

Sept 14, 2006

Chief of Rules & Directives Branch

Division of Administration

Moulthrop T-6D 59

US NUCLEAR REGULATORY Commission

Washington, DC. 20555-0001

6/16/06

71FR34969

22

Dear Chief

Last week I wrote you a letter asking you NOT to relicense the 35 year old (New Jersey) Oyster Creek NUCLEAR PLANT. So much change for clean safe energy has been made since this plant was built and so much more will be available in the near future. Such as the article enclosed of a company named GEOPLASMA in Atlanta building a plant in Florida to VAPORIZE TRASH. SYNTHETIC COMBUSTIBLE gas produced will be used to run turbines to create electricity. Sludge from waste water will be hardened into a material slag for road construction. Please read the attached article.

Sincerely yours  
Mary Maryza

3238 AS BORN Ter  
Toms River, NJ 08753

732-270-2678

SONSI Review Complete

Template = ADM-013

E-RIDS = ADM-03

Ass =

Mr. Marnik  
(NTH2)

RULES / DIRECTIVES

2006 SEP 20 PM 3:37

RECEIVED

# In this plan, Fla. garbage is toast

\$425M Sunshine State plant would vaporize 3,000 tons of trash and create electricity

BY BRIAN SKOLOFF  
ASSOCIATED PRESS

FORT PIERCE, Fla. — A Florida county has grand plans to ditch its dump, generate electricity and help build roads — all by vaporizing garbage at temperatures hotter than the sun.

The \$425 million facility expected to be built in St. Lucie County will use lightning-like plasma arcs to turn trash into gas and rock-like material. It will be the first such plant in the nation operating on such a massive scale and the largest in the world.

Supporters say the process is cleaner than traditional trash incineration, though skeptics question whether the technology can meet the lofty expectations.

The 100,000-square-foot plant, slated to be operational in two years, is expected to vaporize 3,000 tons of garbage a day. County officials estimate their entire landfill — 4.3 million tons of trash collected since 1978 — will be gone in 18 years.

No byproduct will go unused, according to Geoplasma, the Atlanta-based company building and paying for the plant.

Synthetic, combustible gas produced in the process will be used to run turbines to create electricity — about 120 megawatts a day — that will be sold back to the grid. The facility will operate on about a third of the power it generates, free from outside electricity.

About 80,000 pounds of steam per day will be sold to a neighboring Tropicana Products Inc. facility to power the juice plant's turbines.

Sludge from the county's wastewater treatment plant will be vaporized, and a material created from melted organic matter — up to 600 tons a day — will be hardened into slag, and sold for use in road and construction projects.

"This is sustainability in its truest and finest form," said Hilburn Hillestad, president of Geoplasma, a subsidiary of Jacoby Development Inc.

For years, some waste-management facilities have been converting methane — created by rotting trash in landfills — to power. Others also burn trash to produce electricity.

But experts say population growth will limit space available for future landfills.

"We've only got the size of the planet," said Richard Tedder, program administrator for the Florida Department of Environmental Protection's solid waste division. "Because of all of the pressures of development, people don't want landfills. It's going to be harder and harder to site new landfills, and it's going to be harder for existing landfills to continue to expand."

The plasma-arc gasification facility in St. Lucie County, on central Florida's Atlantic Coast, aims to solve that problem by eliminating the need for a landfill. Only two similar facilities are operating in the world — both in Japan — but are gasifying garbage on a much smaller scale.

Up to eight plasma arc-equipped cupolas will vaporize trash year-round, nonstop. Garbage will be brought in on conveyor belts and dumped into the cylindrical cupolas where it falls into a zone of heat more than 10,000 degrees Fahrenheit.

"We didn't want to do it like everybody else," said Leo Cordeiro, the county's solid waste director. "We knew there were better ways."

No emissions are released during the closed-loop gasification, Geoplasma says. The only emissions will come from the synthetic gas-powered turbines that create electricity. Even that will be cleaner than burning coal or natural gas, experts say.

Few other toxins will be generated, if any at all, Geoplasma says.

But critics disagree.

"We've found projects similar to this being misrepresented all over the country," said Monica Wilson of the Global Alliance for Incinerator Alternatives.

Wilson said there aren't enough studies yet to prove the company's claims that emissions will likely be less than from a standard natural-gas power plant.

"I think this is the time for the residents of this county to start



LYNNE SLADKY/ASSOCIATED PRESS

Leo Cordeiro, left, St. Lucie County solid waste director, and assistant director Ron Roberts stand at the landfill in Fort Pierce, Fla.

asking some tough questions," Wilson said.

Bruce Parker, president and CEO of the Washington, D.C.-based National Solid Wastes Management Association, scoffs at the notion that plasma technology will eliminate the need for landfills.

"We do know that plasma arc is a legitimate technology, but let's see first how this thing works for St. Lucie County," Parker said. "It's too soon for people to make wild claims that we won't need landfills."

Louis Circeo, director of Georgia Tech's plasma research division, said that as energy prices soar and landfill fees increase, plasma-arc technology will become more affordable.

"Municipal solid waste is perhaps the largest renewable energy

resource we have."

He said that if large plasma facilities were put to use nationwide to vaporize trash, they could theoretically generate electricity equivalent to about 25 nuclear plants.

NEWARK, N.J.  
STAR LEDGER  
week of  
9-10-06?

resource that is available to us," Circeo said, adding that the process "could not only solve the garbage and landfill problems in the United States and elsewhere, but it could significantly alleviate the cur-