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By garcia_s at 10:36 am, Sep 10, 2010

August 13, 2010

Landowner/Resident of Palm Beach County

**Re: Solid Waste Authority of Palm Beach County
Notice of Filing an Application under the Florida Electrical Power Plant Siting Act
for Palm Beach Renewable Energy Facility No. 2**

Dear Landowner/Resident:

I would like to take this opportunity to inform you of a project that the Solid Waste Authority of Palm Beach County (SWA) is proposing. The SWA is the governmental agency in Palm Beach County responsible for managing all of the solid waste produced in Palm Beach County. Created in 1975 by Special Act of the State of Florida, the SWA has provided cost effective, state of the art, and environmentally responsible programs to manage the two million tons of waste generated by the residents and businesses in Palm Beach County each year. The SWA developed and implemented what is known in the solid waste industry as an integrated solid waste management system. An integrated solid waste management system utilizes several different approaches for managing waste, including waste reduction, recycling, composting, waste-to-energy, and landfilling.

Waste-to-energy (WTE) is a key component of the SWA's integrated management system. For over 20 years, the SWA's current WTE facility has safely, reliably, and cost effectively processed over 15 million tons of solid waste and produced enough electricity each year to power approximately 30,000 homes. The SWA intends to expand its WTE capacity at its facility on Jog Road, west of the Florida Turnpike (see newspaper notice with site location map). The Palm Beach Renewable Energy Facility #2 (Proposed Facility) will be a 3,000 tons-per-day (tpd) facility located next to the SWA's existing solid waste management facilities. The SWA recently filed an application under the Florida Electrical Power Plant Siting Act (PPSA) for the proposed facility and published the attached notice in the Palm Beach Post. This letter contains additional information about the proposed facility and explains how it would benefit our community.

Besides producing electricity, WTE reduces the overall amount of waste placed in our landfills. Although our extensive recycling programs, composting, outreach and various other programs have helped us divert a majority of the waste from the landfill, it is impossible to divert all of it. As a result, what is not recycled or composted is sent to our WTE facility, where it is burned and turned into electricity.

The SWA's existing WTE facility is operating at its maximum capacity. Unfortunately, residents of Palm Beach County continue to produce more waste than the current WTE facility can handle, which means nearly 500,000 tons of combustible waste is sent to the landfill each year. Consequently, the SWA has concluded that we need to increase the capacity of the WTE facility in order to process the excess combustible trash and minimize what is landfilled.

The proposed facility will be designed with state-of-the-art technology and advanced pollution control systems. The United States Environmental Protection Agency has concluded that modern WTE facilities provide a clean, reliable supply of renewable energy, and these facilities have less environmental impact than most other sources of electricity.

The proposed facility will also generate local employment opportunities, both during construction and in the long term, and provide a boost to the local economy. The SWA intends to hire locally to the greatest extent possible for this project.

The attached fact sheet offers general information about the proposed facility, as well as responses to frequently asked questions about the SWA's current programs.

We continue to look forward to providing the residents of Palm Beach County with the most comprehensive and efficient solid waste services. If you have any questions, please contact the SWA's Engineering Department at (561) 640-4000.

Very truly yours,

THE SOLID WASTE AUTHORITY OF PALM BEACH COUNTY


Mark Hammond
Executive Director

Attachments:
Newspaper Notice
Fact Sheet

RENEWABLE ENERGY FACT SHEET

August 2010

North County Resource Recovery Facility

The North County Resource Recovery Facility (NCRRF) is a power plant, much like a traditional power plant, but instead of a typical fossil fuel, it combusts solid waste (household garbage) to generate electricity for use in the County. It is located one mile north of 45th street on the west side of Jog Road in West Palm Beach.

Since 1989, the NCRRF has been operating effectively and has processed nearly **16 Million tons** of waste and generated over **6 Million MWh** of power, enough to power the Authority's facilities and approximately **30,000 homes** in Palm Beach County each year.

It has saved almost **20 years** of landfill capacity in the existing landfill and **15 million barrels of oil** while recovering and recycling **600,000 tons** of ferrous and non-ferrous metal.

The NCRRF is currently being refurbished. This will allow the NCRRF to provide for reliable processing capacity and improved air emissions for the next 30+ years.



THE EXISTING NCRRF ON JOG ROAD.

Job Creation:

- ◆ The Renewable Expansion is expected to generate **employment opportunities for up to 1,500 people** during construction and boost the local economy through construction support industries, restaurants, and tourism.
- ◆ The Renewable Energy Expansion is expected to generate up to **80 permanent jobs** once operations commence in 2015.

Proposed Renewable Energy Facility Expansion

The Proposed Renewable Energy Expansion will be located just north of the existing NCRRF Facility. It will reduce the amount of waste currently being landfilled by up to **85%**, delaying for many years the need to develop a new landfill in Palm Beach County.



CONCEPTUAL PROPOSED FACILITY

The Renewable Energy Expansion will process **1 Million tons** of waste a year and generate more than **675,000 MWh** of power, enough to power the Facility and approximately **56,000 homes** each year. It will also recover **33,000 tons of metal** annually. Over its expected useful life, the Facility should offset the need to burn **45 Million barrels of oil** to generate electricity.

It will have very low air emissions through the use of Best Available Control Technol-

ogy. Emissions Permit limits will be the **lowest of any renewable energy facility** combusting municipal solid waste in the Country. The Facility will also conserve water resources. It will utilize air cooling instead of conventional water cooling. Much of the process water used in the Facility will come from a rain water harvesting system. As much as **200,000 gallons per hour of rain water** will be captured from roof drains from the new Facility and the existing NCRRF.



CONCEPTUAL RAINWATER TANK



Source: Google Maps



RENEWABLE ENERGY FACT SHEET

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FREQUENTLY ASKED QUESTIONS

How many tons of waste does the Authority handle a year?

The Authority handled on average over the past five years 1.9 million tons of waste a year. That is 7.5 pounds of waste per person, per day. Even after recycling and other measures, more than a half a million tons of waste has been landfilled each year.

How much energy does one ton of waste contain?

One ton of waste has about the same amount of energy as 500 lbs of coal, 1 barrel of oil, or 675 kilowatt-hours (kWh) of electricity.

What is that "smoke" that comes out of the stack at the existing NCRRF?

The "smoke" that you see coming out of the stack at the North County Resource Recovery (NCRRF) is actually not smoke at all! The only visible gas released from the stack at the NCRRF, or any other similar modern Facility, is water vapor left over from the combustion process. In addition to water vapor, trace gases are released out of the stack, all well within federal and state regulatory guidelines.

How does the Environmental Protection Agency (EPA) view waste-to-energy (WTE) facilities?

The EPA has recognized the municipal waste-to-energy industry for upgrading emission control systems to exceed the Clean Air Act standards. The EPA considers WTE a clean, reliable, and renewable energy source which has less of an environmental impact than most other sources of electricity.

How do WTE Facilities compare to traditional fossil fuel fired power plants?

According to the EPA, a new WTE Facility, similar to the one being built in Palm Beach County, will produce **63% less carbon dioxide, 94% less sulfur dioxide (SO₂) and 10% less nitrous oxides (NO_x)** than a traditional coal fired power plant. In fact, a new WTE Facility can actually improve air quality by replacing fossil fuel power plants. Modern WTE Facilities meet or exceed the strictest federal and local environmental standards.

How do WTE Facilities compare to landfills regarding Global Warming related emissions?

A WTE Facility avoids methane (CH₄) emissions that result when waste is buried and decomposes in a landfill. According to the EPA, methane is approximately **21 times more potent** than carbon dioxide as a greenhouse gas causing global warming. In fact, one ton of municipal solid waste combusted in a modern WTE Facility and not landfilled reduces GHG emissions by **0.55 tons** of carbon dioxide equivalent!

How many WTE Facilities are there currently operating throughout the United States and the world?

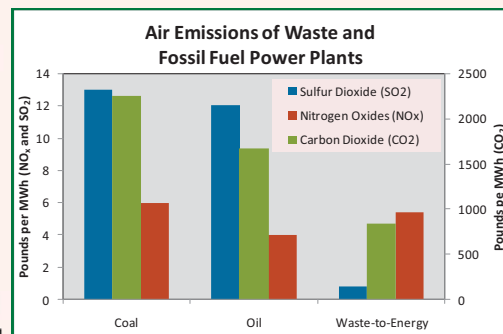
There are 11 WTE Facilities throughout Florida converting over 6.5 million tons of waste each year into over 500 megawatts of clean, renewable energy. There are currently 87 operational municipal solid waste WTE Facilities in the United States processing about 8% of the nation's waste. There are over 400 operational WTE Facilities operating in Europe, 82 in Japan, and 21 in China. Europe has plans to bring 100 new WTE Facilities online by 2012.

How will the Renewable Energy Expansion be paid for?

The Renewable Energy Expansion is going to be paid for by bonds issued by the Authority. Bonds will be repaid through waste disposal fees and the annual single family disposal assessment paid by property owners. The Authority's disposal assessment has remained static or declined from 1990 through 2006. Since then, the Authority has been expanding its system to meet current and future needs resulting in increases to fund these infrastructure improvements. It is estimated that the annual residential disposal assessment will top out at \$180+/- (it is currently \$156) and will only increase beyond that to cover inflation for quite some time.

The EPA recognizes waste-to-energy as a clean, reliable, and renewable energy source.

Modern Facilities meet or exceed the strictest federal and local environmental standards.



Almost 50 million barrels of oil are substituted by waste-to-energy facilities in Europe each year.

