The Journal

Officials tour plant that will turn solid waste into fuel



Journal photo by Jim McConville John Decker, a director of Entsorga West Virginia, talks to state Sen. Charles Trump, R-Morgan, on Friday how the waste-to-solid fuel conversion facility will operate when up and running. in the first quarter of next year.

MARTINSBURG — Turning trash into money is no longer a pipe dream.



Entsorga West Virginia will start turning tons of solid waste into usable fuel beginning the first quarter of next year, executives said.

On a cold and rainy Friday morning, 12 Eastern Panhandle officials, dressed in hard hats and boots, got a bird's eye view of the Entsorga West Virginia waste-to-solid fuel plant under construction on Grapevine Road.

Local officials in attendance included: Sen. Craig Blair, R-Berkeley; Sen. Patricia Rucker, R-Jefferson; Sen. Charles Trump, R-Morgan; Rep. Paul Espinosa, R-Jefferson and Eric Householder, R-Berkeley.

Costing an estimated \$29-30 million to build, Entsorga is billed as a *"renewable landfill."* Parent company Entsorga Italia operates nine plants around the world. The Berkeley County facility is its first U.S. operation.

Entsorga West Virginia is a joint venture between Apple Valley Waste Technologies, Inc., Entsorga Italia and Chemtex Global, New York. The project is being financed with \$25 million in tax exempt, private activity bonds issued by the West Virginia Economic Development Authority.

Local waste from the Eastern Panhandle – Berkeley, Jefferson, Morgan and Hampshire counties – will be the raw material to be converted into a solid fuel source.

When the plant is fully operational, an estimated 80 percent of Berkeley County's solid waste will no longer be landfilled, according to Clint Hogbin, chairman of the Berkeley County Solid Waste Authority, who was on tour.

Berkeley County started looking into the concept of reusable or convertible trash in 2003.

"With the growth in the area, an increased waste stream and a strong pushback from the residents who live around the landfill, the Berkeley County Commission 15 years ago gave us the money to do a study," Hogbin said. "The conclusion (of our study) was that Berkeley County Solid Waste should look at renewable resource recovery as an option for solid waste management."

The conversion process starts with mixed municipal solid waste that is transported to the plant. It undergoes a multistep sorting and air compressing process that does not use heat.

One of Entsorga's local partners, Berkeley County-based Argos Cement, is signed on to use the solid waste fuel in its cement manufacturing process.

"I don't see it as a waste product; I see it as a manufacturing product," said Emily Dyson, director of science research and development for Entsorga North America and project manager. "We're manufacturing a valuable commodity, and we just happen to be using the local municipal solid waste as a fuel stock."

Entsorga's converting process consists of several rounds of automated sorting, followed by air blown drying out process.

"We dry it out, we compost it, we mix it, we blend it and size it to meet the specifications that are equal to or equivalent to coal," Dyson said.

The drying process employs industrial sized fans.

"There's no heat here," said John Decker, a director of Entsorga West Virginia. "The only heat is generated from the material itself. There is no incineration. There's no heat. There's no fuel. It creates its own heat to dry itself out."

It will take between 10 to 14 days to dry into a finished product, Dyson said.

Once dried and compressed, the end product resembles compressed confetti in its usable fuel form.

"It basically ends up looking like a fluffy paper," Dyson said.

The 55,000 square foot installation is completely automated.

"There is no human intervention once the trash gets dumped — everything is automated," Dyson said.

When open, the facility will employ16 workers working two shifts. The plant will be open six days a week.

The waste drop-off cost at Entsorga will be the same as conventional landfills, Dexter said.

Facility executives anticipate signing up multiple solid waste partners along with Berkeley County.

"Apple Valley Waste is going to participate," Dexter said. "And I think you are going to see a large number of manufacturers in the area participate."

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