Trash to Treasure

LANE COUNTY GOVERNMENT IS REVIVING TALKS TO MAKE RECYCLING MORE EFFICIENT AND CONVERT METHANE FROM THE LANDFILL

By Henry Houston

Lane County's waste could be its treasure. All it needs is the right facility at Short Mountain Landfill, near Goshen.

The landfill, which is the repository for everything from food waste to materials from the county's several transfer stations, is one of the county's largest sources of greenhouse gas emissions, according to the second phase of the county's Climate Action Plan, released in November 2021.

To address emissions at Short Mountain, the county is exploring a facility on the site that can keep recycling and other materials from heading to the landfill and contributing to the dump's carbon footprint. Another part of that plan is to include an anaerobic facility at Short Mountain that can convert methane at the landfill into natural gas.

These are expensive propositions, and Lane County is still in early phases of exploring such facilities. An anaerobic digestion facility has seen success in California's Monterey County, however, converting methane into natural gas — referred to as "renewable natural gas" — leads to questions about how it's used and whether it should be used by residential communities.

Throughout Lane County, a lot of recyclable materials and food waste are placed in garbage bins, says Dan Hurley, Lane County's director of Public Works. Those recyclable materials don't make it to Portland, where Lane County's recyclable materials are taken, so they end up at the Short Mountain Landfill, he says.

That then emits greenhouse gases. "The landfill is the largest emitter of greenhouse gas from county operations, and it's the second-largest stationary source in the whole country, second behind International Paper," he adds.

Hurley says a material recovery facility could locate recyclable materials among the waste that ends up at the landfill. The facility could expand recycling capabilities and result in spinoff industries, he says.

According to materials from a Dec. 7 Lane County Board of County Commissioners meeting that explored ways to cut down on Short Mountain's greenhouse gas emissions, the county reported that in 2019 it had a 55.1 percent recovery rate of recyclables, the highest in the state. The county is now aiming for a 63 percent recycling rate.

The county is currently requesting bids from manufacturers, but the costs of such a recovery facility could range from $15 million to $40 million. Funding for upgrading the county's landfill processing could come from the recently passed Modernizing Recycling Act, which puts a fee on producers, Hurley says.

Lane County is also exploring the anaerobic digestion facility, which converts methane into natural gas providing energy for buildings, homes or transportation.

Methane recovery isn't new for Lane County. It's been doing methane recovery since 1991 with Emerald People's Utility District, Hurley says. In that agreement, the landfill has been collecting landfill gas, which is about half methane, to power a landfill gas-to-energy facility.

Around 2010, Lane County was in the process of developing a Renewable Energy Park that included a 2-megawatt solar array, an anaerobic digester, upgrades to EPUD's combustion engines and facilities to utilize waste heat from landfill gas combustion, Hurley says. The county didn't get the program off its feet due to finances. But Lane County is still interested in developing some of those projects, he says.

An anaerobic digestion facility would collect more methane than the current facilities at the landfill, according to the county's Climate Action Plan. That methane could be converted to a fuel source that can be used for transportation- or heat-related purposes, the plan says.

There has been a biogas plant powered by food waste in Lane County. In 2013, the private company JC-Biomethane opened a plant that accepted waste from households and restaurants, but in 2016 it ran into trouble with paying its property taxes, according to a 2016 *Eugene Weekly* investigation. In 2018, the multinational petroleum company Shell purchased the plant.

An anaerobic plant at Short Mountain could remove 400,000 metric tons of carbon dioxide by 2040, the county's Climate Action Plan says. According to an EPA calculator, removing that much carbon dioxide is equivalent to taking about 86,000 passenger vehicles off the road for a year.

But Laura Feinstein, a fellow at the Seattle-based environmental think tank Sightline Institute, says she has some reservations about methane-converted natural gas, sometimes referred to as renewable gas. One of the problems, she says, is that there's no such thing as renewable natural gas; it burns the same way as natural gas.

Natural gas companies are trying to use methane-converted natural gas as a way to keep the fossil fuels industry alive for a few more years, she says. There isn't enough methane in landfills to turn that into a viable fuel source, she adds, so she cautions against sending it to residential users for cooking or heating. There are greener energy sources in Oregon, so "we shouldn't be off in this boondoggle on how to get landfill gas into our kitchen."

The Monterey Regional Waste Management District (MRWMD) in California was the second organization in the U.S. to try an anaerobic digestion facility, says its general manager, Tim Flanagan. MRWMD serves a population similar to Lane County.

The agency's anaerobic facility was a part of a pilot program that ran 2013 to 2019, and it used the natural gas to power the sewage plant next door. Building a permanent anaerobic digestion facility for MRWMD will take years, he says. The agency is planning construction by 2025.

MRWMD also has a materials recovery facility and worked with the Eugene-based waste system designer Bulk Handling Systems to build it, Flanagan says. The facility sorts through raw garbage, separating waste from recyclables, like paper and plastic, he says.

Lane County is considering working with BHS, but Hurley says the county will talk with other companies to do its due diligence.

Hurley says it's too early in planning to disregard certain negotiations, such as selling the natural gas to NW Natural. If the county sold it to NW Natural, that could help bring the company on board to help pay for the multi-million dollar project, he says.

The county is still in early stages of developing this facility, so it hasn't spoken with NW Natural about this.

There are other options for natural gas, too, Hurley says. The county could use the landfill-converted natural gas for LTD buses or garbage trucks.

These multi-million dollar facilities can't replace individual behavior, he says. A facility that can extract methane from food waste isn't better for the environment than a resident who composts their food at home, for example. "That's the easiest and best use of organics," Hurley adds. "But not everybody can do backyard compost." ■

Obituaries for the Homeless

PLEASE HELP *EW* HONOR THE LIVES OF THOSE WHO HAVE DIED

By EW Staff

As the new year kicks off with ice and snow and torrential rain, the homeless people of Lane County struggle for shelter and survival. In addition to our news coverage of this life and death issue, the writers of *Eugene Weekly* will continue our project of chronicling the lives of the unhoused people who die in Lane County.

Below is a list, courtesy of Black Thistle Street Aid, of the people known to have died in 2021. *EW* was only able to write obituaries for the first 13 people, whose names are in bold type.

If you have contact information for friends and family who might want to talk for an obituary for other people on the list, or information on people who died but are not listed or, sadly, people who die in 2022, please email Editor@EugeneWeekly.com or call 541-484-0519.

1. Ivory McCuen
2. Kristi Schmidt
3. Hazel Dai
4. Douglas James Hanson
5. Kim Repp
6. Eugene Winters
7. Davie Scott Hanes
8. Lisa Ann Fowler
9. Deborah "Debbie" Plum
10. Chuck Rintalin
11. Rodney Heckathorn.
12. Sarah Fallingwater
13. Shandee Franke
14. Jimmy Clark
15. Anthony Pietrafitta
16. Kermit
17. Tucker
18. JJ
19. Lane Davis
20. Robert "Montana" Lepper
21. Grant
22. Irish Paul
23. Marcos
24. Ron
25. Mark Corbitt
26. Jack Edwin Hill
27. Jeremy D.
28. Kelsey Hope
29. Michael
30. Leslie Shoemaker
31. Tamara Hickling
32. Cindy Chance
33. Shawn Martin
34. Jimbo
35.Thomas Perkalis
36. Sam
37. Scott
38. Unknown man, who died of exposure at a bus stop on Hwy 99