MP, Member for Pumicestone (Chair)  
 Mr Jeff Seeney MP, Member for Callide (Deputy Chair)  
 Mrs Julie Attwood MP, Member for Mount Ommaney  
 Mr Peter Dowling MP, Member for Redlands  
 Mr Chris Foley MP, Member for Maryborough  
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46 Section 30(2)&(3).

47 Section 32.

48 Section 34.

49 Section 35(2).

50 Section 36.