

Medical waste company helps keep it clean



AURORA, CO - JANUARY 16: A jar of shredded, sterilized medical byproducts sits on a desk at Colorado Medical Waste, Inc in Aurora, Colorado on January 16, 2014. The half pound of material in the the jar was several pounds of syringes, masks, gloves and tubing once full of toxic waste is now harmless paper confetti. Colorado Medical Waste, Inc. is the first of its kind in Colorado to offer sterilization of contaminated product before its ground into a fine pulp and then incinerated leaving nothing behind.

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There is a jar of harmless medical waste on the edge of Beverly Hanstrom's desk. The contents look like paper confetti, but the shredded strings of light blue were once disposable gloves immersed in the body of a surgery patient.

"This is all that's left after ozone treatment," Hanstrom, president of Colorado Medical Waste Inc., said. She held up the 1-pound jar of scraps that used to be 10 pounds of toxic trash discarded from a hospital.

For comparative purposes, Hanstrom pulled out a binder and flipped through pictures of viles containing black, viscous blood that were strewn on the dirt at the Tower Landfill in Commerce City. Contaminated body fluids covered the earth like a poisonous blanket.

“Once the waste is dumped into the landfill, industrial compactors weighing several tons are required to pass over the waste three times,” Hanstrom said. “(This process) breaks open bags and sharps containers leaving used syringes, blood vials, blood-soaked material and treated medical waste fully exposed.”

The credit for her desk ornament goes to the OMW 1000, a \$1 million Ozone Medical Waste Processing machine that Hanstrom brought to a warehouse space at 3131 Oakland St. about nine months ago.

She said she wanted to start righting some of the environmental wrongs she observed during her career.

For more than 20 years, Colorado Medical Waste Inc. has transported the refuse from 93 of the state’s medical facilities to autoclaves, which are treatment centers that use steam to disinfect some of the materials before dumping everything into a landfill.

Colorado has two autoclaves located in Dacono and Frederick. For 35 years, “steam and dump” has been the only way to treat and dispose of medical waste — until now.

“I was absolutely stunned by what the ozone technology does,” said Dick Hinson, Aurora Economic Development Center senior vice president. “It reduces the volume of the waste we’re producing and it neutralizes the bacteria, which eliminates a serious health hazard.”

The OMW 1000 uses natural oxygen in Hanstrom’s 12,000-square-foot facility and converts it to humidified ozone through a chemical process in which an electric charge is smashed into two oxygen molecules to create the blue, super-sanitizing gas.

“It’s like this crazy, psycho molecule that has to kill everything, it’s so radical,” Hanstrom said. “It’s got a half life of maybe 20 minutes, and then it dies and reverts back to oxygen.”

Once the ozone neutralizes and floats back into the environment, Hanstrom said it smells fresh, like a thunderstorm. There are zero emissions, zero chemicals and no morally questionable dumping into waterways.

Ozone Medical Waste Processing destroys 100 percent of infectious and contaminating bacteria. It uses huge grinders to tear the metal and plastic material to scraps. Autoclaves cannot destroy chemotherapy waste, pharmaceuticals, pathological waste or animal remains.

“We are about 1.5 miles and 4 minutes from the Anschutz Medical Campus,” Hanstrom said. “Hospitals, bioscience, health care, medical education and advanced research make it the largest concentration of medical waste generators in the state and one of the largest in the country.”

For someone barreling toward an environmental revolution, Hanstrom’s enthusiasm is a bit depleted.

“It’s hard for her because she has to lead the way to get the community to understand the importance of this breakthrough technology,” said April Giles, president of the Colorado Bioscience Association.

After more than two years, the Colorado Department of Public Health and Environment has granted Hanstrom the final inspection approval before she gets her Certification of Designation and can open for business.

“I can push the start button Feb. 17 if I want,” Hanstrom said.

There are two other fully operating Ozone Medical Waste Processing machines in the country. One of them is actually located inside a hospital in Indiana.

“The thing that sold me on the whole technology was that one of these machines was located within a hospital,” Hinson said. “That speaks volumes of the safety and the process.”

He said the OMW 1000 is groundbreaking technology not only for the city of Aurora, but for the state and nation.

“It captured my imagination because it is so cutting edge and so unique, so safe and so cost effective,” Hinson said. “The thing is, it’s so cutting edge that people are going, ‘what’s wrong with it?’ People think it’s too good to be true.”

It isn’t, Hanstrom said.

“I’m trying to do something really good and worthwhile for the quality of life all over Colorado,” she said. “It will truly change everything once it picks up.”