Environment - HB0711 - Office of Cemetery Oversight – Study of Deathcare and Funeral Practices

I'm David Zinner, Coordinator for the Maryland Cemetery Legislative Advocates (MCLA). Our group has extensive experience with cemetery issues. I've been a member of the Maryland Advisory Council for Cemetery Oversight (ACCO) for 12 years though my testimony today is not as a representative of the Council.

HB0711 will look at the environmental impact of deathcare and funeral practices in Maryland. I will emphasize just two significant areas of concern - crematory exhaust and arsenic treated wood and embalming fluid.

1. Crematory exhaust can be composed of:
    a. Carbon Monoxide, Lead, Nitrogen Oxides, and Sulfur Dioxide

    b. Particles of incomplete combustion in the air (smoke) a toxic pollutant that can bioaccumulate in tissues and is a possible human carcinogen.

    c. Possible trace chemicals on the EPA list such as: Acenaphthene, Acenaphthylene, Acetaldehyde, Anthracene, Arsenic, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, "Benzo(g,h,i)perylene", Benzo(k)fluoranthene, Beryllium, Cadmium, Chromium, Chrysene, Cobalt, "Dibenz(a,h)anthracene", Fluoranthene, Fluorene, Formaldehyde, Hydrogen, Hydrogen, "Indeno(1,2,3-cd)pyrene", Naphthalene, Nickel, Phenanthrene, Pyrene, Selenium

    d. Mercury, a toxic pollutant that is a neurotoxin and can bioaccumulate in tissues from vaporized tooth fillings

    e. There is also smell, which is much harder to measure. One customer reported on the smell at a crematory as follows:

"Pretty FOUL. Something like I have NEVER smelled in my whole life and a PUTRID smell I will NEVER forget. It smells of burning wood, urine, feces and rancid fat - ALL ROLLED INTO ONE FOUL SMELL."

f. While a modern cremator will generally include a re-burner, which is supposed to re-burn the gasses going up the chimney, this assumes that the cremator is working properly and regularly maintained and that older models are retrofitted.

g. For much more information about crematory emissions, see the EPA's 2020 National Emissions Inventory Technical Support Document: Miscellaneous NonIndustrial NEC: Cremation – Human and Animal at https://www.epa.gov/system/files/documents/2023-04/NEI2020_TSD_Section29_Cremation.pdf

2. An article published in the National Library of Medicine stated that "the burial of caskets with arsenic-treated wood and formaldehyde-based embalming fluids can harm the environment and health. Arsenic can leach into water, affecting aquatic life and the food chain. Formaldehyde can contaminate groundwater, risking drinking water and causing health problems." Of course embalming fluid also impacts workers at funeral homes.

   https://pmc.ncbi.nlm.nih.gov/articles/PMC10970330/#:~:text=The%20burial%20of%20caskets%20with,water%20and%20causing%20health%20problems.

   Formaldehyde in buried bodies turns out to be a much higher risk to the water table than the decomposition of bodies that are not embalmed.

As you can see from this very short elaboration on just two areas, there is a great need to examine the environmental impact of these and other death care practices. Please support HB0711 to protect the health of the citizens of Maryland.