9. Flow Control and the Interstate Movement of Waste: Post-Carbone

Flow control is the ability to ensure that waste from a certain area is delivered to a designated facility.[146] Flow control can be of a legal or economic nature (see box on page 90). Legal or legislated flow control occurs when State or local governments, acting in their capacity as waste "regulators," enact laws, regulations, and ordinances directing the flow of waste to particular facilities. Economic flow control has similar objectives, but the government uses tools such as subsidies and taxes rather then legislation to control the flow of waste.

Background

Almost a century ago, the U.S. Supreme Court ruled that garbage collection and disposal are core responsibilities of local governments.[147] Local governments may directly provide waste services through public employees or independent contractors, or they may regulate the private market. However, these historic Supreme Court decisions did not address whether municipal waste management systems were in compliance with the Commerce Clause of the U.S. Constitution. This controversial issue, which significantly affects everyday life in our solid waste management systems, is creating much uncertainty as it works its way through the judicial system.

After years of unsuccessfully challenging various flow control ordinances, plaintiffs have recently won key decisions. On May 16, 1994, the Supreme Court issued a landmark decision in C&A Carbone, Inc. v. Town of Clarkstown, New York (Carbone),[148] declaring the town's flow control ordinance unconstitutional on the grounds that it unfairly regulated interstate commerce and, therefore, violated the Commerce Clause. The Carbone decision is having a major impact on the way the waste industry does business. At the end of 1993, there were 114 waste-to-energy (WTE) facilities marketing energy in the United States, 55 of which used legal flow control to direct local waste streams. From 1990 to 1993, 21 facilities using legal flow control became operational compared and only 3 facilities that used private contracts or no contracts to secure waste supplies.[149] Since most flow control practices are now subject to dispute and litigation, municipalities are maneuvering to implement more legally defensible procedures to protect their investments in existing waste facilities.

The Carbone decision followed a 1992 decision[150] (excluding Carbone there have been three other Supreme Court cases since 1978 involving a Commerce Clause challenge to restrictions or taxes on waste disposal[151]) in which the Supreme Court declared Michigan's solid waste management law that prohibited private landfills from accepting out-of-State waste to be in violation of the Commerce Clause and, therefore, unconstitutional. The ruling held that Michigan's import restrictions are protectionist measures in that they "unambiguously" discriminate against interstate trade. The Court further stated that "a State (or one of its political subdivisions) may not avoid the strictures of the Commerce Clause by curtailing the movement of articles of commerce through the subdivisions of the State, rather than through the State itself." The Court ruled that the Michigan counties could provide safe disposal of future waste streams without discriminating among wastes from different origins.

[146]For more information on the history of flow control, see J. Carlin, "The Impact of Flow Control and Tax Reform on Ownership and Growth in the U.S. Waste-to-Energy Industry," in Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0535(94/09) (Washington, DC, September 1994); and W.L. Kovacs, "Flow Control of Solid Waste: The Continuing Conflict Between Free Competition and the Public Policy of Integrated Waste Management," *Resource Recovery Report* (Washington, DC, 1996).

[147]*California Reduction Co. v. Sanitary Reduction Works*, 199 U.S. 306, 50 L. Ed. 204, 26 S. Ct. 100 (1905); *Gardner v. Michigan*, 199 U.S. 325, 50 L. Ed. 212, 26 S. Ct. 106 (1905).

[148]*C&A Carbone, Inc. v. Town of Clarkstown, New York*, No. 114, S. Ct. 1677 (1994).

[149]J. Carlin, "The Impact of Flow Control and Tax Reform on Ownership and Growth in the U.S. Waste-to-Energy Industry."

[150]*Fort Gratiot Landfill v. Michigan Department of Natural Resources*, 504 U.S. 353 (1992).

[151]*Philadelphia v. New Jersey*, 437 U.S. 617 *(1978); Chemical Waste Management v. Hunt*, 504 U.S. 334 (1992); and *Oregon Waste Systems v. Department of Environmental Quality*, 114 S. Ct. 1345 (1994).

Flow Control Characteristics

Generally, flow control can be defined as the laws, regulations, and economic incentives or disincentives used by waste managers to direct waste generated in a specific geographic area to a designated landfill, recycling, or waste-to-energy (WTE) facility. In some cases, the waste may be delivered first to a transfer station, then sorted and reshipped. The specific form and mix of controls instituted by State and local governments depend on the objectives desired.

By far the most frequently used rationale for flow control is to ensure the financial viability of a WTE facility by providing a reliable, long-term supply of raw materials. This ensures the facility of obtaining revenues from tipping fees (charges for waste disposal at the facility) and the sale of electricity or steam or both, and, in some cases, from the sale of materials for recycling, depending on the type of waste disposal facility designated to receive the waste. This assurance is critical in raising capital to finance the construction of a facility.

Legal flow control can be implemented in several ways. The municipality use government employees and vehicles to collect and dispose of the waste, contract with private haulers for some portion of the process, or grant permits, licenses, or franchises for the collection, transportation, and disposal of waste only to those entities that deliver the waste to a designated facility. Local laws and ordinances to direct waste flows are usually authorized, required, or supported by State governments.

Economic flow control combines market forces with tools such as subsidies, grants, fees, and taxes to the extent necessary to control waste flows. It attempts to direct the movement of waste without legal or regulatory controls. The distinction between legislated and economic flow control is critical to the development of defense strategies against legal challenges.

Publicly owned WTE facilities and certain privately owned facilities that are affiliated with municipalities can engage in either legal or economic flow control. "Merchant facilities," which are independently constructed by entrepreneurs without municipal involvement in guaranteeing waste flows, usually employ private contracts to secure waste supplies.

Path Around the Carbone Decision

Recently, the judicial system has applied the guidance gained from the two Supreme Court decisions mentioned above, and in so doing has identified a path that may enable municipalities to restructure their current arrangements to be exempt from or in compliance with Commerce Clause strictures. To understand why flow control ordinances violate the Commerce Clause while certain practices such as "exclusive municipalization of waste disposal services" have been ruled valid by the judicial system, it is necessary to understand the judicial system's past reasoning and interpretations.

Legal Background

The Commerce Clause has been interpreted by the Supreme Court to prohibit States from discriminating against or unduly burdening interstate commerce. The Commerce Clause is applicable to State and local governments that are "regulating" the market but not to those that are participating as private buyers or sellers. Nothing in the U.S. Constitution or in the Commerce Clause prohibits a State from eliminating private markets, thus creating a government monopoly (although in the latter case antitrust laws are applicable.)

If State and local governments are regulating (directly or indirectly) interstate markets, such regulations are subject to judicial analysis under the Commerce Clause. First, the judicial body must determine whether the regulations discriminate against out-of-State economic interests. If so, the regulating authority must demonstrate that the benefits to local interests outweigh the discriminatory effects and that no nondiscriminatory alternative is available to protect those interests. This test is difficult to pass. If the regulation does not discriminate against interstate commerce, it still must pass the "undue burden" test. Even if a regulation treats in-State and out-of-State interests in the same way, a statute has been held to be unconstitutional if it creates an undue burden on interstate commerce.[152]

The strictures of the Commerce Clause are not absolute; Congress, by using its powers to regulate interstate commerce, may authorize through legislation particular activities that may otherwise be viewed as unduly discriminating against or burdening interstate commerce. Various bills have been contemplated in the U.S. Congress. For example in May 1995, the full U.S. Senate passed S. 534, which would have authorized States to

[152] *National Solid Wastes Management Association v. Myer*, 63 F. 3d 652 & 7th Cir. (1995).

direct or limit waste flows under certain circumstances. The provisions of the bill were also added as an amendment to the 1997 Senate Energy and Water Appropriations Bill, but the amendment was removed in the final form of the legislation.

Key Recent Court Cases

Since the Carbone decision, lower courts have applied and expanded the interpretation of the Supreme Court in several key cases.

Smithtown Case

The municipality of Smithtown, New York,[153] partially in response to Federal[154] and State[155] policies and statutes to protect the environment, initiated negotiations with the neighboring municipality of Huntington to provide joint waste disposal operations. Under a State-sanctioned agreement,[156] Smithtown would provide the landfill and Huntington would provide the incinerator.

The construction of the incinerator was financed with tax-free bonds. The bonding authority, the New York State Environmental Facilities Corporation, loaned the funds to Ogden Martin to build the facility. The bonds were secured with a contractual obligation between Ogden and the two towns to reimburse Ogden over a 25-year period for the total costs (capital and operating) of the incinerator; this is known as a "service fee" and must be paid regardless of the amount of waste delivered to the facility. Ogden then pays the State bonding authority, which in turn pays the bondholders. The towns fund the "service fee" with property taxes and tipping fees. A flow control ordinance was enacted to ensure a steady flow of tipping fees. No tipping fee was charged for recyclables delivered to an adjacent facility, thus encouraging waste haulers to divert waste out of the waste stream to recycling. Violation of the flow control ordinance is punishable by a fine up to $500 and up to 60 days in jail.

Smithtown solicited competitive bids to provide municipal garbage collection and disposal. All bidders were required to dispose of all residential garbage at the Huntington incinerator, where a $65 per ton tipping fee was applicable. Most of the residential contracts were awarded to SSC Corp., whose total bid was $218 per household in 1994. The $218 was determined by converting the $65 tipping fee at the incinerator into a $92 charge per household and combining it with a collection charge of $126 dollars per household. The total $218 user fee was added to each homeowner's annual property tax.

In April 1994, Smithtown accused SSC of breach of contract because they were allegedly disposing of waste at facilities cheaper than Huntington and pocketing the savings. Smithtown, therefore, withheld funds from SSC, which sued in the U.S. District Court for the Eastern District of New York. SSC only contested the part of the contract that required waste to be delivered to a designated facility. The District Court found that both the flow control ordinance and the waste disposal contract with SSC impermissibly discriminated against interstate commerce, in violation of the Commerce Clause.

Smithtown appealed the decision in the U.S. Court of Appeals for the Second Circuit. The first order of business of the court was to determine whether Smithtown's flow control ordinance was a "regulation" subject to scrutiny under the Commerce Clause or merely the result of "participation" in the waste disposal business. SSC argued that the ordinance constituted an exercise of the town's "sovereign powers of civil and criminal enforcement." Smithtown countered that it was a participant in the waste disposal business because it had placed substantial public funds at risk in financing the incinerator and the ordinance protected that investment. Since the ordinance threatened violators with fines and jail terms, the Court of Appeals ruled that Smithtown was acting as a regulator and did not warrant an exception to the Commerce Clause.

Citing Carbone as precedent, the Court of Appeals reinforced the decision of the District Court and ruled that Smithtown's flow control ordinance was unconstitutional. The Court of Appeals found that the ordinance discriminated against interstate trade since it directed all waste to a single facility, excluding in-State and out-of-State competitors. Furthermore, Smithtown failed to demonstrate that it had no other means available to support a legitimate local interest. As in the Carbone case, Smithtown could use economic flow control alternatives, such as property taxes, to recover funds to pay the service fee for the incinerator.

[153]*SSC Corporation v. Town of Smithtown*, 66 F. 3d 502, 2d Cir. (1995); *Cert. Denied* 116 S. Ct. 911 (1996).

[154]The Resource Conservation and Recovery Act of 1976 (RCRA), Public Law No. 94-580, 42 U.S.C., §§ 6901-6902, requires all solid waste to be either "utilized for resource recovery" or "disposed of in sanitary landfills" in accordance with U.S. Environmental Protection Agency Standards 42 U.S.C. § 6943(a)(2) (1988) and Part 258 of 40 C.F.R. (1994).

[155]"The Long Island Landfill Law," 1983 N.Y. Laws 299, *N.Y. Environmental Conservation Law*, § 27-0704 (1984).

[156]In December 1989, the towns of Smithtown and Huntington executed a Municipal Cooperation Agreement under Article 5G of the General Municipal Law of the State of New York. See *N.Y. General Municipal Law*, §§ 119-m to -00 (1986 & Supp. 1994).

On the other hand, the Court of Appeals reversed the District Court decision by ruling that the Smithtown contract with SSC constituted municipal "participation" rather than "regulation" and, hence, was not subject to Commerce Clause scrutiny. Courts have consistently ruled that nothing in the Commerce Clause prohibits a State from participating in the marketplace and favoring its own citizens over the citizens of other States.[157] The Court determined that Smithtown was a market participant in two distinct forms of market activity: "waste collection" and "waste disposal." Smithtown is using tax dollars to pay for these services. The services are contracted out but could have been done with government workers. Smithtown is a "buyer" rather than a "regulator" of waste services. The Supreme Court permits municipalities to discriminate in favor of their own taxpayers when buying or selling services in the marketplace.

There are several reasons why Smithtown charges SSC tipping fees and then reimburses SSC, rather than paying the fees directly to Ogden:

1. Tipping fees control the otherwise free flow of waste from other sources.
2. Tipping fees encourage recycling because there is no tipping for recycled waste.
3. Tipping fees encourage prospective contract bidders to forecast accurately the amount of waste from each area. Underestimation results in unreimbursed tipping fees.
4. By itemizing disposal costs in the contract, Smithtown can easily modify fees to residents as tipping fees change.

Clearly, the characteristics of the contract enhance the town's ability to monitor the contract and minimize costs to residents. The fact that SSC actually pays the tipping fees to Ogden must not cloud the fact that Smithtown is the consumer and ultimate payor for those services.

In summary, the Court of Appeals for the Second Circuit found Smithtown to be acting as a market participant because it was spending its own funds to enter the market as a "buyer" and "consumer" (rather than a regulator) of waste disposal services. The court reasoned that Smithtown was buying services similarly to any local government buying educational or police protection services. In all these instances, the benefits are restricted to those that fund the treasury by paying taxes or fees. Therefore, as a buyer of services from the waste haulers, the town can dictate by contract where the waste is to be delivered.

Babylon Case

In 1983 the New York legislature required Babylon, as well as other towns in its jurisdiction, to close municipal dumps in the interest of the environment.[158] Consistent with State policy preferences,[159] Babylon initiated action to construct an incinerator. After a competitive bidding process, a contract was awarded to Ogden Martin to construct the facility. The town, in accordance with New York law, created an Industrial Development Agency to issue tax-exempt bonds, own the incinerator and lease it to Ogden. The land on which the incinerator was built was owned by the town, leased to the Industrial Development Agency, and sublet to Ogden.

In accordance with a service agreement, the town had an unconditional commitment to pay Ogden a service fee covering the total capital and operating costs of the facility. The town retained exclusive rights to control the flow of garbage and tipping fees at the incinerator. In order to secure a waste stream to ensure the financial viability of the facility, the town instituted a flow control ordinance.

Babylon discontinued the enforcement of its flow control ordinance after the Carbone decision struck down a similar ordinance. As an alternative, the town created a commercial garbage collection district to displace private collectors with a single hauler, BSSCI, which was chosen through a competitive bidding process. BSSCI was paid to collect and dump trash at the incinerator, where there was no tipping fee unless the tonnage exceeded a certain amount. The disposal system was financed with property taxes and user fees on the generators of the waste.

Potential competitors challenged Babylon's waste management system in the U.S. District Court for the Eastern District of New York under the Commerce Clause and antitrust laws. Central to the legal dispute was the relationship between the town, BSSCI, and the incinerator. The District Court granted a preliminary injunction despite its own finding that no irreparable injury had been demonstrated. However, the District Court concluded that Babylon's amended ordinance

[157] *Hughes v. Oklahoma*, supra at 810; *LeFrancois v. Rhode Island*, 669 F. Supp. 1204, D.R.I. (1987); *Evergreen Waste Sys. V. Metrop. Serv. Dist.*, 643 F. Supp. 127, D. Or. (1986); *Aff'd on Other Grounds*, 820 F. 2d 1482 (1987); *Shayne Bros., Inc. v. Dist. of Columbia*, 592 F. Supp. 1128, D.D.C. (1984); *County Comm'rs of Charles County v. Stevens*, 299 Md. 203, 473 F. 2d 12 (1984).

[158] 1983 N.Y. Laws 299, codified at *N.Y. Environmental Conservation Law*, § 27-0704 (1984).

[159] *N.Y. Environmental Conservation Law*, § 27-0106 (Supp. 1995).

had the same discriminatory effect on interstate commerce as the ordinance struck down in the Carbone decision.

Babylon and BSSCI appealed the decision to the Court of Appeals for the Second Circuit. Potential competitors maintained their claim that exclusion from the waste market discriminated against interstate commerce because it granted the entire waste disposal business to a single hauler and a single incinerator eliminating competition from other in-State and out-of-State companies. Babylon countered by arguing that the town was not subject to the scrutiny of the Commerce Clause because it was a market participant rather than a market regulator. Further, even if the town was considered a market regulator, its waste disposal system did not discriminate in favor of any local company, but even-handedly prohibited any local or out-of-State companies other than the designated agents BSSCI and Ogden from entering their waste disposal market. Finally, Babylon argued that its waste disposal scheme did not place an undue burden on interstate commerce.

The Court of Appeals found that Babylon was a market regulator and, therefore, subject to the tests of the Commerce Clause. Although Babylon was a market participant in one respect (it bought garbage hauling services from BSSCI), it did not enjoy carte blanche to regulate a market (in other areas) just because it happened also to be a participant in that market. The legality of each challenged activity must be evaluated separately. The court also found that, although Babylon eliminated the commercial waste market, it did not in any way discriminate (favor in-State companies over out-of-State companies) against interstate commerce.

The Babylon case differs from the Carbone case, in which the flow control ordinances required local garbage haulers to buy disposal services from a local facility. In Babylon, the market was eliminated, with the local government providing services to those within its jurisdiction rather than as a business selling to a captive consumer group. Having found that Babylon's waste system did not discriminate against interstate trade, the Court's next step was to follow Supreme Court guidance[160] and apply the undue burden test.[161] The Court concluded that hiring a single contractor to handle the town's waste did not necessarily affect interstate commerce, particularly since out-of-State bidders and in-State bidders had equal opportunity to bid on and be awarded the contract. Moreover, the Court held that the taxes Babylon used were in reality a purchase of services from the private businesses providing them rather than a subsidy. The town was in fact using economic flow control, buying incineration services in the market with tax dollars and guaranteeing a flow of garbage to the incinerator by reducing its tipping fees to zero, to the best interest of the community.

Other Rulings

In Harvey & Harvey v. County of Chester, PA, and Tri-County Industries, Inc. v. County of Mercer, PA, just one month after the Second Circuit Court's decisions in Smithtown and Babylon, the Third Circuit Court set forth new criteria in the determination whether flow control laws violated interstate commerce. The court's emphasis was on the fairness and openness of the decisionmaking process leading to the selection of the hauler or disposal site, rather than determining any given designation's impact on interstate commerce. This shift in focus to the fairness of the selection process could result in many flow control ordinances being upheld. At least municipal flow control ordinances are not likely to be declared to discriminate against interstate commerce if out-of-State parties have a fair and open opportunity to compete for the contracts.

Antitrust Considerations

Flow control is also subject to antitrust laws. However, local governments are deemed to be immune from antitrust liability under the "State action" doctrine, provided that their anticompetitive policies and practices are clearly authorized by policies adopted by the State legislatures.[162] When private parties are involved, the State action doctrine requires active supervision by the State in addition to a clearly articulated State policy.[163]

If local governments are acting as market participants rather than market regulators, it is uncertain whether they can be entitled to immunity from antitrust laws under the State action doctrine. The precise application of State action immunity to local governments acting as market participants is entangled in issues of fact and law and may have to be resolved on a case-by-case basis.

[160]*Pike v. Bruce Church, Inc.*, 397 U.S. 137, 25 L. Ed., 2d 174, 90 S. Ct. 844 (1970).

[161]The guidance is as follows: ". . . where a statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits." Source: *USA Recycling Inc. v. Town of Babylon*, 66 F. 3d 1272, 1995 U.S. App. (Lexis 27011); 41 ERC (BNA) 1254; 25 ELR 21522; p. 28.

[162]*Hallie v. Eau Claire*, 471 U.S. 34 (1985).

[163]*Hallie v. Eau Clair*, 471 U.S. at 47.

Summary

Municipalities that continue to enforce legislative flow control may be subject to damage suits and litigation. However, the Smithtown, Babylon, Harvey, and Tri-County decisions provide paths for legitimizing flow control despite the Carbone decision. Nothing in the Commerce Clause, or for that matter in the Constitution, prohibits a State from eliminating private markets and substituting a government monopoly. The judicial systems currently upholds such municipalization of waste disposal services, particularly if the activities are contracted out through competitive bidding in which out-of-State parties are given fair and equal opportunities to compete.

Financial Impacts of Recent Judicial Decisions

Bond Market

As a result of the Supreme Court decisions that outlawed the waste disposal practices of many municipalities, Moody's Investors Service undertook a case-by-case assessment of ratings of 76 solid waste bonds.[164] The assessments examined credit fundamentals (including the economy, finances, administration, and debt) and the potential credit risks for solid waste bondholders, given that waste systems must operate in a free market environment with waste streams evolving to the cheapest disposal method. Moody's criteria for the credit assessments did not assume blanket absence of legal flow control; downgrades were limited to those systems that had already experienced material losses, such as declines in waste streams or financial deterioration, or were currently involved in litigation. Moody's key findings were as follows:

- Fourteen ratings were downgraded; Moody cited reductions in waste streams, financial deterioration, and litigation as the contributing factors to the downgrades.
- Continued deterioration of the financial credibility of the waste systems was likely without a Federal solution that protected or grandfathered legal flow control.
- Moody indicated that the ratings would be raised if Congress authorized legal flow control.
- In cases where waste streams were competitive, financial flexibility and managerial responsiveness were key factors in weighing creditworthiness.
- The successful substitution of economic flow control for legal flow control was viewed as an increasingly important factor in credit determination.

The Role of Competition and Absence of Adequate Flow Control in Bond Rating Downgrades

Legal Security—No Cure-All for Loss of Waste and Declining System Revenues

A deficiency makeup of system revenues or even a general obligation guarantee of debt service does not automatically mean that credit quality would be unaffected by the substantial weakening of a solid waste enterprise. The timing and sufficiency of the guarantee and the ability of the obligor to fulfill the backup commitment must also be considered.

For example, in New York State, the rating of St. Lawrence County's Solid Waste Management Authority was downgraded from **Baa** to **Ba** (see Appendix G for definitions of ratings) as a result of a diversion of waste attributable to a noncompetitive tipping fee. This bond had a double-barreled security. As the enterprise weakened, bondholder security shifted from system revenues to the county's contractual obligation under a service agreement. The county's general obligation bond rating is **Baa**. Although it appears that the county possesses the resources to meet the commitment to pay debt service on the solid waste bonds, the subsidy still must be budgeted and implemented on a timely basis. The distinction between the county's rating and the authority's rating stems from the loss of waste and projected drawdown of enterprise cash reserves as well as the contractual obligation of the county, which is considered weaker than the county's general obligation, unlimited tax security.

Declining Waste Levels and Weakened Financials Prompt Downgrade

Declining waste levels and weakened financial operations were cited as the major factors in the downgrade of the Prince George's County (Maryland) Solid Waste

(Continued on page 95)

[164]Moody's Investors Service, *Moody's Municipal Credit Report, Moody's Solid Waste Rating Surveillance and Rating Outlook* (New York, NY, May 1995).

Interstate Movement of Waste

Before the Supreme Court's decisions that prohibited States from closing their borders to waste from other States, the disposal of municipal solid waste, in most States, generally occurred near its geographic point of origin. To the extent that waste crossed State lines, a good portion of it usually traveled only a few miles to natural waste disposal sites. This practice reflects a cooperative and collective strategy of individuals in a community to solve their common waste problems. The fact that the waste crossed State lines may have been coincidental; the overall objective of the communities was to dispose of their waste in the most efficient, environmentally sound, and cost-effective manner.

The Role of Competition and Absence of Adequate Flow Control in Bond Rating Downgrades (Continued)

Management System from **A** to **Baal**. This rating action was based on loss of waste and a weakened financial position, despite the county's legal pledge to use General Fund resources or other available funds to pay operating costs if system revenues proved insufficient. Prince George's County's general obligation rating is **Aa**.

The rating distinction here reflects the weakening of the system and the fact that the timing and extent of a county subsidy were not clearly delineated under county deficiency makeup covenants, leaving unanswered questions about when necessary revenues would be transferred. Prince George's County's General Fund operations are also under increased financial pressures that have no relation to the solid waste system.

Financial Flexibility—A Key Element in Measuring Degrees of Risk

The Economic Development Authority of Fairfax, Virginia, and Southeastern Public Service Authority (SPSA) both experienced declines in waste flows. The ratings on these issuers were lowered to **Al** and **Baal**, respectively, from **Aa** and **A**, representing increased risk in implementing a business plan to promote competition. The effect of a loss of waste on revenues is expected to be tempered by management responses, such as subsidizing commercial fees and aggressively pursuing alternative waste streams.

While the uncertainty of successful implementation is reflected in the rating downgrades, Moody's views positively the ability of both systems to adjust pricing or attract alternative waste sources. By contrast, this flexibility is not immediately practicable for most of the New Jersey systems, which have higher overhead and extremely noncompetitive tipping fees to adjust. Tipping fees for New Jersey systems affected by the rating downgrades average about $110 per ton. SPSA is expected to increase its residential fee from $34 per ton to $63 per ton while lowering the fee for the more vulnerable commercial waste to between $30 and $34 per ton from $41 per ton. The Fairfax tipping fee is still fairly competitive at $48 per ton. Fairfax is taking steps to increase its waste volume by pursuing out-of-county waste.

Financial Position Weakened, but Responsiveness Reflected in Credit Standing

Moody's considers Lancaster, Pennsylvania, to be an interesting case study. In this situation, management's responsiveness had a favorable effect on the assigned rating because it prevented the situation from worsening. As a result of a decline in revenues and credit risks tied to the resolution of the flow control issue, Moody's downgraded the authority's credit rating from **Al** to **A**.

At the same time, Moody's noted management's proactive approach to the risk of losing flow control. Management lowered tipping fees to attract more waste to the facility. This strategy has only been partially successful, because waste volume has not increased to a level that, given the lower price now charged at the gate, balances out lower costs with increased volume. While Moody's considers the Lancaster management strategy commendable, the system still carries risks that are reflected in the lower rating and unfavorable outlook.

Source: Moody's Investor Service, *Moody's Municipal Credit Report, Moody's Solid Waste Rating Surveillance and Rating Outlook* (New York, NY, May 1995), pp. 3-4.

Public Officials Around the Country Encounter Problems

- Dade County, Florida, lowered disposal fees by more than 20 percent, fired 280 employees, renegotiated contracts, restructured debt, sharply reduced capital expenditures, increased the taxpayer surcharge on water and sewer bills by 12 percent, increased the cost of carting services, cut recycling efforts, delayed development of two household chemical collection facilities, downsized the illegal dumping task force, and cut the county's mulching program. Despite Dade County's significant reduction in tipping fees, cost savings, and revenue enhancements, the County's bond rating was lowered by national rating companies.
- Virginia's Southeastern Public Service Authority (SPSA) lost more than 50 percent of its general cash balance, fired 50 employees, increased the user fee for disposal, and instituted a new fee for recycling. SPSA's bonds were downgraded due to lack of flow control.
- Hennepin County, Minnesota, faces more than $300 million in court-imposed judgments stemming from a lawsuit challenging the County's flow control authority. Taxes could more than double to cover the County's liability.
- Atlantic County and surrounding counties in New Jersey lost more than $2 million in revenues. Staff was cut by 8 percent. Development of a recycling center stopped. Bonds used to finance solid waste facilities and services have been downgraded.
- Iredell County, North Carolina, has lost nearly $300,000 in cash revenues.
- New Hanover County, North Carolina, stopped development of a recycling facility and raised taxes while transferring nearly $10.5 million from general funds to cover the more than $18 million in lost revenues.
- Lee County, Florida, increased property taxes on an emergency basis to cover $7.8 million in lost revenues, representing 30 percent of its solid waste departments's operating budget. Property owners face a special assessment in the long term.
- The Town of Babylon, New York, lost $2 million in 1995 alone—6 percent of its total town budget. The town was forced to lay off 70 employees. Babylon created a commercial garbage district to offset its losses and was sued by haulers. The lawsuit cost the town nearly $5 million in lost revenues and legal expenses.
- The bond rating of the solid waste authority of St. Lawrence County, New York, was lowered because the authority faces a $1 million shortfall this year. The county will need to borrow up to $3 million to subsidize the authority.
- Charles County, Maryland, lost 40 percent of its facility revenues, fired employees, and cut recycling efforts. It faces the potential of having to subsidize its landfill with tax revenues.
- Calvert County, Maryland, cut recycling efforts and employee hours by 30 percent to avoid layoffs due to lost revenues.
- Citrus County, Florida, delayed capital expenditures as it faces loosing up to 60 percent of its waste stream to out-of-county landfills.
- St. Lucie County, Florida, lost 30 percent of its landfill revenues and fired 11 employees.
- Dutchess County, New York, taxpayers paid $5 million more in property taxes in the last year-and-a-half in addition to their garbage bills due to the loss of waste volume.
- Seven metropolitan Minnesota counties have seen a reversal in recycling amounts and an increased reliance on landfills. After a decade of progress in diverting waste from landfills by use of recycling and resource recovery facilities, from a 1993 landfilling rate of 11 percent, the counties report that landfilling has reversed direction and is now over 18 percent.
- Oneida and Herkimer Counties in New York face a lawsuit threatening to scuttle the counties' integrated waste management system and force property taxpayers to pay off $47 million in bonds.
- Nassau County, Florida, lost 20 percent of its facility revenues.
- Montgomery, Otsego, and Schoharie Counties in New York stopped recycling collection services and face dismantling the entire solid waste management system. The bond insurer for the counties' facilities stated that future actions "could totally destroy the established belief in the municipal bond market."

Source: National Association of Counties, "Think the Lack of Flow Control Hasn't Hurt Anybody? Think Again" (Washington, DC, January 1997).

On the other hand, in States where landfill space is relatively scarce and expensive (New Jersey and New York), large quantities of waste may be shipped significant distances. In 1993, approximately 13 million tons of waste, or less than 5 percent of total U.S. solid waste, was exported.[165] Over 40 percent of the total waste exported came from New Jersey and New York (Table 27). The key economic factors influencing the shipment of waste are the relative tipping fees of the exporting and importing geographic areas and transportation costs.

The political willingness of States to receive out-of-State waste has been a significant factor in the growth of long-distance waste disposal operations. As of 1993, 41 of the 48 contiguous States had enacted or contemplated legislation restricting the flow of out-of-State waste into their jurisdictions.[166] Over the years, many such laws have been challenged and struck down, but there is still much uncertainty associated with the development of long-distance waste disposal businesses. The two recent Supreme Court decisions (Gratiot and Carbone) have done much to eliminate uncertainty. Large landfills that are intending to accept waste from faraway sources are beginning to be built. The landfills are ideally situated environmentally and geographically. Furthermore, it is likely that large landfills which will derive revenues from large geographic regions independent of State borders will be able efficiently to meet the environmental standards mandated by Subtitle D regulations of the Resource Conservation and Recovery Act and the Clean Air Act.

Table 27. Waste Generated, Exported, and Imported by Trading Partners, 1993

State	Million Tons per Year			Shipments[b]	
	Waste Generated[a]	Exports	Imports	To	From
New York	25.2	3.90	0.20	PA, OH, IL, IN	Canada
New Jersey	7.3	1.60	—[b]	PA, VA, WV	NY
Illinois	14.7	1.00	1.00	IN, OH, WI	MO, IN, IA
Missouri	7.5	1.00	0.03	IL, KS	—
Pennsylvania	9.5	0.80	3.80	OH, WV, IL, IN	NJ, NY
Rhode Island	1.2	0.60	—	OH, MA	—
Ohio	17.5	0.30	1.70	MI, PA, KY	NY, NJ, PA, RI
Virginia	7.6	0.03	1.50	NC	—
West Virginia	1.7	0.10	0.50	PA, OH, KY	PA
Connecticut	2.3	—	0.80	—	—
Massachusetts	6.8	0.40	0.70	NH	RI, NY
New Hampshire	1.1	0.03	0.50	MA, ME	MA
Indiana	4.4	0.08	0.80	IL, OH, KY, MI	NY, NJ, IL, PA
Kansas	2.7	—	0.70	—	MO
Total[c]	**109.5**	**9.80**	**2.20**		
Percent of U.S. Total	**36**	**75**	**84**		
U.S. Total	**307**	**13**	**15**		

[a]The amount of waste generated that is landfilled varies widely across States. Most of the waste exported or imported is landfilled, but there are exceptions. For example, in Connecticut about one-third of imports go to waste-to-energy facilities (for discussion, see J.E. McCarthy, *Interstate Shipment of Municipal Solid Waste: 1995 Update*, CRS Report for Congress, 95-570 ENR (Washington, DC: Congressional Research Service, 1995).

[b]Reflecting shortcomings in the available data, numbers for trading partners do not always match. For example, New Jersey reports receiving from New York, but New York does not report shipping to New Jersey.

[c]Exports and imports do not match for at least two reasons. One is that States in addition to those listed above export and import waste; the other is that even for nationwide data, reported exports and imports do not match (see bottom line above).

Sources: **Waste Generated:** *Biocycle*, Vol. 35, No. 4 (April 1994), p. 48. **Exports and Imports:** J.E. McCarthy, *Interstate Shipment of Municipal Solid Waste: 1995 Update*, CRS Report for Congress, 95-570 ENR (Washington, DC: Congressional Research Service, 1995). **Shipments:** J.E. McCarthy (1995) and E. Ley, M.K. Macaulry, and S.W. Salant, “Spatially and Intertemporally Efficient Waste Management: The Costs of Interstate Flow Control,” Discussion Paper 96-23 (Washington, DC: Resources for the Future, 1996).

[165]These waste figures include significant quantities of waste such as construction debris that are not included in the Environmental Protection Agency’s definition of municipal solid waste. However, these figures can be used to estimate the amount of waste that crosses State lines, municipal or total waste.

[166]E. Ley, M.K. Macauley, and S.W. Salant, “Spatially and Intertemporally Efficient Waste Management: The Costs of Interstate Flow Control” (Washington, DC: Resources for the Future, June 1996), p. 4.