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# Human Composting for a Greener Afterlife

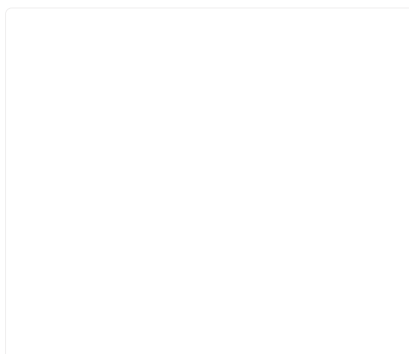


By [Gemma Alexander](#)

○ AUG 29, 2022 [human composting](#), [natural burial](#), [natural organic reduction](#)



No matter how sustainably you have lived your life, modern funeral practices ensure that you make one last giant carbon footprint when you die. In most places, regulations require the use of toxic, persistent chemicals for embalming and burial; cremation produces **as much CO2** as a flight from London to Rome. Until recently, [natural burial](#) choices were mostly limited to environmentally friendly uses for cremation ashes. Now there is a new option for a greener afterlife – natural organic reduction (NOR) – better known as composting.



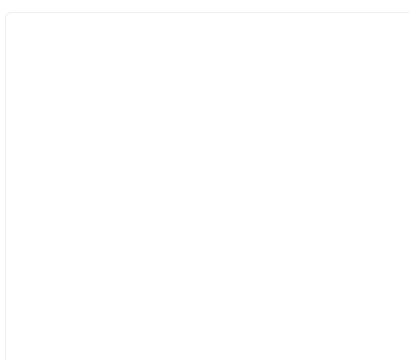
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## NOR

If the idea of human composting brings to mind images of the bug-filled waste piles you'd find behind a barn, or worse, scenes from a crime thriller, rest easy that natural organic reduction is a clean process. It is equally respectful of the deceased and the planet that sustained them in life. The chemistry of NOR is the same as all composting, and the proof of concept is agricultural (farms dispose the bodies of large livestock through composting).

But NOR facilities compost human remains individually in hyperbaric oxygen chambers. These honeycomb-like cells (called "cradles" or "vessels") control the temperature and oxygen level inside, slowly rotating a clean, efficient mixture of organic materials (including straw and wood chips) **tested by the University of Washington**. When composting is complete, the compost is screened to remove any nonorganic materials like dental fillings and pacemakers. The final result is indistinguishable from garden topsoil. Families can choose to collect the soil for their own use, but most choose to donate it. From funeral to garden, the entire process takes about six weeks.

## The History

**Katrina Spade** was a graduate student in architecture when she began researching funerary options and found no practical, ecological alternatives. She wrote her Master's thesis on composting as an urban form of natural burial. But she didn't give up on the idea after graduation. Instead, she worked with Western Carolina University and the University of Washington to produce feasibility studies. Then she helped push to change laws in Washington state to permit NOR. **ESSB 5001** took effect on May 1, 2020, in Washington, making it **the first state in the U.S.** to allow composting of human remains. Finally, in December of 2020, the first bodies were "laid in" at **Recompose**, Spade's composting facility located in the suburbs of Seattle.

## Safety

Because NOR takes place inside a controlled environment, many of the problems that can be associated with composting – like odors or incomplete decomposition – are avoided. Permits require air filters and no visible emissions or detectable odors from the facility. Regular review by an independent third party is required.

[Westlake Home – Luxury Organic Bedding](#)

Washington state requires the resulting soil to receive third-party testing for pathogens like fecal coliform and salmonella, as well as heavy metals like arsenic, lead, and mercury. The state also prohibits people with tuberculosis or prion infections from undergoing NOR.

## The Options

Recompose, which began with 10 composting vessels, only operates through a prepaid “Precompose” plan. They are currently upgrading their initial system, and are not accepting new clients. You can sign up on their webpage for notification when they reopen to new clients. [Herland Forest](#), a nonprofit natural burial cemetery in the Cascade mountains, has extremely limited capacity, with only a single composting cradle in operation. A third facility, [Return Home](#), (which uses the term “terramation”) began operation in the Seattle area in June 2021. All three companies can accept bodies from out-of-state. But the carbon impact of transportation may significantly reduce the environmental benefit of composting relative to cremation. A fourth company, [Earth](#), serves Washington and Oregon. Using the term “soil transformation” to describe their process, they have the largest facility — 78 vessels.

NOR pricing ranges from around \$3,000 to \$7000, as each company offers somewhat different services. Herland, with its solar-powered cradle, may be the most ecological and has the lowest prices. But they cannot provide funeral services. Recompose has the highest price, but provides an all-inclusive service. As with cremated ashes, families can choose to collect the resulting soil. For those who do not, Herland can use the soil to plant a tree in their permaculture forest; Return Home offers to donate soil to “regional park departments, land trusts and the like for ecosystem restoration,” and Recompose donates soil to the ecological restoration project at [Bells Mountain](#) near Vancouver, Washington. Earth owns conservation land on the Olympic Peninsula, where they can use the compost for restoration projects.

This variability is typical of the funeral industry. In King County, where both Recompose and Return Home are located, a [2020 price survey](#) found cremation prices ranged from \$525-\$4,165 while burial prices ranged from \$1,390 to \$11,100.

## Other States

From [only three options](#), NOR has already begun to expand. [Colorado](#) and [Oregon](#) legalized the human composting process in 2021, and [Vermont](#) did so in 2022. In Colorado, [The Natural Funeral](#) has begun offering composting services.

More legalization bills have been introduced in [California](#), Illinois, and Massachusetts. The success of this handful of pioneers and the passage of new legislation around the country could normalize NOR as a standard death care option for environmentally minded families within a few years.

*Originally published on March 29, 2021, this article was updated by Gemma Alexander in August 2022.*

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By [Gemma Alexander](#)

Gemma Alexander has an M.S. in urban horticulture and a backyard filled with native plants. After working in a genetics laboratory and at a landfill, she now writes about the environment, the arts and family. See more of her writing [here](#).

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