



Pierce Louis, above, and Tyler Miller started compost company Dirt Hugger after working together at an aerospace and drone company in Hood River.

Spreading the Word About Compost

Dallesport duo Pierce Louis and Tyler Miller turn tens of thousands of pounds of organic waste into life-supporting compost for commercial and residential growers

By Jeanie Senior

When friends Pierce Louis and Tyler Miller began talking about starting a business together, they were working at a Hood River aerospace and drone company.

They are now co-owners of Dirt Hugger, a Dallesport firm that turns out certified organic compost, a low-tech product that involves a fair amount of high-tech methods.

Pierce and Tyler employ 10 full-time and two part-time workers on 9 acres leased from the Port of Klickitat.

In 2015, Dirt Hugger processed 20,000 tons of organic waste into 10,000 tons of compost. In 2016, the intake was about 30,000 tons, with a corresponding boost in compost production.

The firm's investment in its Dallesport operation has grown to about \$1.5 million, which includes development and

machinery costs.

"We have filled every inch of land that we are currently leasing," Pierce says. "I would assume we will be talking to the port about more land."

The partners were prompted to consider composting as a business after looking at a study on the amount of organic waste—generated in the Gorge by everything from wood products companies to fruit processors and other commercial enterprises—that was ripe for composting, but instead was burned or sent to regional landfills.

The earth-friendly bonus was obvious to the pair: A regional composting plant would not only keep waste out of landfills, it would produce a product that could be used to improve and return nutrients to the soil.

Most of Dirt Hugger's light and loamy compost goes back to commercial agriculture on both sides of the Gorge, Pierce

says. It is spread in orchard tree rows, for example, or used to improve the soil quality for other fruit and vegetable growers.

To learn more about the business, Pierce and Tyler looked at 10 composting facilities in four states. In 2010, they opened their first composting site at the Port of The Dalles, where Dirt Hugger operated for four years before being evicted by the pending expansion of Google's facilities.

"It was a blessing in disguise," says Pierce. "It meant we had to start from scratch and design a whole new facility."

A total of eight grants—including funds from the Port of Klickitat and Klickitat County, as well as a Kickstarter fundraising campaign—helped pay for the development.

The Dallesport site was designed with an in/out traffic pattern that lets trucks delivering raw waste move efficiently. There also are ample curing beds for



processed and screened compost, and a system to capture liquid discharge so it can be reused.

Pierce says a key to the operation is a concrete aeration slab—the first place waste is spread when it arrives. Air is pumped into the compost from jetted openings spaced on the pad, which speeds the composting process. Pierce calls it a giant air-hockey pad.

The pad is a high-tech part of making compost. Computer programs provide a recipe to balance the compost mix.

“We basically know what’s coming in and use a front end loader as a measuring spoon,” Pierce says, calculating, for example, how much wood product needs to be mixed with food waste to achieve the needed carbon-to-nitrogen ratio.

Probes monitor the heat of the compost, the result of the biological activity that breaks down the waste and also kills weed seeds and pathogens. Moisture and oxygen levels also are tracked.

When the composting process is complete, the mix is moved off the pad to another area, where it cures for as long as two months. It is then run through a massive machine that screens the waste and removes contaminants, chiefly plastic bags—enough to fill a 40-cubic yard



Above, Dirt Hugger’s site is set up to maximize efficiency. Top, in 2015, Dirt Hugger turned 20,000 tons of organic waste into 10,000 tons of compost.

dumpster in a day.

The variety of waste Dirt Hugger receives for composting, meanwhile, continues to expand. In addition to wood products and material from fruit processing plants, it gets yard waste: three tanker trucks a week filled with a byproduct from a Hood River brewery; organic waste from Google in The Dalles; and Tofurky maker Turtle Island in Hood River. There also is commercial food waste from restaurants, schools and hospitals in Hood River and The Dalles, as well as from Vancouver, which also sends grocery store waste.

In 2016, the Washington Organic Recycling Council gave Dirt Hugger the

Composting Innovation Award. It was an unexpected tribute to the accomplishments of the company’s founders and its employees.

Pierce runs the business side of the company and jokes that Tyler, a mechanical engineer, “does all the hard stuff.” He admits there were many nights early on when he stayed awake at night, running spread sheets and fretting.

“When we started, it was an expensive hobby,” Pierce says. “Our first employee got paid before we did.” ■

Dirt Hugger rents equipment needed to distribute compost and also sells smaller quantities of compost to home gardeners. For more information, go to www.dirthugger.com or call (541) 946.3478.