HB 2574 - Natural Organic Reduction - Q&A

A Natural Choice for the End of Life

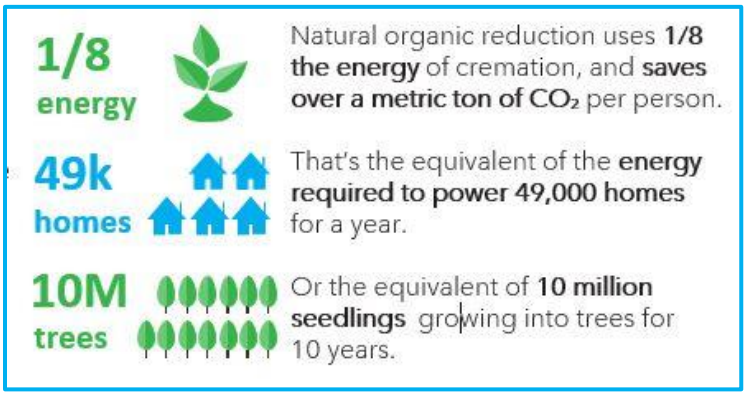
What does this legislation do? HB 2574 amends current law to add natural organic reduction (NOR) as another choice Oregonians have after death, providing a sustainable alternative to cremation and burial. It will conform NOR to existing death care laws and expand upon a precedent that gives Oregonians the right to choose their own method of disposition.

What is natural organic reduction and how does it work? NOR gently transforms human remains into soil in 4-6 weeks. The process uses large vessels to hold human remains which are combined with straw, wood chips, and other natural materials. The decomposing process creates heat of over 131F, which kills viruses, bacteria, and pathogens, and exceeds EPA requirements for heavy metals, which are stabilized in the soil, not volatilized. The resulting soil is safe for gardens, trees and general land use.

Is this death care method being used anywhere else? Yes, this process was approved for human cadavers in Washington in 2019. Recompose, a business based in Seattle is currently providing the service, while others are in the licensing process. Legislatures in Colorado, California, and New York are considering similar bills during their 2021 sessions. NOR is based on the principles of livestock mortality composting, in which farm animals are returned to the land as soil. Mortality composting has been practiced across the United States for decades and has been proven safe and effective by researchers at Washington State University, Cornell University, and the University of Minnesota, among others.

What are the benefits of NOR?

- The primary benefit is the ability to offer consumers additional options after death.
- With significant savings in fossil fuel emissions and land use, NOR addresses the increasing demand for more sustainable alternatives.



Is there a demand for NOR? Yes—64% of Americans have expressed an interest in green burial, indicating a need for sustainable and affordable alternatives. Recompose, the company offering NOR in WA, already has over 400 customers who have prepaid for NOR, and one of the first five bodies accepted at Recompose was from Oregon. Over 700 Oregonians have signed up for Recompose's email newsletter.

What is done with the soil? Much like the choices people have with cremated remains, families will choose the best resting place for the soil created in this process. They might choose to plant a tree or garden for example. In Washington, there is currently an opportunity to donate the soil to a restoration forest.

Where would NOR facilities be located? Facilities meeting state permitting and licensing requirements could be located anywhere in Oregon.

Does it smell? The NOR process does not smell. Microorganisms present in the process break down odorous gases into water and CO_2. In addition, biofilters and mechanical ventilation are used to aerate the process and ensure that no trace of odor is emitted.

Is it safe? Yes. The process kills bacteria and viruses, including COVID-19. Farmers have used mortality composting for many decades in order to safely dispose of deceased livestock and control odor.

Has it been tested and scientifically proven? Yes. Research at Western Carolina University and Washington State University (WSU) has demonstrated the viability of NOR as a natural method of disposition, and WSU's Soil Science Department conducted a pilot study which proved the safety and efficacy of the process.

What happens to heavy metals like mercury? NOR helps to ensure that mercury remains stabilized in the soil, rather than being volatilized. (Volatilized mercury from cremation accounts for a significant amount of mercury released into the atmosphere.) Research completed by WSU showed that heavy metals, including arsenic, cadmium, copper, zinc, lead, and mercury, were all well under EPA limits.

What happens to pharmaceuticals? Because current funeral practices are not required to account for drug concentrations, very little is known about pharmaceutical agents in human cadavers. However, it is known that most medications are metabolized or excreted from the body within a few hours after ingestion, so concentrations in cadavers are likely low. Unlike cremation and burial, NOR breaks down many of the pharmaceuticals that do remain in the body after death. Research completed by WSU showed a 95% reduction of tracked pharmaceuticals.

What is the impact to the existing funeral industry? Oregon's funeral industry will have the ability to offer NOR as desired. With growing interest in sustainable alternatives, this provides opportunity for existing businesses to expand their offerings and join the wave of the future.

What is alkaline hydrolysis, and why is it included in HB 2574? Alkaline hydrolysis uses water, alkaline chemicals, heat, and sometimes pressure and agitation, to accelerate natural decomposition, leaving bone fragments and a neutral liquid called effluent. The process was legalized in Oregon in 2009 when the state updated its definition of final disposition to include the dissolution of human remains. While the process is already allowable under Oregon Administrative Rules, it is not currently in statute, so HB 2574 will simply add the existing rule to Oregon Revised Statutes.

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HB 2574 online: https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB2574