

Munchinator reduces trash to compost-like product

By Kathryn Reed

The contraption looks a bit like a sophisticated high school science project as it rocks back and forth, with steam escaping and a slight rumble reverberating in the large room. The Munchinator is at work.

A team of representatives from Carson City-based Ecologico Logic Inc. brought a prototype of their machine from their Southern California offices to South Tahoe Refuse this week to demonstrate how organic waste can be turned into compost in a matter of hours.



Mohammed Memon tells a crowd Nov. 3 about his company's device to breakdown organics.

Photos/Kathryn Reed

More than two dozen cans of pine needles and wood products were dumped into a funnel of sorts to enter the presoaking stage before going to the digester.

It took the firm's research team 10 years to develop the patented naturally occurring microorganisms that breakdown the waste.

Water is added at the start, then it is re-circulated to continue working on fresh waste. The amount of water needed depends on what is being processed. The 2-ton system on display used 300 gallons of water.

It costs about \$20 in energy (it runs on electricity) per ton of waste, officials said.

The end product is 20 percent solids, with the rest being water and carbon dioxide. The solid looks like wet pulverized wood chips – with little aroma.

Using this aerobic method to breakdown the waste is cleaner compared to anaerobic organisms that produce toxic gases like methane, hydrogen sulfide and sulfur dioxide.

“The solid is like an organic fertilizer, but it's not rated as a fertilizer,” explained Mohammed Memon, chief operations officer of Ecologico. “But it's super nutrient rich. It's sellable as a growth enhancer.”

He brags of his avocado crop since using the compost in his yard – four harvests a year instead of one.

Ron Cline, director of marketing, said the Munchinator is all about helping the environment. It means less waste going to landfills, which in turn means fewer trucks on the road and byproducts that can be reusable.

Cline said the goal is not to compete with entities like South Tahoe Refuse, but to be a partner. He said his firm has buyers lined up for the solid that the Munchinator produces.

John Marchini, who runs South Tahoe Refuse, isn't sure his company needs a machine like this because of the chipper they use at the Resource Recovery Center and the ability to sell

the end product to users in the Carson Valley.

He said he would be more interested in grinding everyday trash. The state would have to make a ruling if reducing a pile of trash by 25 percent counts the same as diverting it from a landfill.

Marchini's other concern would be the wastewater if household trash is involved, especially plastics.

The company is giving demos of the system in various cities, but is not limiting the technology to just municipalities.

"We want to take smaller systems to hotels," Cline said. "We could take this size into cruise ships."

Although Ecologico is promoting this to get rid of organic waste, it could be used to reduce trash as well as biohazards.

Cline, who lives near the old Meyers Landfill on the outskirts of South Lake Tahoe, said the Munchinator could "process landfill dirt and it would come out clean so you don't have to truck contaminated dirt."

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