



**THE COMMONWEALTH OF MASSACHUSETTS  
OFFICE OF THE INSPECTOR GENERAL**

**The North East Solid Waste Committee Project:  
Planning and Development of  
a Public Private Partnership**

**Robert A. Cerasoli  
Inspector General  
December 1997**



ROBERT A. CERASOLI  
INSPECTOR GENERAL

The Commonwealth of Massachusetts  
Office of the Inspector General

JOHN W. MCCORMACK  
STATE OFFICE BUILDING  
ROOM 1311  
TEL: 725-9140  
FAX: 725-9334  
MAILING ADDRESS:  
STATE HOUSE STATION  
P. O. BOX 870  
BOSTON, MA 02133

December 1997

His Excellency the Governor

The Honorable President of the Senate

The Honorable Speaker of the House of Representatives

The Honorable Chairman of the Senate Ways and Means Committee

The Honorable Chairman of the House Ways and Means Committee

The Honorable Chairman of the House Post Audit and Oversight Committee

The Directors of the Legislative Post Audit Committee

The Secretary of Administration and Finance

Members of the General Court

*Omnibus ad quos praesentes literae pervenerint, salutem.*

This Office has been asked by a caucus of state legislators who represent twenty-three Massachusetts communities comprising the North East Solid Waste Committee (NESWC) to investigate the NESWC resource recovery project. The NESWC project is an extraordinarily expensive public-private partnership planned and developed by the Commonwealth in the 1970s and early 1980s as a partial solution to the state's mounting solid waste disposal problems. Since the NESWC facility began operations more than a decade ago, the disposal fees paid by the NESWC communities have escalated sharply. NESWC communities currently pay approximately \$95 per ton for waste disposal – nearly twice the

current market price in the region. This rate is expected to exceed \$215 per ton by 2004. In promoting the NESWC project, the Commonwealth had assured the NESWC communities that they would actually be *receiving* a per-ton payment for waste disposal after 1990.

In conducting this review, my Office focused on the central role played by the Commonwealth in planning, developing, and marketing the NESWC project to Massachusetts communities. As this report reveals, although the service agreements developed by the Commonwealth protected the interests of NESWC facility's private owner-operator and bondholders, these agreements failed to provide the NESWC communities with sufficient control over the NESWC facility costs or sufficient protection from the project's considerable financial risks.

The NESWC case offers vitally important lessons about the potential cost of long-term privatization contracts that allocate most of the risks to the public sector. Over the past several years, many Massachusetts communities have expressed interest in vendor proposals to privatize municipal water and wastewater systems through long-term contracts for construction, operation, and maintenance. These public-private partnership proposals offer certain desirable features to public officials, such as the ability to finance capital upgrades without issuing bonds. However, the NESWC story illustrates the financial risks inherent in such long-term arrangements.

The NESWC communities are bearing the brunt of the Commonwealth's flawed economic analysis and failure to protect the public interest more than 15 years ago. The current momentum to privatize water and wastewater facilities without adequate planning, safeguards, and oversight could similarly burden current and future taxpayers and ratepayers in Massachusetts with massive long-term costs and risks. My Office will continue to investigate the NESWC project and to subject new public-private partnership proposals to the critical scrutiny they warrant.

Sincerely,

Robert A. Cerasoli  
Inspector General

# Contents

Introduction .....	1
Project History and Findings .....	3
Finding 1. Because key business terms of the NESWC project had not yet been established, the price proposals generated by the Commonwealth’s open-ended RFP were not reliable.....	5
1a. The RFP did not specify the size of the proposed project. ....	5
1b. The RFP left key business terms open for negotiation with the selected contractor. ....	7
1c. By the time the NESWC facility began operations in 1986, UOP’s 1975 user fee proposal was irrelevant. ....	11
Finding 2. The service agreements negotiated by the Commonwealth with UOP posed significant financial risks to participating NESWC communities. ....	12
2a. The service fee formula places most of the financial risk from oil price fluctuations on the NESWC communities.....	13
2b. The service agreements require the NESWC communities to compensate MRI for “unforeseen changes in circumstances” that adversely affect MRI’s profits. ....	14
2c. The NESWC communities may be required to pay the full cost of capital improvements to the NESWC facility required by new environmental laws even though the facility will be owned by MRI at the end of the contract. ...	15
2d. The service agreements require the NESWC communities to pay for the cost of disposing of a guaranteed minimum tonnage and contain a penalty for tonnage shortfalls.....	17
Finding 3. The Commonwealth aggressively marketed the NESWC project to Massachusetts communities. ....	18
Finding 4. The NESWC project risks were depicted as minimal in publicity disseminated by the Commonwealth and UOP.....	20
Finding 5. The Commonwealth did not conduct a meaningful competition in selecting the consulting engineer responsible for overseeing construction of the NESWC facility.....	26

Finding 6. The construction agreement negotiated between UOP and its subsidiary, MRI, did not protect the interests of the NESWC communities. .... 28

Finding 7. NESWC uncovered evidence that MRI might have manipulated the acceptance tests of the NESWC facility to conceal design and construction deficiencies. .... 35

Conclusion ..... 37

Publication No. 18029-40-5C-12/97-IGO, approved by Philmore Anderson III, State Purchasing Agent  
Printed on recycled paper

## Introduction

The Office of the Inspector General has been asked by a caucus of state legislators who represent 23 Massachusetts communities comprising the North East Solid Waste Committee (NESWC) to investigate the NESWC resource recovery project.<sup>1</sup> The NESWC communities dispose of solid waste at an incinerator located in North Andover, under 20-year service agreements scheduled to expire in 2005. NESWC developed out of an informal association of public officials from communities in the Greater Lawrence area that began meeting in the 1970s to explore solutions to the problem of declining landfill space for the disposal of solid waste. The number of communities involved in this association varied over the years prior to 1983, when all but one of the current member communities signed the 20-year service agreements.<sup>2</sup> In 1988, NESWC was incorporated as a governmental body pursuant to Chapter 328 of the Acts of 1988.

The NESWC project is a public-private partnership that was planned and developed by the Commonwealth in the 1970s and early 1980s as a partial solution to the state's mounting solid waste disposal problems. The Commonwealth selected a private contractor to design, build, and operate a resource recovery facility capable of incinerating the municipal solid waste produced by communities in northeastern Massachusetts and southern New Hampshire and of producing electric power from steam generated in the combustion process. The contractor was selected through a competitive process, based on the contractor's qualifications, proposed technology, and low projected disposal fees. After the selection of the contractor, each of the 23 communities signed a 20-year service agreement that obligates the community to

---

<sup>1</sup> The communities are Acton, Andover, Arlington, Bedford, Belmont, Boxborough, Burlington, Carlisle, Dracut, Hamilton, Lexington, Lincoln, Manchester, North Andover, North Reading, Peabody, Tewksbury, Watertown, Wenham, Westford, West Newbury, Wilmington, and Winchester.

dispose of waste at the NESWC facility and pay a disposal fee that covers the debt service payments for the facility as well as the cost of operating and maintaining it.

The \$197 million North Andover resource recovery facility is owned and operated by Massachusetts REFUSETECH, Inc. (MRI), a subsidiary of Wheelabrator Technologies, Inc. (Wheelabrator). The facility began operating in 1985 with a rated capacity of 465,000 tons of waste per year. The NESWC communities receive most of the revenue generated by the sale of electricity produced by the facility and certain other revenues as an offset to the disposal fee.

The Commonwealth aggressively marketed the NESWC project to Massachusetts communities, which were told that the financial risks would be minimal. However, the risks of this public-private partnership have proved to be substantial and have caused disposal fees to the NESWC communities to vastly exceed initial projections. Although the service agreements developed by the Commonwealth and signed by the NESWC communities contain protections for both the bondholders and for MRI, the private owner-operator of the facility, these agreements provide the NESWC communities with almost no control over facility costs or protection from the financial risks of this public-private partnership.

In the course of its review to date, this Office has reviewed project documents provided by NESWC, the state Department of Environmental Protection, several NESWC communities, State Street Bank and Trust Company (the trustee for project financing), the state Department of Public Utilities, and other sources. The Office has also interviewed state and local officials with involvement in the NESWC project, legal and engineering consultants to the NESWC project, and participants in other resource recovery projects in Massachusetts.

---

<sup>2</sup> Twenty-two member communities signed service agreements between 1981 and 1983. One community, West Newbury, signed a service agreement in 1986.

## Project History and Findings

*The Commonwealth took steps to plan and promote resource recovery projects. (early 1970s)*

Starting in the early 1970s, the Commonwealth and municipalities throughout the state began searching for alternatives to using landfills for municipal solid waste disposal. Not only were landfills rapidly filling up, but they were coming to be viewed as major sources of pollution as toxic substances leached out of them into groundwater and aquifers.

A major resource recovery industry emerged in the early 1970s to promote and develop private resource recovery facilities around the country. The term “resource recovery” refers to the processing of solid waste in a manner that recovers resources – such as paper, metal, glass, or energy – from the waste. Generally speaking, a resource recovery facility either burns municipal and/or commercial waste to produce steam that can drive turbines to produce electricity; or else processes waste into a combustible fuel. The resource recovery industry was spurred by decreasing landfill space and by the nation’s first energy crisis, which heightened interest in developing new energy sources as alternatives to fossil fuels.

In 1973, the Commonwealth enacted legislation that gave the resource recovery industry a major boost. The legislation<sup>3</sup> required the state Bureau of Solid Waste Disposal (BSWD) to designate solid waste disposal districts throughout the state and authorized the BSWD to lease land to private persons or firms for construction, operation, and maintenance of private resource recovery facilities.

---

<sup>3</sup> M.G.L. c.16, §18-24, as amended by Chapter 1217 of the Acts of 1973.



*The Commonwealth contracted with MITRE to plan and site resource recovery projects. (1973)*

In 1973, the BSWD, which was located in the Executive Office of Environmental Affairs, contracted with the Bedford-based MITRE Corporation, an engineering consulting firm,<sup>4</sup> to analyze the feasible locations and sizes of resource recovery projects around the state. The BSWD's contract with MITRE for preliminary planning work proved to be the beginning of a close relationship that would grow in scope and continue for more than 10 years.

The NESWC project was initially planned by the Commonwealth and MITRE to be the first of at least five regional resource recovery projects.<sup>5</sup> Although the BSWD invested some efforts in the development of all five potential projects, the agency ultimately focused primarily on the project that became the NESWC project – the only resource recovery project planned and developed by the Commonwealth that was actually constructed.

*The Commonwealth solicited proposals for a resource recovery facility on behalf of the communities that would participate in the NESWC project. (1974)*

In December 1974, the BSWD, with the assistance of MITRE, issued a request for proposals (RFP) to design, build, and operate a resource recovery facility to service the northeastern Massachusetts region at a site to be provided by the Commonwealth in the town of Haverhill. According to the RFP, a project objective was to save money for participating communities:

The goal of this project is the establishment of a solid waste resource recovery facility to serve all or part of the northeast area of the Commonwealth of Massachusetts. **The overall project**

---

<sup>4</sup> The nonprofit MITRE Corporation was a spinoff of the Lincoln Laboratory at the Massachusetts Institute of Technology. The MITRE acronym stands for Massachusetts Institute of Technology Research and Engineering.

<sup>5</sup> According to project documents and interviews, the other projects planned by the Commonwealth included the "128-West" project serving Newton, Wellesley, Natick, and other communities; the "Central Massachusetts" project, serving Worcester; the "Lower Pioneer Valley" project, in the Springfield area; and an Essex County project.

**objective is to minimize the cost to the User Communities of disposing of their solid waste** subject to the maintenance of high standards of technical, management and financial adequacy and environmental protection. [Emphasis added.]

The RFP stated that the Commonwealth would use a process of “proposal evaluation and competitive negotiation” to select a contractor to design, construct, and operate a resource recovery facility. The contractor would then enter into a fixed-price, full-service contract with each user community in a form approved by the Commonwealth. The facility would process the solid waste and recover resources to be marketed in a manner proposed by the contractor.

The RFP stated that a contractor would be selected based on an evaluation of the proposer’s qualifications, technical design, and proposed user fee. The RFP further intended that the contractor would sign agreements directly with the communities.

At the prebid conference held by the BSWD on January 7, 1975, the Assistant Director of the BSWD explained the purpose of the procurement as follows:

What we are doing here, what we are trying to do is provide a joint public private solution to their [the NESWC communities’] public problem with the expertise of the private industry through the resource recovery processes that are being developed now.

**Finding 1.**

**Because key business terms of the NESWC project had not yet been established, the price proposals generated by the Commonwealth’s open-ended RFP were not reliable.**

**1a. The RFP did not specify the size of the proposed project.**

At the time that the RFP was issued, no communities in the northeast region had made firm commitments to participate in the project that would later become the NESWC project. The RFP did include a letter from a local official who chaired an

informal group of five communities in the greater Lawrence area. The letter stated that the communities firmly supported the establishment of a resource recovery plant in the area and intended to work with the Commonwealth and the selected contractor to solve the region's solid waste problem. However, the letter did not commit the five communities to participating in the project. Of the five communities – Andover, Haverhill, Lawrence, Methuen, and North Andover – only Andover and North Andover ultimately signed the NESWC contracts.

The RFP made it clear that the Commonwealth planned to organize the regional structure of the project after selecting the contractor and noted that 53 communities in northeastern Massachusetts and New Hampshire were potential users of the project. However, because of the unknown size of the project service area, the RFP solicited cost estimates for three alternative projects whose size and functional requirements varied significantly:

- A small facility to serve a “core region” that included Andover, Haverhill, Lawrence, Methuen and North Andover, and would burn up to 310,000 tons of waste per year;
- A medium-sized facility that would burn 527,000 tons of waste per year from 53 communities in northeastern Massachusetts and southern New Hampshire; and
- A large facility that would burn 930,000 tons per year from an unspecified larger number of municipalities in the northeastern Massachusetts and southern New Hampshire region.

The Commonwealth completed the selection process – and decided to award the contract based on the largest facility – before marketing the contract to communities in the target market area. As will be discussed, the size of the facility had to be significantly reduced when the number of participating communities proved smaller than the Commonwealth had anticipated.

**1b. The RFP left key business terms open for negotiation with the selected contractor.**

The RFP put proposers on notice that the Commonwealth wanted to generate creative proposals from private contractors: “This RFP has been designed to stimulate innovative response.” Thus, although the RFP provided a detailed list of the contractor’s responsibilities and the Commonwealth’s responsibilities in connection with the proposed project, the RFP deliberately deferred the decisions regarding crucial business terms of the project until the negotiation stage of the procurement.

Although the RFP contained a set of assumptions to be used to provide a “common economic basis for comparative evaluation of the various responses,” the RFP made it clear that proposers were expected and encouraged to devise and propose their own business terms. The RFP explained that this approach was designed to promote flexibility and enhance the relationship between the Commonwealth and the selected contractor:

A competitive negotiation process will be used in selecting a contractor, as it provides flexibility to discuss and amend proposal specifications, and to incorporate system complexities, and provides for discussion of risk and responsibility. Additionally, the negotiation process promotes greater understanding between the Contractor and the Commonwealth and provides a stronger justification of the award decision on the basis of technical, economic and management factors.

The RFP required proposers to propose a per-ton user fee, which was to represent the disposal price the participating communities would pay the private operator, for each of the three project options set forth in the RFP. The proposed user fees were to be calculated on the basis of the economic assumptions set forth in the RFP. However, the RFP made it clear that the actual costs of the project to participating communities would hinge on the outcome of the competitive negotiations. The Commonwealth intended to negotiate the conditions under which user fees could increase, the formula to be used in

dividing the facility's revenues between the contractor and the participating communities, the refuse tonnage to be guaranteed to the contractor, and other crucial factors that would ultimately determine the cost of the project to the participating communities.

The following are examples drawn from the issues listed in the RFP under the heading of "Negotiable Terms and Conditions":

- Actual user fee and landfill fees based on changes in assumed costs and/or conditions.
- Escalator factors may be negotiated before a finalist is selected, if the proposed escalators are not accepted by the Commonwealth.
- [A r]evenue sharing formula may be negotiated before a finalist is selected, if the proposed formula is not accepted by the Commonwealth.
- Minimum and/or maximum quantities of municipal, commercial and industrial refuse to be guaranteed as inputs to the facility; also the periods for which they are guaranteed and the frequency with which minimums may be readjusted will be negotiated.
- The sharing of risk will be negotiated as reflected in appropriate provision for force majeure, and minimum revenues on the part of the municipalities and the Contractor.

The Commonwealth's decision to negotiate these major business terms with the selected contractor, rather than specifying the business terms in the RFP, reflected the Commonwealth's commitment to encouraging private sector innovation in the development of a resource recovery solution for northeastern Massachusetts communities. However, this decision also meant that the user fees contained in the proposals likely would not reflect the actual disposal costs to the communities associated with the final agreements entered into by the NESWC communities. The actual disposal costs would, of course, depend on the business terms of these agreements.

*The Commonwealth selected Universal Oil Products to design, construct, and operate the NESWC facility. (1975)*

According to the RFP, four criteria would be used in evaluating the proposals:

- the system reliability
- the financial and operational qualifications of the contractor and the proposed system
- the net disposal fee, and
- the environmental impact and aesthetics.

Proposals would first be evaluated on the basis of the non-price criteria; those deemed to have met these criteria would be evaluated on the basis of the proposed user fee.

According to project records, 18 firms responded to the Commonwealth's initial request for qualifications, and these firms were provided with the RFP. Six firms submitted proposals. The proposals were evaluated by teams consisting of representatives of the Commonwealth, the area communities, MITRE, and the U.S. Environmental Protection Agency. In August 1975, the Commonwealth and MITRE recommended the selection of Universal Oil Products (UOP) to design, build, and operate the largest of the three alternate facilities listed in the RFP.<sup>6</sup>

According to a written summary of the proposal evaluation process prepared by the BSWD in August 1975, the selection of UOP was based on five major considerations, including UOP's "low disposal fee per ton":

[The technology proposed by UOP] is a proven technology; there is a viable long term market commitment for the electric power; the firm has strong financial and management capabilities; the process

---

<sup>6</sup> In February 1983, as the result of a corporate merger, Wheelabrator-Frye, Inc., a predecessor to Wheelabrator Technologies, Inc. and a former competitor to UOP in the solid waste field, became the developer of the NESWC facility. (Hereafter, both Wheelabrator-Frye, Inc. and Wheelabrator Technologies, Inc. will be referred to as "Wheelabrator.")

is environmentally sound; and **there is a low disposal fee per ton.**  
[Emphasis added.]

UOP's proposed disposal fee of \$4.70 per ton was calculated by adding an estimated amortized capital cost for construction of the largest facility specified in the RFP (capable of burning 930,000 tons of waste per year) to a proposed operating cost, and subtracting the projected income from energy and other sources, such as recovered materials, that would be paid to the user communities. The proposal evaluation summary noted a series of variables that could potentially change the user fee proposed by UOP, but dismissed the impact of these variables as "minimal."

The UOP facility will be capable of processing waste at a charge of approximately five dollars per ton, which is competitive with environmentally sound landfills and incinerators. **This charge was calculated from information provided by UOP, as well as based upon certain assumptions which might be subject to change. Note that a change in any of the assumptions enumerated will have only a minimal impact upon the ultimate disposal fee.**

One of these assumptions included the method of financing and the interest costs. . . . In addition, the use of industrial development bonds for solid waste facilities producing electric power must be approved by the Internal Revenue Service.

A third variable that may effect [*sic*] the ultimate disposal fee is the method and costs associated with the final disposal of the residue. Finally, the disposal fee may be affected by the escalation of revenues and operating costs, producing either a decrease or increase in this fee. [Emphasis added.]

The summary did not address the possibility that oil prices might decline, thereby decreasing the revenues received by the facility. (Finding 2 of this report discusses the relationship between oil prices and facility disposal fees.)

**1c. By the time the NESWC facility began operations in 1986, UOP's 1975 user fee proposal was irrelevant.**

The NESWC facility, which was initially slated to begin operation in 1979, did not begin operations until September of 1985. By that time, the plan to build the large facility capable of burning 930,000 tons of waste per year – for which UOP had proposed a user fee of \$4.70 per ton – had been abandoned in favor of a significantly smaller facility with a rated capacity of 465,000 tons per year. In 1975, MITRE had projected that UOP's initial \$4.70 per ton user fee would decline to \$1.10 per ton by 1989. The actual disposal fee paid by the NESWC communities in 1989 was over \$50 per ton. The changed size of the facility, the business terms negotiated by the Commonwealth and UOP, and changed economic conditions all contributed to the disparity between the projected and actual disposal fees. (The projected and actual user fees to NESWC communities are discussed in greater detail in Finding 4 of this report.) Thus, UOP's proposed user fee of \$4.70 proved irrelevant to the actual project finances.

*The Commonwealth negotiated with UOP on behalf of prospective NESWC communities. (1975-1981)*

During the initial six-year period after UOP was selected as the project contractor, the Commonwealth and MITRE took the lead in negotiating the form of the service agreements that would later be signed by participating communities.<sup>7</sup> The intention was for the participating communities to sign separate but identical service agreements with MRI, the subsidiary of UOP established to own and operate the NESWC facility. Project records show that while a number of elected officials from communities in northeastern Massachusetts and New Hampshire participated in some aspects of the

---

<sup>7</sup> The initial service agreements signed in 1981 by Andover, North Andover, and Carlisle listed the BSWD as the communities' authorized "Contract Community Representative."



negotiation process, the Commonwealth – through the BSWD and MITRE, its consultant – was responsible for hammering out the technical and business terms of the service agreements.

**Finding 2.**

**The service agreements negotiated by the Commonwealth with UOP posed significant financial risks to participating NESWC communities.**

The economic feasibility of the 20-year service agreements would be affected by changes in market conditions, environmental laws, and other factors that would dramatically affect the amount of revenue the facility would produce and the cost of operating it. Because these variable economic factors could not be predicted over such a long period of time with a high degree of certainty, the project inherently carried enormous financial risks. In theory, the service agreements between MRI and each of the NESWC municipalities could have allocated the risks so that each party bore a portion of the risk for factors which neither party could control. The service agreements that the Commonwealth negotiated with MRI, however, were skewed to place nearly all of the financial risks on the NESWC communities.

The service fee formula calls for the NESWC communities to pay the debt service for the facility and an amount that MRI calculated to cover its operational costs and its profit. At the end of the 20-year contract term, MRI will own the facility. In effect, the communities are buying the facility for MRI and providing MRI with a guaranteed income stream to operate it, thereby eliminating most of MRI's risk for the venture. The financial burden placed on the communities by this arrangement is, in theory, offset by their share – 89.5 percent – of the electricity revenue. Contract terms that have contributed to the high costs that the NESWC municipalities face today include the following:

**2a. The service fee formula places most of the financial risk from oil price fluctuations on the NESWC communities.**

The disposal fees that the NESWC communities pay under the service agreements are based on a complex formula that adds together debt service, a fixed operation and maintenance fee, and certain pass-through costs, then subtracts facility revenues. The largest source of revenue is the sale of electricity to the New England Power Company (NEP). The service fee formula credits the NESWC communities with 89.5 percent of the electricity revenue, with the other 10.5 percent going to MRI.

A power purchase agreement, which established the terms for the sale of electricity to NEP, was signed by MRI and NEP in January 1981 and incorporated as an exhibit into the service agreements signed by the communities. Under the power purchase agreement, the price of the electricity produced by the facility is based on the electric utility's "avoided fuel cost", i.e.; the price for the fuel (generally oil) that the utility would otherwise burn to produce the same amount of electricity. Because the market price of oil is subject to substantial fluctuations based on a myriad of political and economic factors, the decision to tie the service fee so closely to this price was a high-risk, high-stakes gamble.

Most power purchase agreements between electric utilities and resource recovery facilities in Massachusetts, in contrast, are based on multi-year projections of the utilities' full "avoided costs," according to Massachusetts Department of Public Utilities documents. Avoided costs are the costs of fuel, construction, and operation and maintenance that the utilities avoid paying when they purchase electric power from resource recovery facilities rather than building their own generating facilities. In addition to requiring the payment of full avoided costs, some resource recovery facilities have locked-in or fixed purchase prices over periods of 20 years or more.

Because oil prices have not escalated as the Commonwealth projected, the power purchase agreement between MRI and NEP has turned out to be an excellent deal for NEP, but a very poor one for the NESWC communities. The 1997 price of 2.5 cents per kilowatt hour that MRI, the operator of the facility, charged NEP for electricity generated by the facility was among the lowest prices paid for power by utilities in the state. The power purchase agreement between MRI and NEP was riskier than most other power purchase agreements signed in Massachusetts between utilities and resource recovery facilities.<sup>8</sup> Because MRI's share of the electricity revenues from the NESWC facility was small in comparison to the NESWC communities' share, MRI has suffered less economic harm from oil price fluctuations.

**2b. The service agreements require the NESWC communities to compensate MRI for “unforeseen changes in circumstances” that adversely affect MRI's profits.**

The service agreements require the NESWC communities to compensate MRI for a loss in profits that results from changes in the composition of the solid waste, changes in the law, or any other change in circumstances that MRI did not foresee when the service agreements were signed. The service agreements contain the following language:

The Customer and MRI . . . recognize that, over the course of a twenty (20) year period, the possibility exists for the occurrence of unforeseen changes in circumstances . . . of a continuing nature which could alter the financial conditions upon which this Agreement has been based and entered into by MRI . . . . Accordingly, the Customer and MRI agree that in the event there

---

<sup>8</sup> For example, a 1986 contract for the sale of power from a waste-to-energy plant in Springfield to the Western Massachusetts Electric Company is a fixed-price arrangement that has helped keep disposal fees stable to participating communities. Those electric power purchase prices started from 8.7 cents per kilowatt hour in 1987 and moved up to a floor rate of 10.5 cents per kilowatt hour in 1989, continuing through the end of the 25-year contract term. Disposal fees to the communities involved in the Springfield project have remained relatively stable, ranging from \$50 to \$60 per ton.

should occur any such [unforeseen changes in circumstances] having a major effect in altering the financial conditions upon which this Agreement was based and entered into by MRI, MRI shall have the right, at its option, to request . . . that the Service Fee be adjusted . . . so as to restore equivalent financial conditions for the performance by MRI of its obligations under this Agreement.

This one-sided provision further skews the risks of the NESWC project to the detriment of the participating communities. Although the NESWC communities bore the major brunt of the downturn in oil prices during the 1980's, MRI relied on this contract provision in 1989 to increase the service fee to make up for the lower than expected profit from its 10.5 percent share of electricity revenue. On December 12, 1989, MRI served upon NESWC a request for an adjustment in the service fee based in part on a claim that the decline in oil prices constituted an unforeseen circumstance that entitled MRI to a fee adjustment under the service agreements. The NESWC communities disputed this claim and the matter was referred to binding arbitration as required by the service agreements. In 1992, an arbitration panel found in favor of MRI on the portion of the fee dispute pertaining to the decline in oil prices, and awarded MRI approximately \$3.4 million. (Finding 7 of this report discusses the arbitration proceedings in greater detail.)

**2c. The NESWC communities may be required to pay the full cost of capital improvements to the NESWC facility required by new environmental laws even though the facility will be owned by MRI at the end of the contract.**

The service agreements require the NESWC communities to assume all risk of increased operational costs as well as the costs of designing, constructing, and financing improvements to the NESWC facility required to comply with any change in environmental laws or regulations that occurred after January 1, 1979. The potential cost of complying with changing environmental regulations over a 20-year period was and is incalculable.

Moreover, the service agreements state that the full cost of designing, building and financing required capital improvements must be amortized by the communities over the remaining term of the 20-year service agreements, no matter when the improvements are constructed. Thus, communities could be required to amortize in as little as one year the full cost of improvements that have a useful life of decades. This provision has proven to be onerous to the NESWC communities.

The NESWC communities were faced, as of late 1997, with the prospect of amortizing expensive improvements to the facility over a period of five years or less. The state Solid Waste Act of 1987 and the 1990 federal Clean Air Act amendments imposed new requirements for air pollution controls at the facility. MRI has informed the NESWC communities that the cost for construction of the retrofit improvements will be \$43 million, a figure that does not include financing costs. Construction is not scheduled to be completed before the year 2000. MRI contends that under the terms of the service agreements, the NESWC communities will be required to pay the entire \$43 million cost, plus the cost of financing, over the remaining five years of the contracts. In the year 2005, MRI will own the improved facility free and clear, with the communities having paid for air pollution controls that may have a useful life of 20 years or more.<sup>9</sup>

As of late 1997, the parties had not reached agreement on the final terms of the air pollution control project. Although the final cost had yet to be determined, MRI contends that the service agreements require the NESWC communities to pay the full cost of improvements that will primarily benefit MRI as the owner of the NESWC facility.

---

<sup>9</sup> In 1996 and 1997, MRI proposed several new service agreements that would extend the length of the contracts until the year 2015, thus providing an additional ten years to amortize the cost of the improvements. Several NESWC communities indicated that they would not agree to a new contract that would extend their obligations to MRI beyond the year 2005.

**2d. The service agreements require the NESWC communities to pay for the cost of disposing of a guaranteed minimum tonnage and contain a penalty for tonnage shortfalls.**

In order to ensure a stable revenue stream from the service fees to pay the debt service and MRI's operating costs, the service agreements committed each community to pay for a minimum number of tons of waste, regardless of whether or not the community actually produced that amount of waste. Under this "put-or-pay" clause, the communities have agreed to provide a guaranteed annual tonnage to the plant of 203,000 tons per year. As of 1997, the NESWC communities were only providing approximately 185,000 tons per year of waste to the plant. At \$95 per ton, that yearly shortfall of at least 18,000 tons of waste has cost the NESWC communities more than \$1.7 million a year.

In addition, the service agreements provide a method for assessing a shortfall penalty for any community that fails to produce its minimum tonnage. The shortfall penalty is intended to compensate MRI for the electricity and other revenues it would have received had the community met its tonnage requirement. However, MRI was not enforcing this penalty provision as of 1997, according to the NESWC Executive Director. Whether the penalty provision is enforced or not, the put-or-pay requirement in the NESWC service agreements has been a disincentive to recycling for the NESWC communities.

The Commonwealth's solid waste management policy in the 1990s has emphasized the importance of recycling and composting. According to the 1994 state Solid Waste Master Plan, the total tonnage of municipal solid waste disposed of at landfills or resource recovery facilities statewide decreased by six percent between 1990 and 1992, due in large measure to increased recycling and composting efforts. Based on the increasing number of municipal recycling programs, the Commonwealth predicted that the 28 percent of municipal solid waste that was recycled or composted in 1992 would increase to 34 percent by

1996. Cost savings from reduced disposal fees have proved to be a key incentive contributing to the increasing rate of recycling and composting. The NESWC communities, however, have been unable to take advantage of these savings.

**Finding 3.**

**The Commonwealth aggressively marketed the NESWC project to Massachusetts communities.**

Beginning in the late 1970s, the Commonwealth mounted an aggressive campaign to market the NESWC project to prospective communities by making presentations to local officials and voters in communities throughout northeastern Massachusetts and southern New Hampshire. In addition to promoting the NESWC project, project records show that the Commonwealth issued frequent warnings to the effect that available landfill space was disappearing and that existing landfills would be ordered closed due to environmental violations.

For example, in a January 1979 letter to the Andover Town Manager, the Commissioner of Environmental Management warned of increased costs and “crisis management” if Andover and other communities did not sign on promptly with the NESWC project:

**Stricter requirements will eliminate many landfills and increase the costs of those that remain. If municipalities do not make timely decisions now to assure the availability of the NESWC facility, many municipalities . . . can be expected to enter a period of crisis management. . . .** I urge each and every municipality to recognize this problem for what it is and to realize the immediacy of the need for a positive decision on the NESWC contract. . . . It is important that each city and town in the Northeastern Massachusetts area have this item on its agenda, at town meetings or in city council. [Emphasis added.]

The Administration continued to issue such warnings in the ensuing years. In April 1979, *the Lawrence Eagle-Tribune* reported that the Governor had sent letters to communities in the greater Lawrence area, warning that many of their

landfills violated state regulations. A January 1981 article in the *Boston Globe* quoted the Secretary of Environmental Affairs as stating that 45 out of 59 landfills in use in northeastern Massachusetts were in violation of state environmental regulations, and that the landfills serving 50 of 74 communities expected to be served by the NESWC plant were projected to be full by 1985.

Project records show that some communities objected to the Commonwealth's pressure to participate in the NESWC project. In March 1978, for instance, the Methuen Town Manager took issue with a characterization by the state Department of Environmental Quality Engineering of the town landfill as an "open dump with . . . frequent burning and smoldering fires," according to the *Lawrence Eagle Tribune*. The Town Manager charged, according to the news article, that the Commonwealth was attempting to force Methuen to join the NESWC project.

According to minutes of a August 28, 1980 meeting attended by representatives of the Manchester Board of Health and UOP, the UOP representative stated that the Commonwealth would no longer participate with UOP in marketing the NESWC project to communities. The Manchester Board of Health representative, according to the minutes, commented that this was a step in the right direction and that the Commonwealth had:

intimidated the area towns by voicing an implied threat if the towns did not agree to participate in the "State sponsored" NESWC program.

The Commonwealth's efforts to promote the NESWC project continued. In an April 1981 letter addressed broadly to "community leaders," the BSWD Director emphasized the Commonwealth's financial investment in developing and promoting the NESWC project while disclaiming any intent on the part of the Commonwealth to impose the project on communities:

[T]he Bureau has invested a substantial portion of its budget over the past few years in technical, financial and legal consultants who have been retained to assist the NESWC communities in developing and analyzing this project. . . .



It is not our intent to impose this project on any community. Rather, we intend only to make available, upon your request, support to assist in your analysis of the NESWC project. If other long-term solid waste options are presented to you, you should obviously compare them to the NESWC option.

The Commonwealth considers the NESWC Project to be an excellent solution to the critical solid waste problem now facing most communities in northeastern Massachusetts. I encourage you to make an early informed decision as to which long-term solid waste disposal option is best for you. [Emphasis added.]

The Administration's lobbying efforts on behalf of the NESWC project culminated in an April 1981 signing ceremony in the Governor's office for the first three towns to join the NESWC project: Andover, North Andover, and Carlisle.

Notwithstanding the Commonwealth's marketing efforts, other communities that had originally expressed interest in the project declined to participate. Competition to the NESWC project had emerged during this period from Wheelabrator<sup>10</sup> and a firm called Refuse Fuels, Inc, both of which were planning waste-to-energy facilities that would serve communities stretching from the Greater Lawrence area to the Boston suburbs of Arlington, Waltham, and Watertown. According to project records, the NESWC project ultimately lost Haverhill, Lawrence, and Lowell in the competition with Refuse Fuels.

**Finding 4.**

**The NESWC project risks were depicted as minimal in publicity disseminated by the Commonwealth and UOP.**

The financial risks of the NESWC project were regarded and depicted by the Commonwealth as low, largely because of the expectation that the NESWC communities would garner significant revenues from the sale of electricity by the NESWC facility to NEP. For example, in a January 1979 letter to the Andover

Town Manager, the DEM Commissioner characterized the NESWC project's energy market as "guaranteed" and touted the project as an "economically sound solution" offering attractive revenue sharing arrangements and low disposal fees:

a proven, reliable technology, guaranteed performance of equipment and operation, guaranteed energy production, **guaranteed energy market**, guaranteed compliance with environmental standards, **attractive revenue sharing arrangements, (and) low disposal fees**. . . . Great care, analysis and professional expertise have gone into developing this solution. Competitive proposals were extensively evaluated. **A contract was negotiated to protect the interest of the municipalities**. . . . All of this effort makes available to municipalities an opportunity to solve an increasingly serious problem with a proven, reliable, environmentally and economically sound solution into the next century. [Emphasis added.]

Project records contain a promotional information packet, apparently prepared by UOP, that projected the "guaranteed" energy revenues and additional anticipated revenues from the NESWC project. However, an attachment to the packet labeled "Cost and Revenue Assumptions" made it clear that the term "guaranteed" applied only to the NESWC facility's energy recovery rate<sup>11</sup> and the 89.5 percent share of the energy revenues to be received by the NESWC communities. The projected energy price of five cents per kilowatt hour, which underlay the revenue projections for the NESWC facility, was not guaranteed under the terms of UOP's electric power agreement with NEP. Thus, the participating NESWC communities were not guaranteed a minimum level of energy revenues. Those revenues would rise or fall, based on the price of oil.

In other communications to prospective NESWC communities, UOP made no reference to this and other risks of the NESWC project. In a May 1981 letter broadly addressed to community representatives, UOP's Vice President and

---

<sup>10</sup> The "128-West" resource recovery project promoted by Wheelabrator in the early 1980s was never constructed. As a result of a 1983 corporate merger, Wheelabrator became the owner of MRI and the developer of the NESWC project.

<sup>11</sup> UOP was guaranteeing the energy recovery rate of 395 kilowatt hours of electricity per ton of solid waste having a heating value of 4200 Btu per pound.

General Manager called attention to the signing ceremony in the Governor's office and characterized the NESWC project as "the most economically advantageous project in the United States":

The revenue-sharing North East Solid Waste Committee (NESWC) resource recovery project achieved a milestone April 23 with the initial signing of the 20-year service agreement[s] by North Andover, Andover and Carlisle.

Enclosed for your interest is a copy of the news release and photograph of the ceremony held in the office of Governor Edward J. King. . . .

The conclusions of the towns who have signed as well as the several additional towns who have already authorized signing are unanimous:

- 1. The most economically advantageous project in the United States.**
2. Legal and financible contract.
3. Proven, reliable technology.
- 4. Lowest tipping fee.**
- 5. Likelihood of declining disposal cost over time.**

The time for decision is now. There is no project in the U.S. currently or prospectively that offers communities as attractive a long-term solution as NESWC. We urge your expeditious consideration. [Emphasis added.]

Project records show that the Commonwealth's consultants provided the Commonwealth with assurances that the projections underlying the NESWC project economics were sound. For example, in a March 1981 letter to the BSWD director, a MITRE consultant alluded to risks to be assumed by the NESWC communities but did not include declining oil prices among those risks:

[W]hile UOP accepts guaranteed capital and operating cost risks and performance risks, the communities assume the risk for costs incurred due to facility outages that are not the fault of UOP. On balance, we believe that such risks to the communities have been

acceptably minimized through the choice of technology, company, and energy market.

MITRE has prepared estimates for energy revenue and those cost elements for which the communities are responsible, such as residue disposal and insurance, and has reviewed the construction and operating costs guaranteed by UOP and considers them to be reasonable and comparable to costs of similar facilities. In our opinion, the projected disposal fee based upon such costs and revenues has been prepared using sound estimating practices. . . .

In summary, it is MITRE's opinion that the proposed NESWC project employs reliable technology, has a strong energy market agreement, and provides an environmentally and economically sound solution for communities with solid waste disposal problems in northeastern Massachusetts and southern New Hampshire.

However, warnings of the risks posed by the NESWC project were sounded by others. The Southern Essex Solid Waste Council (SESWC), a quasi-public organization analogous to NESWC that was developing a resource recovery project in Essex County, produced a 10-page critique of the NESWC project in 1978. SESWC's critique contended that the then-draft service agreements between the NESWC communities and MRI placed too many of the project risks on the communities. The SESWC critique took issue with a provision of the NESWC draft agreement that, in effect, guaranteed a continuing level of profit to UOP in the event of changes in laws, composition of waste, and unforeseen circumstances. The provision remained in the service agreements and was later cited by MRI as the basis of a requested increase in the NESWC disposal fee in 1989.

A second source of warnings about the NESWC project was Refuse Fuels, Inc., a firm promoting a competing waste-to-energy project for the region. Refuse Fuels provided area towns in January 1982 with a comparative risk analysis, warning that the projected revenues from NEP under the NESWC project were based on "best case" scenarios developed by the Commonwealth's consultant. The analysis noted that the NESWC disposal fee was based on several variables that "could drastically increase a community's costs."

In October 1982, CSI Resource Systems, Inc. conducted an analysis for the Town of Methuen, which examined a number of disposal alternatives available to town at the time, including the Refuse Fuels proposal. The analysis concluded that of the alternatives examined, the UOP proposal carried the “lowest potential disposal cost (to Methuen) for the highest potential risk.” Methuen ultimately chose not to join the NESWC project, and joined the Refuse Fuels project instead.

Ironically, Wheelabrator issued warnings about the potential risks of the NESWC project. In promoting the competing “128-West” project, a Wheelabrator Vice President wrote the following in a January 1982 letter to the Arlington Town Manager:

The comparative economics of all the projects presented by the State Bureau of Solid Waste and their consultants, in my opinion, are not realistic, and do not represent today’s costs. . . . As far as risks are concerned, I suggest you ask the State’s legal consultant for his evaluation. He negotiated the 128 Contract and is intimately familiar with it and NESWC. You need only ask one question: ‘Which contract provides less risk to my town?’

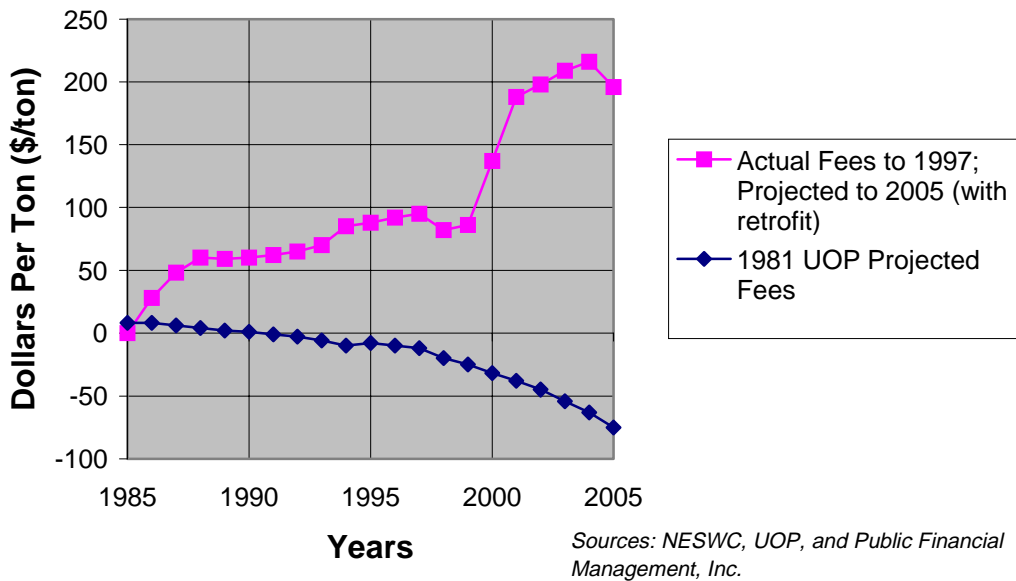
Wheelabrator would subsequently replace UOP, by means of a corporate merger, as the developer of the NESWC facility.

A comparison of the actual disposal fees paid by the NESWC communities since the facility began operating in 1985 with fees projected by UOP and the Commonwealth during their joint marketing efforts in 1981 shows how optimistic those projections were. A 1981 UOP promotional packet contained projections of disposal fees starting at \$8 per ton in 1985 and dropping to a negative \$75 per ton by 2005. In other words, the communities were told they would actually make \$75 per ton by delivering waste to the facility in 2005. The break-even year, in which the disposal fee would be zero, was projected to be 1990.

In actuality, disposal fees rose steadily from \$28 per ton in late 1985 to \$95 per ton in 1997. Public Financial Management, Inc., a NESWC consultant, projected

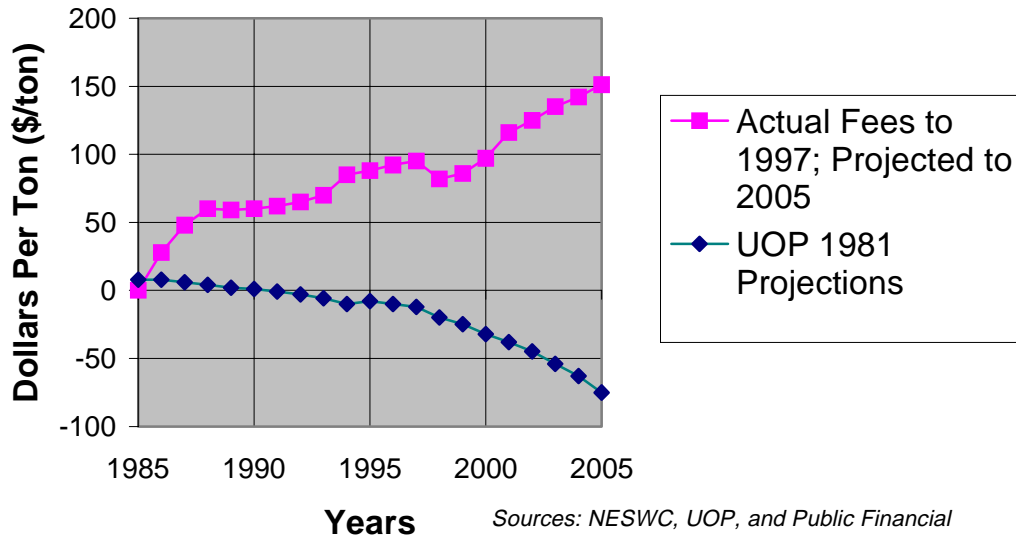
in 1997 that disposal fees will rise to \$215 per ton by the year 2004. The projected increase during the final six years of the service agreements is in part due to the required addition of air pollution control equipment to the NESWC facility. Figure 1, below, compares the 1981 projections given to the NESWC communities by UOP and the Commonwealth with the actual and projected fees as of 1997. The 1997 projections shown in Figure 1 include the \$43 million estimated cost of retrofitting the NESWC facility with new air pollution control equipment as required by state and federal legislation.

**Figure 1**  
**NESWC DISPOSAL FEES**  
**1981 Projected Fees vs. 1997 Actual/Projected Fees**  
**(With Retrofit)**



Even without the \$43 million retrofit, the 1997 projected fees to the NESWC communities would be substantially higher than those projected by UOP and the Commonwealth back in 1981, as Figure 2 shows.

**Figure 2**  
**NESWC DISPOSAL FEES**  
**1981 Projected Fees vs. 1997 Actual/Projected Fees**  
**(Without Retrofit)**



**Finding 5.**

**The Commonwealth did not conduct a meaningful competition in selecting the consulting engineer responsible for overseeing construction of the NESWC facility.**

As noted earlier in this report, the Commonwealth had initially contracted with MITRE in 1974 to conduct the resource recovery siting study that led to the selection of UOP to design, build, and operate the NESWC facility. The Commonwealth continued to contract with MITRE through 1981, at which time MITRE moved its Massachusetts operations to Virginia. At that time, several MITRE employees involved in the NESWC project moved to the firm of Roy F. Weston, Inc.

In October 1981, the Commonwealth executed an amendment to its contract with MITRE, changing the contractor's name from MITRE Corporation to Roy F. Weston, Inc. From 1981 to 1983, Weston worked for the Commonwealth on the planning and implementation of the NESWC project .

In February 1983, the Commonwealth selected Weston to serve as the consulting engineer to oversee the construction and acceptance-testing of the NESWC facility. Although the Commonwealth solicited proposals to serve as consulting engineer from three firms, including Weston, Weston was the only firm to submit a proposal. A memorandum prepared by the BSWD Director recommending selection of Weston as the NESWC consulting engineer emphasized the previous NESWC experience of the Weston consultants while dismissing the other two firms as having declined to compete “for various reasons”:

Roy F. Weston personnel were intensely involved in the construction agreement negotiations and in the preparation of the feasibility study. It is not uncommon for engineering firms performing such tasks to continue as the Consulting Engineer as recommended here.

The Bureau (BSWD) has solicited responses from two other nationally known engineering firms located in Boston, **who declined for various reasons.** [Emphasis added.]

According to the NESWC Executive Committee minutes of the meeting held on February 14, 1983:

[BSWD’s consultant] reported that to date, only one proposal has been received for a consulting engineer, from Roy F. Weston.

According to BSWD records, however, the other two firms declined to compete for the contract because the BSWD had given them only 24 hours to prepare proposals. Under these circumstances, there could have been no meaningful competition.

*UOP and MRI entered into an agreement to construct the NESWC facility. (1983)*

In 1983, UOP entered into a \$96,750,000 construction agreement with its subsidiary, MRI, to build the NESWC facility. Before construction began, the construction price was increased \$100,350,000.



### **Finding 6.**

**The construction agreement negotiated between UOP and its subsidiary, MRI, did not protect the interests of the NESWC communities.**

When the Commonwealth sought proposals in 1974, it indicated that it intended to select a contractor who would design, build, and operate the facility. The Commonwealth's rationale was that this design/build/operate approach would enable the Commonwealth to select one private entity that would assume all responsibility for the project. After the Commonwealth selected UOP for the contract, it proceeded to negotiate the service agreements that would govern the rights and obligations of the NESWC communities and of MRI, the owner and operator of the facility. The Commonwealth did not, however, attempt to define the terms of the construction contract under which UOP would construct the facility. In 1983, after 22 NESWC communities had signed service agreements, UOP negotiated the terms of the construction agreement with MRI, its own subsidiary.

The Commonwealth's approach to the project failed to protect the interests of the NESWC communities. Although the Commonwealth retained a lawyer to participate in the negotiations, the structure of the contracting arrangement – which allowed the two affiliated corporations to deal with each other – invited abuse. Neither the Commonwealth nor the NESWC communities were parties to the construction contract, nor did the contract allow them any input into the design of the NESWC facility.

Under the Commonwealth's design/build/operate approach, UOP would be accountable not for constructing a facility in accordance with detailed design specifications, but rather for constructing a facility that would meet certain performance guarantees. For this reason, the performance guarantees were vital to ensuring that UOP did not deliver a substandard facility.

However, the construction agreement gave UOP primary control over the terms of the performance guarantees and the acceptance test procedures that would be used to determine that the guarantees were met. Under the construction contract, UOP would conduct the acceptance test upon completion of the facility. Both MRI and Weston, as the consulting engineer, would have the right to be present during the acceptance test and to review the results of a report prepared by UOP certifying the results of the test. If either MRI or Weston disputed UOP's determination that the guarantees were met, the matter would be referred to an independent engineer. MRI accepted the facility in 1985 with Weston's concurrence.

Evidence surfaced in a subsequent arbitration proceeding that suggests that MRI may have manipulated the acceptance test procedures to conceal design and construction deficiencies at the facility. Weston testified in the arbitration proceeding that because MRI misrepresented certain conditions under which the acceptance test was conducted, Weston was unable to detect the failure to meet a key performance guarantee. This evidence is discussed in Finding 7 of this report.

*Wheelabrator became the developer of the NESWC facility. (1983)*

In February 1983, as the result of a corporate merger, Wheelabrator became the owner of MRI and the developer of the NESWC facility.

*The NESWC project was financed. (1983)*

In April 1983, the North Andover Industrial Finance Authority issued \$197 million in revenue bonds to finance the NESWC facility. At that point, 22 communities had signed 20-year service agreements to send their waste to the NESWC facility.<sup>12</sup> Construction of the facility began in May 1983 and was scheduled to

---

<sup>12</sup> The project was able to recruit only one additional community after 1983: the Town of West Newbury executed a service agreement with MRI in December 1986.

take three years to complete. The facility began commercial operations in September 1985, roughly eight months before the scheduled completion date.

*The Commonwealth formalized and then terminated its agreement to represent the NESWC communities. (1983-1984)*

In November 1983, with construction underway, the BSWD signed an agreement with the NESWC Executive Committee – an 11-member panel chosen by representatives from each participating community – to act as the communities' Contract Community Representative. This agreement formalized the BSWD's longstanding role in promoting and managing the NESWC project, including negotiating the 1981 service agreements and several changes to those agreements in 1982.

Over the ensuing year, however, the BSWD took steps to reduce its involvement in the NESWC project. In December 1984, the Commissioner of Environmental Management notified the Chairman of the NESWC Executive Committee that the 1983 the BSWD's agreement to serve as the NESWC communities' Contract Community Representative would be terminated within 90 days.

Even before construction of the NESWC facility was completed, NESWC was appealing to the Commonwealth for help in coping with increases in the projected disposal fees to the NESWC communities. In a December 1984 letter to the Governor, the NESWC Executive Committee Chairman had written, in part:

The bulk of the waste from the twenty-two communities is now being landfilled at about \$13/ton. Over the first four years of operation at the NESWC facility, the processing fee is expected to average \$34/ton, with considerable risk that it may be appreciably higher. . . . Indeed for some towns, overall solid waste disposal cost[s] may more than triple.

The Arlington Town Manager also wrote to the Governor in December 1984 to request state financial assistance for the NESWC communities. His letter stated, in part:

The Bureau of Solid Waste Disposal worked with us, hand in hand, throughout the entire planning, contractual, and construction phase of the entire [NESWC] project.

Unfortunately, we now find ourselves faced with increases in tipping fees that could more than double next year. . . . Clearly, as we attempt to continue to implement Proposition 2½ and other pressing local needs, we need special help on this particular project.

Finally, we feel there is also a very important principle involved in our plea. Rightly or wrongly, the state helps those communities that find themselves in financial difficulty because of mismanagement and/or poor fiscal planning. We now ask that you give the same assistance to those communities which have made the tough decisions, exercised prudent management and fiscal planning, but nevertheless find themselves faced with extraordinary increases in the cost of solid waste disposal. [Emphasis in the original.]

According to project records, NESWC Executive Committee members met with the Governor and with the DEM Undersecretary on December 19, 1984. A memorandum prepared by the NESWC Executive Committee Chairman after these meetings characterized the Governor as “very supportive in understanding the project situation and trying to find ways together to reduce the tipping fee for the first five years.” According to the memorandum, the DEM Undersecretary agreed to use the Commonwealth’s “influence” to urge NEP to renegotiate the power agreement with the NESWC facility. However, subsequent negotiations with NEP proved unsuccessful until the mid-1990s, when NEP agreed to increase its electricity price by one-half cent per kilowatt hour.<sup>13</sup>

*The NESWC facility began operations. (1985)*

In September 1985, the completed NESWC facility began commercial operations. By this time, the Commonwealth had withdrawn altogether from the NESWC project. Nevertheless, the 1985 Solid Waste Master Plan issued by the

---

<sup>13</sup> In 1995, NESWC interceded in the power purchase agreement between MRI and NEP, and negotiated a supplemental payment of approximately one-half cent per kilowatt hour.

Governor and the Secretary of Environmental Affairs depicted the Commonwealth and Massachusetts towns as partners working together to meet the “solid waste challenge” and asserted that the Commonwealth would continue to promote regional solutions:

The solid waste challenge will be solved only if the Commonwealth and her communities work together as partners. That much is clear. Less clear are the terms of the partnership. Amidst conflicting assertions that solid waste is a local responsibility (because it derives from the municipal function of trash collection) or a state responsibility (because the public health is at issue), we propose a division of roles that is thoughtful, realistic, and fair. . . .

With regard to waste management, **it is the Commonwealth’s responsibility to promote regional disposal and recycling solutions.** It is the responsibility of cities and towns to adopt modern, long-term trash disposal solutions that make environmental and economic sense, and to bear the legitimate local costs of those solutions. [Emphasis added.]

*Legislation was enacted to establish NESWC as a public instrumentality. (1988)*

In 1988, NESWC, which had remained an informal organization, was incorporated as a public instrumentality under Chapter 328 of the Acts of 1988. As a public instrumentality, NESWC now had legal authorization to do such things as file lawsuits and make legally binding contracts. The legislation also codified into law the existence of a NESWC advisory board consisting of one representative from each contract community, and executive and other committees.

*The Commonwealth regulated and criticized the NESWC project over the following decade. (1985-1995)*

Over the decade following the issuance of the 1985 master plan, the Commonwealth’s focus shifted from promoting specific resource recovery projects to regulating the pollutants emitted by these projects and promoting recycling as an alternative to solid waste combustion. The Commonwealth had

become increasingly concerned about the air pollutants emitted by resource recovery facilities, including sulfur dioxide, hydrochloric acid, emissions of dioxin and furans, and heavy metal particulates, including mercury and lead. Accordingly, the Solid Waste Act of 1987 required all resource recovery facilities to operate with acid gas scrubbers, an expensive form of pollution control equipment primarily designed to control sulfur dioxide emissions.

Although the NESWC facility was constructed with electrostatic precipitators, which are designed to control particulate matter, it was not constructed with acid gas scrubbers. The installation of scrubbers required by the Solid Waste Act of 1987 would have a major financial impact on the NESWC communities, accounting in large measure for the projection by NESWC's financial advisors of an increase in disposal fees from \$95 per ton in 1997 to more than \$215 per ton by the year 2004.

The Commonwealth's 1990 master plan entitled "Toward a System of Integrated Solid Waste Management" noted the financial impact on communities of resource recovery projects such as the NESWC project, particularly the impact of put-or-pay provisions:

[U]ntil passage of the Solid Waste Act, long-term contracts with solid waste disposal facilities locked Massachusetts cities and towns into obligations to deliver a minimum tonnage, effectively discouraging recycling.

Similarly, the 1994 Update to the Massachusetts Solid Waste Master Plan cited put-or-pay provisions as barriers to increased recycling in the Commonwealth and warned:

Many communities have signed long-term contracts committing set quantities of waste for disposal at combustion facilities. Expanding recycling can reduce the tonnage of solid waste needing disposal to a level below the minimum guaranteed tonnage. Depending on the particularities of the contract and the practice of the facility operator, a community may be obligated to pay the combustion facility operator a disposal fee for materials the community diverted

into a recycling or composting operation. This situation causes the municipality to pay twice for management of the same ton of waste.

An earlier draft of the 1994 Update had proposed the establishment of a \$5 million, five-year fund to assist communities whose guaranteed annual tonnage contracts require them to pay fees for waste diverted from disposal to recycling or composting. However, this funding proposal was deleted from the final 1994 Update.

*NESWC clashed with MRI over the disposal fees paid by the NESWC communities. (1989-1992)*

A contractual dispute between NESWC and MRI was brought before an arbitration panel in 1992. The arbitrated dispute arose from a 1989 claim by MRI that it was owed an upward adjustment in the disposal fee based on two provisions in the service agreements. The first provision called for MRI to be compensated by the NESWC communities for any unforeseen changes in circumstances that adversely affected its profits. As discussed in Finding 2b, MRI successfully contended that lower-than-projected oil prices constituted an unforeseen circumstance that entitled MRI to additional compensation. The second provision raised by MRI required the NESWC communities to guarantee the composition of the solid waste delivered to the facility. MRI claimed that the energy content of the waste delivered by the NESWC communities was higher than that specified in the service agreements. MRI further contended that the high heat content of the waste was fouling the NESWC facility's boilers and increasing MRI's operation and maintenance costs. The arbitration panel found that MRI did not produce adequate evidence to support its claim that the composition of the waste provided by the NESWC communities had caused higher operating costs. In preparing its defense to MRI's claim, however, NESWC discovered evidence that may support a claim against MRI.

### **Finding 7.**

**NESWC uncovered evidence that MRI might have manipulated the acceptance tests of the NESWC facility to conceal design and construction deficiencies.**

In order to counter MRI's claim that the fouling of the facility's boilers was caused by the high heat content of the communities' waste, NESWC filed discovery requests to obtain documents from MRI related to the design and construction of the facility. MRI produced the records pursuant to an arbitrator's order that precluded NESWC from disclosing their contents. Records obtained by NESWC pursuant to discovery as well as testimony presented in the arbitration indicated that the fouling of the boilers may have been the result of inadequate design and construction.

Under the construction contract between MRI and Wheelabrator, the NESWC facility was required to pass certain acceptance tests prior to its acceptance by the NESWC communities. The purpose of the acceptance tests was, in part, to establish that the facility met a required capacity guarantee. The construction contract provided for liquidated damages to be paid by Wheelabrator based on a capacity shortfall in the event that the facility failed to meet the capacity guarantee. The construction contract also contained an incentive for early completion in the form of a \$45,000 per day bonus for Wheelabrator.

Evidence provided to NESWC in discovery indicates that the NESWC facility capacity may be inadequate to meet the capacity guarantee. According to testimony presented in the arbitration, Wheelabrator might have avoided approximately \$20 million in liquidated damages by representing that the facility met the capacity guarantee. Other testimony indicates that Wheelabrator also received an early completion bonus based on MRI's representation that the facility had passed the acceptance tests. The records this Office has reviewed indicate that the amount of the early completion bonus may have been more than \$10 million.



In the arbitration proceeding, NESWC alleged that MRI manipulated the acceptance test to make it appear that the NESWC facility met the capacity guarantee. NESWC's allegation was not addressed by the arbitration panel's decision. NESWC, MRI, Weston, and other parties involved in the NESWC project entered into a standstill agreement in 1991 to preserve their legal claims arising from the design or construction of the facility.

This Office obtained from a confidential source copies of correspondence between Wheelabrator and Martin, the manufacturer which designed the boilers, as well as other records produced during arbitration that tend to support the allegations raised by NESWC in the arbitration. This Office has requested from NESWC additional records produced by MRI and others during the arbitration. MRI has attempted to block this Office's access to those records by seeking an injunction in Superior Court prohibiting NESWC from releasing them. MRI claims that it is entitled to this injunction because the records belong to MRI and were provided under a confidentiality agreement that prohibits NESWC from disclosing their contents.

This Office is pursuing legal action to obtain the records of the arbitration proceeding. NESWC and its legal counsel, Palmer & Dodge, have agreed to cooperate with this Office in obtaining the records. To date, MRI has succeeded in shrouding in secrecy evidence that may provide a legal basis for a claim by NESWC against MRI. This Office will continue to investigate the allegations raised by NESWC in the arbitration proceeding.

## Conclusion

This report focuses on the history of the NESWC project and the terms of the deal that have made it so costly to Massachusetts taxpayers. The NESWC communities were persuaded by low projected solid waste disposal fees to sign 20-year service agreements. These projected fees were developed by the Commonwealth and its technical consultant, who predicted that a continuing rise in oil prices would boost the revenue from the sale of electricity, thereby reducing the disposal fees. The predicted low disposal fees did not materialize. Instead, when the NESWC facility began operation in 1986, the NESWC communities were faced with disposal fees that were far higher than expected – and have continued to climb. The NESWC communities currently pay approximately \$95 per ton for waste disposal, nearly twice the current market price for solid waste disposal in the region. The cost is projected to reach \$215 per ton by 2004.

The NESWC story contains vitally important lessons for all public officials about the potential cost of long-term contractual arrangements that allocate most of the risks to the public sector. These lessons are particularly timely for the communities that are currently considering proposals from private contractors for long-term contracts to upgrade, operate, and maintain public water and wastewater facilities. Some public officials are attracted to these long-term public-private partnerships because they appear to offer a mechanism for avoiding debt limitations that restrict access to capital for needed upgrades. Industry proponents also claim that these arrangements can ensure low, stable water and sewer rates.

The NESWC communities have learned that long-term cost projections that do not adequately factor in project risks can be dangerously misleading. The current momentum to privatize wastewater treatment facilities without adequate planning, safeguards, and oversight could similarly burden current and future taxpayers and ratepayers in Massachusetts with massive long-term costs and risks. This Office

will continue to investigate the NESWC project and to subject new public-private partnership proposals to the critical scrutiny they warrant.