

# Va gets serious about ‘water cremation’

**B**ack in 2012, Virginia Del. Brenda Pogge, R-James City, proposed legislation that would have made it illegal for the commonwealth’s funeral service providers to offer alkaline hydrolysis to their customers.

Alkaline hydrolysis is a funereal disposition process that dissolves human remains in a solution of hot water and strong alkali (potassium hydroxide or sodium hydroxide). Sometimes called “water cremation,” alkaline hydrolysis leaves behind a liquid effluent and bone



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matter. The liquid can be disposed of through the municipal sewer system. The bone can be dried, ground, and returned to the decedent’s next of kin, very much like cremated remains.

Del. Pogge’s bill never made it out of the Health, Welfare and Institutions Committee. At the time, fewer than 10 U.S. states had legalized alkaline hydrolysis. But a lot can change in 10 years. Today, alkaline hydrolysis is legal in nearly half of all U.S. states and Canadian provinces, with providers in 20 states and provinces.

And just this year, legislators moved to make this option available to Virginians. The General Assembly has instructed the commonwealth’s Board of Funeral Directors and Embalmers “to convene a work group to study how to legalize and regulate the process of alkaline hydrolysis in the Commonwealth” (Senate Bill 129). The board’s report is due by Nov. 1.

The work group met on July 14 and Aug. 11 to discuss the process, inviting public comment and advice from a variety of experts, including representatives from the Virginia Department of Health, the Virginia Department of Environmental Quality, the National Funeral Directors Asso-

ciation and the Cremation Association of North America.

Proponents of alkaline hydrolysis note that the process requires one-tenth of the energy needed to operate a flame cremation chamber, and that, unlike flame cremation, it generates no greenhouse gas or poisonous gas emissions. It is for these environmental reasons that Anglican Bishop Desmond Tutu — human rights activist and staunch environmentalist — chose alkaline hydrolysis as his form of disposition when he died in South Africa in December. No other event has drawn more international attention to the process than Bishop Tutu’s choice, but the Anglican Church has not weighed in on the process.

Absent from the documents made publicly available by the Virginia board’s work group are any explicit deliberations about the moral and religious objections to the process that have prevented its legalization in states like Ohio, Indiana and New York. In those states, Catholic officials — who generally prefer burial to other means of disposition — have argued that the process is an undignified way to dispose of sacred human remains. But the work group remains focused on practical considerations related to the legalization and regulation of alkaline hydrolysis.

Notably, the board has discussed various approaches taken by all other U.S. states that have legalized the process. Seven states have legalized alkaline hydrolysis by changing legal definitions (often definitions of cremation) in order to include the process within existing regulatory frameworks. This strategy is simple and inexpensive because it allows alkaline hydrolysis to piggyback on the regulations and infrastructures that are already in place for the provision of existing funeral services.

But nine states (including our

neighbors in North Carolina) have chosen to define alkaline hydrolysis separately from cremation, and to regulate the process as a unique form of disposition. This approach requires the creation of new regulations written specifically for alkaline hydrolysis facilities, operators and technological requirements. While it is somewhat more costly, such careful and deliberate regulation can provide lawmakers with greater flexibility and greater control over a novel technology in an evolving funeral industry.

With the legalization of alkaline hydrolysis underway, there is one detail that the work group should not overlook. Virginia would do well to update its existing death certificate to reflect its addition to the list of approved disposition methods. Providing a separate check box on the certificate will allow the public, funeral service providers, lawmakers and utilities (notably wastewater authorities) to keep track of usage and demand for the technology, as well as its impacts on the people, environments, and institutions of the commonwealth.

Cremation’s popularity is certain to continue its growth in the coming years. Alkaline hydrolysis offers a more sustainable alternative to both fossil fuel-powered cremation and costly, resource-intensive burial practices. It remains unclear when alkaline hydrolysis will be legal in Virginia, let alone when funeral service providers will invest in offering it to their customers, but fortunately the commonwealth appears intent on facilitating a safe and responsible introduction of the process into Virginians’ death care choices.

Olson, a technology ethicist and associate professor of science, technology and society studies at Virginia Tech, grew up in a three-generations-old family of funeral directors