

In Cheyenne, glass pile shows recycling challenges

By MEAD GRUVER (AP) – Sep 27, 2009

CHEYENNE, Wyo. — After working out at a gym, Amy Mahaffy dropped off a half-dozen glass jars in a city recycling container before heading home.

The containers however won't end up being recycled any time soon. Their destination: A mound of glass at the city landfill, an ever-growing monument to the difficulty many communities across the country face in finding a market for a commodity that's too cheap for its own good.

"We are stockpiling it in a desperate search for a market," landfill foreman Monty Landers said.

Cheyenne hasn't recycled the glass it collects — 9 tons a week — for years. Instead, the city has been putting it in the landfill, using it to surround the concrete-walled wells that pump toxic fluids out of the dump.



In this Sept. 15, 2009 photo, Monty Lander looks over discarded glass containers at the Cheyenne, Wyo., landfill. Glass been piling up at the Cheyenne landfill while the city struggles to find a market for the jars and bottles it collects for recycling. (AP Photo/Mead Gruver)

Told where the glass bottles and jars that she diligently rinses out end up, Mahaffy seemed dismayed. "I don't think that's what they should be doing with it," she said. "I think they should be recycling it."

The economics of glass recycling have been marginal for some time.

Nationwide, only about 25 percent of glass containers are recycled. That's compared to 31 percent of plastic containers, 45 percent of aluminum cans and 63 percent of steel cans, according to the Environmental Protection Agency.

In northern Idaho, Kootenai County gave up collecting glass last year. In Oregon, which was the first of 11 states to adopt a bottle deposit law in 1971, Deschutes County stockpiled 1,000 tons of glass at its landfill before finally finding a use for it a couple years ago — as fill beneath an area for collecting compost.

Glass also has piled up at the landfill serving Albuquerque, N.M., where officials this year announced that a manufacturer of water-absorbing horticultural stones would eventually use up their stockpiles. New York City gave up glass recycling from 2002 to 2004 because officials decided it was too costly.

In a sense, glass ought to be the perfect commodity to recycle. It can be recycled an infinite number of times. Melting down one glass bottle and making another isn't particularly complicated or especially costly.

The challenge is that the main ingredient in glass, sand, is plentiful and cheap — often cheaper than cullet, which is glass that has been prepared for recycling.

Used glass must be sorted by color and cleaned before it can be crushed into cullet that is suitable for recycling into new containers. That contributes to much of the cost of recycling glass, said Joe Cattaneo, president of the Glass Packaging Institute in Alexandria, Va.

"It's not just a glass company buying it from your municipal waste company, or recycling company," Cattaneo said. "Some entity has to clean it so it meets the specifications of mixing it with sand, soda ash and limestone."

Another cost is transportation. The farther away a community is from glass processors and container manufacturers, he said, the more expensive it is to recycle it.

Cheyenne has been in touch with glass recyclers in Colorado but has yet to find a feasible arrangement for glass recycling, said Dennis Pino, director of the city sanitation department. "If we're going to try and do something that's going to put us in the hole, it's not a good idea, especially with the economy," Pino said.

One of the region's largest glass recyclers, an O-I Inc. bottling manufacturing plant, is only 50 miles south of Cheyenne in Windsor, Colo. That plant gets the vast majority of its cullet not from Wyoming or even Colorado, but from the 11 states with bottle deposit laws, company spokeswoman Stephanie Johnston said.

Bottles returned for 5-cent or 10-cent deposits are kept sorted by color and usually haven't been mixed with other recyclable materials or trash. As a result, cullet produced

from such glass is more likely to meet the company's very high standards — completely free of paper, plastic, metal or other contaminants, she said.

"Our interest in recycled content is high. But the way the system is currently set up, it's hard for us to get quality, clean cullet right now," Johnston said. "We're trying to find some ways to increase the amount of quality cullet from the states that don't have bottle bills."

Johnson said O-I prefers to use cullet rather than sand because cullet requires less energy to melt down.

O-I has billed the 4-year-old facility as the most modern of its kind in the world. Cheyenne was runner-up in the race to land the plant in 2003.

Within sight of its landfill glass, Cheyenne has begun building a recycling center that will handle a variety of materials including glass. The city still needs to complete two more leachate wells at the landfill, Pino said, and after that the center should be able to process the rest of the stockpiled glass.

Mahaffy said that's good enough for her to keep recycling her glass.

"If they're keeping it someplace separate where they could recycle it in the future, that's one thing," she said. "But if they're not ever planning on recycling it, that irritates me."

The city plans to buy a glass pulverizer and is considering at least two uses for the glass it plans to grind into a fine consistency — in place of sand in road construction and at playgrounds, Pino said.

"It's not dangerous. It's been tested — it works great," he said. "We don't want to just keep stockpiling it. We want to find another use for it."

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