

"STATE PUBLIC POLICY TRENDS IN TRASH-TO-ENERGY"

FRAZIER W. RUSSELL
MANAGER, STATE LEGISLATIVE AFFAIRS
WHEELABRATOR TECHNOLOGIES INC.

Introduction

As state and local officials struggle with the challenge of organizing and implementing solid waste management programs, they are faced with choices laden with emotional, political, scientific and economic influences. Trash-to-energy, an important part of many states' disposal options, brings with it policy issues reflective of its unique processes. Recycling, emissions levels, and ash management, top the list of matters being debated in relation to trash-to-energy. As the industry responds to changing social and political climates, it participates actively in assisting states and localities in meeting aggressive solid waste goals. Through legislation and regulation, public policy officials continue to define trash-to-energy's role as a key component of their integrated solid waste program.

No state has dealt more extensively with these issues in the past year than has Florida. Served by 14 municipal solid waste combustors, Florida has the capacity to process roughly 30 percent of its trash at trash-to-energy facilities. Three facilities came on-line in 1991 and another began construction in 1992. The State's demonstrated need and reliance on trash-to-energy technology has brought with it a great deal of controversy in the form of environmental activism, as well as an attempted moratorium. These recent, and highly publicized developments, are indicative of the conflicting viewpoints held about the industry. Florida provides a good case study on many of the issues confronting trash to energy.

State and local leaders in Tallahassee and throughout the counties of Florida are focusing attention on public policy issues relating to trash-to-energy. During the past two legislative sessions, lawmakers have worked on an update to the 1988 Solid Waste Management Act (SWMA) which addresses a number of areas relating to trash-to-energy, including the disposal of mercury-containing products. Mercury contamination in the Everglades and lakes in the State have raised concern from citizens and industry alike. Perhaps nowhere else in the country has the topic of mercury in the environment received such a high level of attention.

Flow control of waste continues to be debated and challenged in Florida. Existing Florida law gives counties the ability to direct the flow of solid waste to specified trash-to-energy facilities, yet the implementation of that authority

has raised controversy in sectors of government and industry. With its significant reliance on trash-to-energy, the Florida Department of Environmental Regulation (FLDER) developed a thorough ash management policy to regulate the disposal and reuse of the material. They continue to work with industry on research relating to ash reuse.

The most prominent of recent trash-to-energy public policy developments in Florida was a moratorium effort in the legislature. Championed by then DER Secretary, Carol Browner, the controversy involved environmentalists, industry and government in a several months effort, which is only now being finally resolved.

Recycling and Trash-to-Energy

States around the country have responded to increasing volumes of municipal solid waste by implementing mandatory waste recycling or reduction goals. While initially viewed by some as contrary to the operations of a trash-to-energy plant, public policies are being developed to reflect the cooperative relationship that can exist.

An exciting trend which has come to light in several states reflects the true nature of trash-to-energy as a form of recycling. In these cases, municipal trash processed at trash-to-energy plants may be counted towards the applicable recycling or reduction goal. Besides recycling trash to energy, the recovery of metals has long been an acknowledged recycling component of trash to energy facilities.

For example, in 1992, North Carolina amended its solid waste act to allow trash processed at a trash-to-energy facility to fulfill up to 10 percent of a county's reduction goal. The act still adheres to the solid waste hierarchy and requires that source reduction and composting be fully utilized, but recognizes the valuable role trash to energy plays in the State. Iowa passed a similar law last year which gives trash-to-energy credit in calculating the state's recycling goal once source reduction and reuse have been utilized significantly. This year, the State of Maine introduced legislation which would allow for trash to energy to account for a percentage of the mandatory recycling goal. This movement towards recognizing the technology as a form of recycling reflects a belief long held by those working in the industry.

A result of the public's commitment to recycling is the implementation of disposal bans on certain highly recyclable products from trash-to-energy facilities and landfills. These legislative and regulatory measures can be an effective way of assuring participation in recycling programs and are being utilized in almost every state. The Florida legislature has been debating a progressive plan to encourage recycling and fund its solid waste program through an Advance Disposal Fee. This approach, which will be implemented

at either the wholesale or retail level, is intended to impact business and citizens alike. The aim is to recognize the true cost of packaged products whose containers will most likely be destined for a landfill or municipal waste combustor. Policies like this, designed to discourage production and purchase of wasteful packaging, are being developed in many states.

The source separation of materials such as paper products and yard waste have been effective in reducing the waste stream destined for disposal facilities. New trash-to-energy plants are now sized to accommodate the reduction in the waste stream. In fact, a recent study done by the Integrated Waste Services Association showed that many communities that utilize trash-to-energy facilities have met and often exceeded the national average recycling rate of 17%. The Lee County, Florida trash-to-energy facility, now under construction, is an example of a plant that was downsized during the permitting process to accommodate increased recycling levels.

The trash-to-energy industry is now designing its operations to facilitate the increased level of recycling. In Bucks County, Pennsylvania, Wheelabrator Technologies is under construction with its Falls Township Recycling and Energy Recovery Facility. The project includes a Materials Recycling Facility which will accept materials collected through the curbside recycling program. Wheelabrator will be responsible for collection, separation and preparation of these materials for reuse. The adjoining trash-to-energy facility will process municipal solid waste from the surrounding areas and provide power to approximately 60,000 households. This type of project reflects the industry's desire to respond to the overwhelming public support for recycling.

Ash Reuse

State agencies are taking a new look at the management of ash from municipal waste combustion. Reassured by the EPA's 1992 ruling that ash is a non-hazardous waste, agencies are working with industry to develop policies which recognize the potential uses of the material for use as landfill cover and as an asphalt aggregate in road construction projects.

In its draft revisions to the State's Part 360 Solid Waste Regulations, the New York Department of Environmental Conservation (NYDEC) addresses existing requirements for beneficial reuse of municipal solid waste combustor ash. These revisions, still currently under consideration, reflect the State's desire to provide clear procedural and testing protocol to persons interested in pursuing ash reuse

Early this year, a request was made to the Florida Environmental Review Committee to have the Florida DER review and perhaps modify the 1990 ash management policy. The request was made by a citizen's group, which has long opposed trash-to-energy. The Florida DER was subsequently asked to

review its policy and make any recommendations for modification. The DER reaffirmed their existing policy which includes "cautiously encouraging recycling" of ash. Consistent with this position, the DER approved a product called Permabase, consisting of ash from Hillsborough County, for reuse in roadbase applications. There is also a permit pending for the use of McKaynite, made of ash from the McKay Bay facility, in road construction. This course of events in Florida illustrates the commitment of the State agency to regulate ash as a solid waste and encourage beneficial reuse.

Mercury

Industry and government are focusing a great deal of attention on reducing mercury emissions from municipal waste combustors. While purely scientific in nature, this is perhaps the most emotionally volatile of the public policy issues facing the industry today. Legislative and regulatory efforts have been undertaken in the states to address the increasing concern about mercury in the environment and the trash-to-energy industry has been in the center of many of these efforts.

In 1992, the Integrated Waste Services Association (IWSA) published a study of the sources and impacts of mercury on the environment. The study revealed that through increasingly stringent emissions limits and a phasing out of mercury use in consumer products, mercury emissions from municipal waste combustors are declining dramatically.

The industry has taken the position that just as trash-to-energy facilities have been scrutinized and highly regulated, other mercury emitters should be subject to the same treatment. A study done for the Florida DER in 1992 reported trash-to-energy facilities as the largest contributor of mercury to the environment in Florida, yet there exists no data by which to measure the levels being emitted by other sources such as hospital incinerators or electric utilities in the State. These other facilities are not subject to the same rigorous regulatory requirements with respect to mercury emissions. We should begin to see a trend subjecting other industries to the same level of scrutiny as trash-to-energy facilities.

The most effective way to impact emissions from municipal waste combustors is to ensure that mercury-containing items do not arrive at the facilities. Thus, state legislatures are enacting laws which prohibit the disposal of mercury containing items and require manufacturers to provide a location for their return. States such as Florida and New Jersey have gone even farther by undertaking regulatory measures to establish stringent mercury emission levels for the trash-to-energy industry.

The State of Florida is well along in its process of adopting Maximum Achievable Control Technology (MACT) standards for mercury emissions from municipal waste combustors. Deciding to wait no longer for the EPA to issue Federal MACT standards, the Florida DER has undertaken a rule making process which will set aggressively low mercury levels for municipal solid waste combustors. The trash-to-energy industry is playing an active role in this process and supports the agency's desire to see levels lowered.

Flow Control

From cities to counties to states, the ability to direct the flow of garbage is being challenged. Public officials are working to establish the level of control necessary to keep "local" garbage in or out of their jurisdiction. Often, they are working to keep theirs in, but just as often they are trying to keep someone else's out. The restriction of movement of garbage across state lines has been challenged and defeated in the courts on the grounds that it violates the Interstate Commerce Clause. This has not discouraged counties, however, from pursuing the right to control the servicing and disposal of the waste generated within their boundaries.

This debate over flow control is particularly significant to the trash-to-energy industry. The capital intensive nature of trash-to-energy facilities requires that a waste stream be guaranteed to in order to secure financing. This waste stream can be assured a number of ways including regulatory flow control, whereby all waste generated within a county is directed to a designated facility. The topic of flow control is fraught with legal issues and complicated by externalities associated with the transport and disposal of municipal waste.

Interstate bans were debated in Congress last year in the context of a bill introduced by Senator Coates from Indiana. Until Congress allows local jurisdictions to restrict the flow of waste, states will continue to lack any ability to implement bans on out of state waste. A group of state leaders, lead by Governor Casey of Pennsylvania, has made a strong appeal to Congress to empower them with the ability to restrict waste. This may eventually take the form of outright bans, or the authority to assess fees on out-of-state waste crossing the border for disposal.

One can again look to the State of Florida to find a public policy effort which exemplifies this trend. According to current law, counties have the authority to direct waste to a designated trash-to-energy plant. This authority was provided in the 1970s to assure sufficient waste would be delivered to trash-to-energy facilities to support debt servicing on the facilities' bonds. Counties have met with resistance from private recyclers who claim that separated, recyclable material is a product owned by the business or individual who purchased it, and is not subject to flow control of municipal solid waste. The issue was hotly debated in the Legislature in 1992. In the absence of a new

solid waste bill being enacted, there was no resolution. Interested parties have been working together throughout the 1993 session in order to settle the issue in this year's solid waste bill.

Moratorium

While trash-to-energy is widely acknowledged as an important component of the integrated solid waste management hierarchy, there are an alarming number of legislative moratorium efforts each year at the state level. These bills are often motivated by a particular facility that is proposed for development, or is well along the permitting process. Moratorium efforts may also be the result of concern about a trash-to-energy facility's competition with recycling, or emissions.

All too often, when a specific interest group opposes the construction of a new trash-to-energy plant, and they have not been successful in persuading local officials and state agencies to reject it, they will attempt a legislative fix in the form of a moratorium. It has become almost customary that once a plant has come into the final stages of permitting, any existing opposition group looks to the legislature as a means to stop it. Fortunately, state legislatures generally agree that the approval or denial of a technical permit is a regulatory matter and best decided in that arena.

Short of implementing an ongoing moratorium, some states have pursued "pauses" in permitting linked with studies on trash to energy. These studies may include research relating to recycling levels, emissions or evaluations of existing disposal capacity. This was the approach taken by the Florida DER in the legislation considered in 1992. Under pressure from environmental groups concerned about mercury emissions, competition with recycling, and the permitting of a new facility in Lee County, the DER took a very public position in support of a two year moratorium on new trash-to-energy construction. As it was drafted, the bill called for a two year halt to permitting while an extensive study was done on the environmental and economic effects of trash-to-energy plants. Championed by then Secretary Carol Browner, the bill had the support of the DER, as well as many activist groups.

The focus on mercury, disincentives to recycling, and opposition to a new plant made the bill particularly onerous for the trash-to-energy industry. From the start of the session, each interested party began lobbying their perspective on the issue and forming coalition groups to strengthen their position before the legislature. Foreseeing a close and unpredictable outcome, the DER called the groups together to attempt to work out a compromise bill with which to go forward. Representatives from counties, trash-to-energy companies, activist groups, and the Florida DER, met often to negotiate a compromise.

MUNICIPAL WASTE COMBUSTION NETWORK

The result of the lengthy discussions that ensued last year was language which established stringent permitting criteria for expansions and new trash-to-energy facilities. While not a bill that industry or activist groups would otherwise endorse, the language represented a concerted effort to work together. This model has continued to function in Tallahassee during the 1993 session as the permitting criteria remains an important legislative issue for the DER.

The past two years of work on the Florida trash-to-energy bill resulted in both good public policy and the development of good working relationships between industry, environmentalists and other interest groups which will serve these parties as they work on issues in the future. This is a trend which will hopefully emerge as groups with opposing views on moratoriums or other heated issues go to battle in the legislature or before regulators. Where there seem to be diametrically opposed views, an attempt at negotiation can reveal areas of compromise not readily apparent.

Conclusion

While some negative trends may always confront the trash-to-energy industry, the positive public policy movements are a source of great encouragement. Trash-to-energy has adapted to the recycling wave with the knowledge that the processes are not only compatible, but complementary. Ash management has gone from primarily a disposal matter to the exciting and progressive public policy issue of reuse. The trash-to-energy industry and product manufacturers have responded to the mercury challenge by committing themselves to lowering emission levels. This effort is being lead by industry and government alike.

Interstate transport of waste and local flow control are still unresolved. As the flow control controversy continues throughout the country, policies will be developed to address it at the Federal and state levels. There certainly is no positive side to the moratorium trend, yet it has been demonstrated in Florida that even such a negative effort can result in good public policy for a state when the parties agree to work together.

These standards are further complicated because the EPA is in the process of re-evaluating the emission guidelines based on Clean Air Act Amendments (CAAA) of 1990. These amendments established new limits for regulatory dust emissions which are more stringent than the current guidelines. The new limit is the Maximum Achievable Control Technology (MACT) concept. This concept applies to existing facilities and is the level of control achieved at the best 12 percent of existing facilities. These guidelines are being developed for new facilities that have scrubber technology and sulfur dioxide control systems which are more stringent than those already promulgated. EPA must also consider the requirements for lead, cadmium and mercury in addition to the pollutants already regulated. EPA New Source Performance Standards (NSPS) and current emission guidelines are summarized in Table 1.

BIBLIOGRAPHY

Florida Department of Environmental Regulation, "Solid Waste Management in Florida", 1991 Annual Report.

Glenn, Jim, "The State of Garbage in America", *BioCycle*, May 1992.

ICF Kaiser Engineers, "Understanding the Sources, Trends and Impacts of Mercury in the Environment", Fairfax, Virginia, 1992.

KBN Engineering and Applied Sciences, Draft "Mercury Emissions to the Atmosphere in Florida", May 1992.

Woods, Randy, "WTE & Recycling: Under One Roof", *Waste Age*, November 1992.