

Energy options

Linn Solid Waste Agency demonstrates plasma arc technology

By Rick Smith
The Gazette

CEDAR RAPIDS — It's always a joy to see people trying to figure out the future.

That's what is now on display on the grounds of the closed Site No. 1 landfill in southwest Cedar Rapids where the Cedar Rapids/Linn County Solid Waste Agency has brought a future-reaching technology to town for six weeks to show how it is possible to zap garbage, flood debris and construction waste and turn it into gas to power things.

The demonstration is a version of a technology called plasma arc that has been much-discussed in Cedar Rapids, Linn County and particularly Marion in recent years.

A group of local residents, some in Marion, have become energetic fans of plasma arc, a commitment that was born out of Marion's dismay that the Solid Waste Agency decided to expand its Site 2 landfill at County Home Road on Marion's border.

The local group, called wastenotIOWA,

► **ARC, PAGE 6B**

Arc/Turns solid waste into gas

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has helped secure a \$150,000 grant from the state of Iowa and \$50,000 in support from the University of Iowa and the city of Marion to conduct a financial feasibility study to see if plasma arc technology can work to turn municipal solid waste into gas.

Charlie Kress, treasurer of wastenotIOWA and a board member of the Solid Waste Agency, was on hand at the demonstration site on Wednesday afternoon. Kress noted that the local study is readying to embark.

Kress said the idea remains that the plasma arc system could be placed in the metro area to turn municipal solid waste into gas.

Local officials have traveled to Atlanta, Ga., in recent years to look at another ver-

sion of the plasma arc technology at Georgia Tech University and university officials from there also have ventured to the Cedar Rapids area.

On Wednesday, Ken Harris, CEO of Tapa Technologies, helped with the demonstration of their product, called a plasma enhanced melter.

Tapa is a corporate entity owned by the Paskenta Band of Nomlaki Indians in California. It has joined forces with another firm, Integrated Environmental Technologies LLC, to try to establish the technology in the marketplace.

Harris noted that the two partners have successfully run their demonstration unit at Fort Riley, Kan., and elsewhere. He said the companies work to continue to interest the U.S. Army in purchasing a full-sized unit to handle the Army post's municipal waste and that of the city and county

where it is located.

He put the construction cost at the demonstration model, which can handle 1 ton of garbage or construction and flood debris, at \$3 million to \$5 million. A model that could zap 250 tons a day — the local solid waste agency takes in about 560 tons a day — might cost \$50 million to \$100 million to build.

Karmin McShane, executive director of the local solid waste agency, said Wednesday that plasma arc remains one of several options for turning municipal waste into energy and keeping most of it out of landfills. The interest on the agency board in waste-to-energy is strong, McShane said, adding it was still too soon to know if plasma arc can be a cost-effective way to do the job.

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On the Net



For
video
from

Wednesday's
plasma arc
demonstration,
go to [www.
GazetteOnline.
com](http://www.GazetteOnline.com)

Tours

■ For those
who would like
a tour of the
plasma arc
demonstration
model, call the
Cedar Rapids/
Linn County
Solid Waste
Agency at (319)
377-5480.

A molten
glass bath
glows during a
demonstration
of the Cedar
Rapids/Linn
County Solid
Waste Agency's
plasma
enhanced
melter, which
gasifies landfill
waste and
turns it into
energy, on
Wednesday
at closed Site
No. 1 landfill
in southwest
Cedar Rapids.



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