

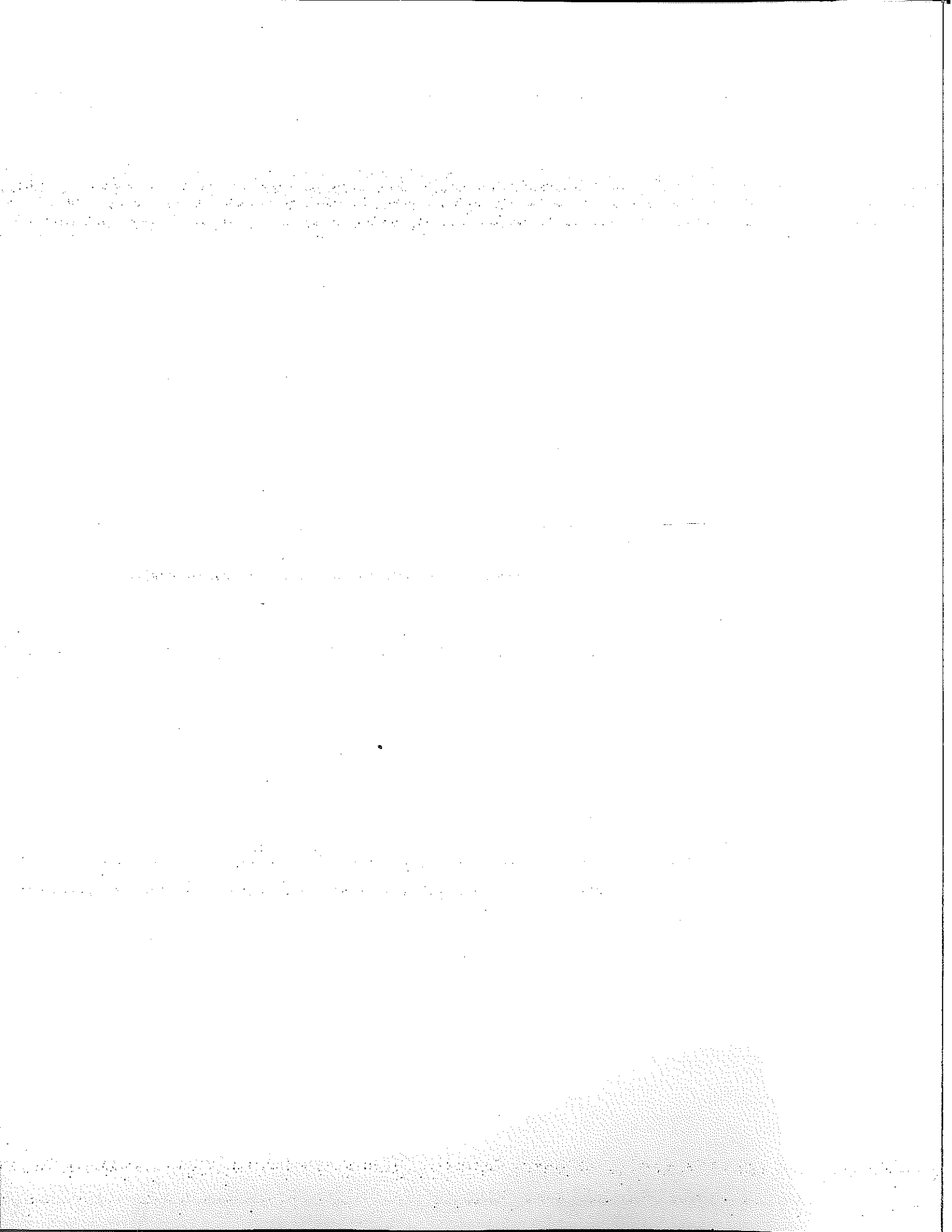
Solid Waste Management in Vermont

A Program Evaluation

December 1992

Legislative Council
Vermont General Assembly

Montpelier, Vermont



STATE OF VERMONT



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Vincent Illuzzi, George E. Little Jr., and Elizabeth Mary Ready

FROM: Benjamin L. Huffman, C. Alan Boright, and E. Anne Winchester

DATE: December 23, 1992

SUBJECT: Final report, solid waste program evaluation.

This is our final report of the legislative staff performance evaluation of the state solid waste program, which was required by Sec. 31d of Act No. 256 of 1992 (1991 Adjourned Session). A copy of this statute appears as Appendix A.

State solid waste law; Act 78.

In 1987, the General Assembly adopted a substantial revision of state solid waste management law, contained in Act 78 of that year.

The act declared as state policy that the highest priority of waste management shall be waste reduction, reuse, and recycling. In addition, the act required closure of environmentally unsound landfills, and encouraged building of modern landfills meeting newly adopted environmental standards.

The act assigned state government a primary role in solid waste management, but retained the previously existing responsibility of municipal governments for solid waste management within their jurisdictions. The act envisioned this municipal responsibility would be carried-out largely through groups of localities joining together as solid waste management districts.

The act also prescribed that user fees, paid by the individual generators of solid waste, should become the main revenue source to pay the costs of solid waste management.

Finally, in each year since adoption of Act 78, the General Assembly has appropriated substantial state capital funds to subsidize waste management throughout the state.

Solid waste program evaluation.

In 1992, the General Assembly directed legislative staff to evaluate the performance of the state solid waste program.

Our evaluation was to include an assessment of progress in accomplishing the goals of Act 78. And we were directed to recommend appropriate legislative action concerning solid waste management.

The bulk of our assessment and recommendations are based on interviews we conducted with individuals who work directly with solid waste management. During the summer and fall of 1992 we conducted 68 interviews with 92 individuals.

Of the 92 individuals, 23 work with the solid waste program statewide. About half of the 23 were employees of the state Department of Environmental Conservation, which contains the solid waste division charged with administering state solid waste law.

To gain a more direct perspective on solid waste activities, we interviewed 69 individuals in parts of the state covered by five solid waste districts (Addison, Chittenden, Rutland, New Hampshire-Vermont, and the Northeast Kingdom). These were individuals responsible for solid waste management districts, officials of cities and towns which either were in support of or opposed to waste district activities, people carrying-out day-to-day waste management activities in both the private and public sectors, and other individuals actively involved in local or district solid waste activities. In addition, we visited eight solid waste management sites, including solid waste haulers, recycling facilities, incinerators, and landfills.

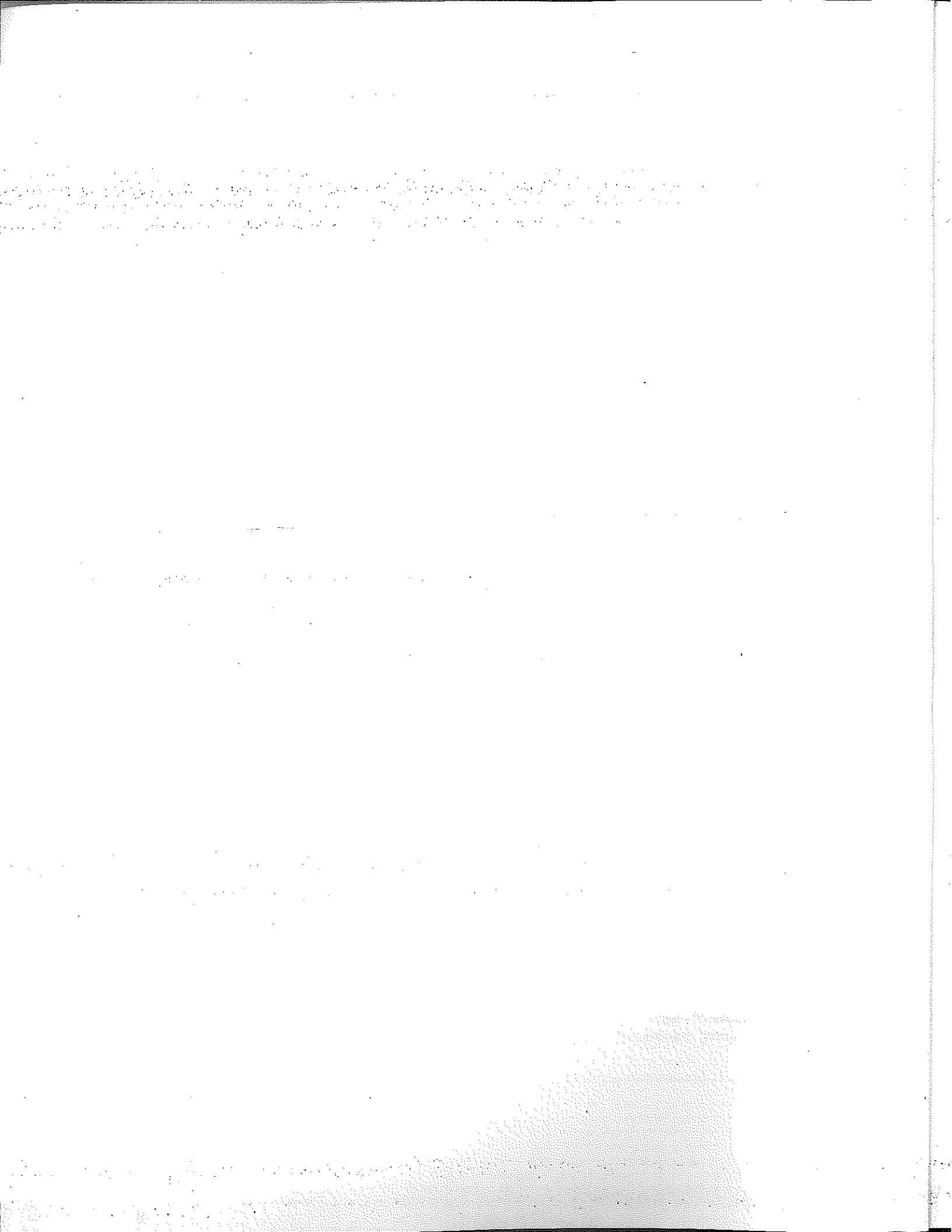
For a quick reading of this report.

For those who may not want to read this report cover-to-cover, we suggest the following:

- The main points of the report, stated briefly, are on pages five through eleven, sections on our "general conclusion" and "general recommendation". We hope you can read at least this.
 - The report "findings" on pages 21 through 24 underlie many of the main points. We hope you can review this too.
 - For elaboration on the main points and some of the findings, read any of the other sections or appendices that interest you.
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Contents

	<u>page</u>
<u>State solid waste law; Act 78</u>	1
<u>Solid waste program evaluation</u>	2
<u>For a quick reading of this report</u>	2
<u>Contents</u>	3
I. <u>General Conclusion</u>	5
II. <u>General Recommendation</u>	7
III. <u>History of Solid Waste Management in Vermont</u>	13
IV. <u>Market Competition in Vermont</u>	17
V. <u>Findings</u>	21
VI. <u>Recommendation Details</u>	25
 <u>Appendix A: Sec. 31d of Act No. 256 of 1992 (1991 Adjourned Session)</u>	
 <u>Appendix B: Summary of Market Economic Terms</u>	
 <u>Appendix C: State Spending on Act 78</u>	
 <u>Appendix D: Solid Waste Quantities and Tipping Fees</u>	
 <u>Appendix E: New Hampshire Vermont Solid Waste Management District</u>	
 <u>Appendix F: People Interviewed During This Evaluation</u>	



I. General Conclusion.

Act 78 sought to change the everyday attitude of Vermonters toward solid waste -- to prompt a shift from a "throw-away" habit toward a deliberate effort to conserve resources. The act sought to support and give direction to this change in attitude through revamping the entire system for day-to-day handling and disposal of solid waste. Today, the waste reduction and recycling priorities of the act are still generally well received, with the act credited for fostering a popular awareness of solid waste issues. However, few of the people we interviewed are satisfied with the resulting, day-to-day waste management system.

According to Act 78, details of revamping the system were to be formulated and given direction through a public planning process modeled on the regional planning experience of the last two decades in Vermont concerning land use and development. Equally important, the act continued to rely on the responsibility of municipalities for solid waste, but sought to transform the previous government role into a more sophisticated operation.

It is clear today that the mixed success of this approach has been due in large part to the diversity that exists within the state from one geographic area to another. Elements of the diversity relevant to solid waste management concern: economies of scale resulting from different levels of population concentration and business activity; previous experience with regional organizations for managing local government responsibilities; and, prevailing preferences for public or private sector conduct of solid waste management activities.

Accordingly, our first conclusion is that any reform of state public policy on solid waste management must acknowledge this diversity, and must not foster needless disruption in existing practices simply to achieve statewide uniformity.

But notwithstanding this qualification, we also conclude that what is most needed today is a reconsideration of the appropriate roles of government and of private business in solid waste management.

What these roles should be will depend on which of the following three perspectives is adopted:*

1. Public utility. The economic conditions of solid waste management may be viewed as a "natural monopoly" and dealt with by government as a public utility, much as government does the distribution of electricity.

* See Appendix B for definitions of market terms.

A natural monopoly is a private sector economic activity which can be accomplished most efficiently by one firm. Competition between firms would be less efficient and more costly to consumers. Accordingly, governments in the United States often choose to regulate the prices and services of a natural monopoly, in order to realize its economic advantages while avoiding the potential disadvantages of uncontrolled monopoly.

2. Competitive market. Alternatively, solid waste management may be viewed as not different from ordinary private sector economic production and distribution, which is performed most efficiently under competitive market conditions.

From this perspective, the appropriate role of government is to assure that private market conditions are competitive. Government historically has required such private sector activity to conform to standards of public health and welfare, but government should not, from this perspective, directly provide the service unless the private sector fails to do so, or fails to do so efficiently.

3 Government service. Or, government can assume responsibility for solid waste management and directly provide for it as a government service, much as it does for highways or sewers.

From this perspective, the physical facilities and operational services of solid waste management are either owned and carried-out by government directly, or provided under contract to a government agency.

We believe solid waste management should not be considered a natural monopoly, and therefore we recommend that government not treat it as a public utility. Which of the two remaining perspectives should be chosen to organize solid waste management depends in part on the diversity of conditions noted above between one geographic area of the state and another.

However, according to economic theory solid waste management would be provided most efficiently as a private sector activity within a competitive market. The practical question becomes one of whether truly competitive market conditions can prevail, a question which we would urge the General Assembly to consider carefully before adopting a private sector waste management approach. As a further qualification, we also believe municipalities (including solid waste management districts) should be allowed and encouraged to continue to manage solid waste within their jurisdictions as a government service, should they so choose.

II. General Recommendation.

A. Retain existing waste management priorities.

We found overwhelming support for the state solid waste management priorities of Act 78 -- that the highest priority be on waste reduction, reuse, and recycling. However, we encountered a few people who thought recycling to any great degree is not economical, and who thought the priorities of the act were wrong, that is, that greater emphasis should have been placed on waste disposal.

We recommend the original priorities of state solid waste law remain.

B. Maintain state role in setting policy, but shift oversight role toward increased leadership and away from day-to-day management.

In addition, we found wide support for the assumption by state government of responsibility for the general subject of solid waste management, and for the adoption of public policy to guide its overall operation. We found this sentiment particularly strong for the adoption and enforcement of state standards on public health and environmental quality as affected by solid waste management.

However, most people interviewed want a state oversight role aimed more at helping achieve the general objectives of state law, and less at prescribing and regulating the detail of how these objectives are carried-out.

We offer specific recommendations in support of this view later in the report.

C. Reconsider day-to-day management responsibility of public sector: encourage and foster private sector competition.

The implementation of Act 78 has been widely criticized. Our findings on this subject are detailed later in the report.

Based on these findings, we recommend the General Assembly reconsider the current statutory assignment to state and municipal government of responsibility for day-to-day management of solid waste.

We urge a shift in emphasis that would maximize the potential of both the private and the public sectors to contribute to successful solid waste management.

At the same time, we must acknowledge the substantial public sector efforts already made, particularly through solid waste districts, to develop

public management of solid waste. Some participants in this effort wish to continue present district initiatives, which we believe they should be encouraged to do. We also acknowledge that many involved in solid waste management throughout the state are weary of frequent changes in the system. We urge that any reform not foster needless disruption to the existing system.

Accordingly, we recommend the General Assembly consider a reformed state solid waste policy with the following three characteristics:

1. State government continue, and strive to improve, its oversight of solid waste management throughout the state.

2. The day-to-day management of solid waste be recognized as primarily an economic proposition, and therefore most amenable to successful operation through the workings of a competitive, private sector marketplace. This should include the market concept of "consumer sovereignty", or of the opportunity for individuals in society to choose solid waste management options they consider to be in their best interest.

This recommendation is based on the assumption that state government is able adequately to oversee private sector waste management.

3. Day-to-day management of solid waste by the public sector should continue to be an option. Public sector management by individual municipalities or by solid waste districts should be enabled by state law, but chosen by municipal voters.

Thus, as under existing state law, municipalities should continue to be allowed to choose whether to join or leave a solid waste district, and whether or not to support the waste management initiatives of a district. However, a municipality should not be assigned primary responsibility, as it is under present law, for solid waste management within its jurisdiction.

D. Other measures to be stressed.

We also urge the legislature to consider the following specific policy recommendations.

1. Financing waste management.

a. Recycling. Ideally, recycling should be an economically efficient alternative to disposal, and therefore most appropriately a responsibility of the private sector. However, because society is in transition concerning this feature of its economic production and distribution, we recommend responsibility for recycling continue to be shared by the public sector, including public subsidy of some recycling activities which are at this time more costly than disposal.

b. Waste disposal facilities. We caution against the creation of

excess waste disposal capacity, the financial needs of which could undercut recycling and reduction efforts, or foreclose future opportunities to adopt more enlightened disposal methods as they emerge. Accordingly, we recommend that public subsidy not be provided waste disposal facilities, and that their financing occur within private capital markets where a proposal is likely to receive a greater degree of practical scrutiny than through the legislative appropriations process.

An exception should be the subsidy of closing unlined landfills in existence prior to the closure requirements of Act 78.

c. Waste management user charges. The price to consumers of using a waste disposal facility should reflect no more than its capital and operating cost, in order for both facility users and facility investors in a competitive market to make the most efficient choices, including choices concerning interstate markets. This pricing policy would acknowledge the private market condition that now encourages waste haulers to transport waste to the cheapest disposal site.

One effect should be less disparity in the price of disposal at lined landfills, which should enhance compliance by both waste haulers and disposal facility owners with solid waste district "flow control" requirements where they might continue to be imposed.

We thus recommend elimination of public fees, charged in addition to actual facility cost, at the disposal site. In lieu of these, we recommend that public monies raised to pay for waste management subsidies (such as grants to towns for recycling programs) be obtained through a state-administered gross receipts tax on the proceeds of waste haulers. The amount of this tax born by consumers would be in proportion to the volume of waste they generate, and would be paid by all waste generators in the state regardless of whether the waste was disposed of in-state or out-of-state.

d. Use of unspent state capital appropriations. A total of \$45 million in state funds for solid waste management were appropriated by the legislature from 1987 through the 1992 session, including monies for use during fiscal year 1993.

Of this total, \$9 million was for use by state government, primarily the Division of Solid Waste Management of the Department of Environmental Conservation. This figure includes \$1 million in general fund monies and \$8 million in revenues from the solid waste franchise tax.

The remaining \$36 million of the total are capital funds, financed by state debt issues, used to finance implementation of Act 78 by entities other than state government, primarily solid waste management districts. By September of 1992, \$20 million of the total of \$36 million had been either disbursed or obligated for use by solid waste districts or for other waste management activities. This left a balance of \$16 million which remained both unspent and unobligated. We recommend the legislature consider

withdrawing its original spending authorization for these remaining state capital funds, and if the original purposes are no longer appropriate, spend the money otherwise.

2. Interstate commerce.

An original legislative intent of Act 78 was to limit the flow of waste into Vermont from outside the state, because of concerns about hazardous material generated out-of-state, and fears that an excessive amount of land could be allocated to landfills. It was thought that if towns or solid waste districts planned for their own waste capacity needs and allowed the construction of facilities to meet those needs, then those facilities would be certified to receive waste generated only from within that planning area (identified in statute as a "service area"), and the system would exclude waste generated outside of district or town borders.

However, the Agency of Natural Resources never implemented this provision as intended. Furthermore, in the summer of 1992, the U.S. Supreme Court, in Fort Gratiot Sanitary Landfill, Inc. v. Michigan Department of Nat. Res., 60 U.S.L.W. 4438 (6/1/92), held unconstitutional a system that required a county entity to agree to accept or not to accept waste generated outside of the county. This calls into question the ability of the system in Act 78 to perform as intended, even if properly implemented.

At its past session, Congress considered but failed to enact legislation that would give states or municipalities the ability to control the influx of solid waste. Although it is likely that similar attempts would be made in the next session of Congress, it is impossible to predict what, if anything, will be enacted. That being the case, the state's options at this time on the subject of waste generated out-of-state include the following:

a. Establishing a state authority. If state government owned all the waste disposal facilities in the state, it could function as a "market participant" and do business with whomever it chose. The General Assembly might choose to pursue this alternative if it determined the state could not control market forces in the public interest. State ownership of all disposal facilities would, of course, depart radically from the existing mix of private and public ownership of disposal facilities.

b. Regulating the content of waste accepted for disposal. As another option, the state may choose to regulate the content of waste disposed within the state, provided standards applied to waste generated out-of-state are no more stringent than those applied to waste generated within the state. Requirements that waste be source separated and that hazardous waste be removed before delivery for disposal, if adequately enforced, could have the practical effect of limiting the amount and nature of out-of-state waste able to be disposed of within the state, and would address the factors that cause concern with out-of-state waste in the first place. That is, it would reduce the hazardous content of that waste and help assure that Vermont's landfill capacity is not used for material that

ought to be recycled.

At this time, however, our concerns about out-of-state waste are less than they might have been several years ago. The flow of solid waste appears increasingly to be determined by market forces that are interstate and international in scope. In fact, since adoption of Act 78, Vermonters have dealt with their waste disposal needs by increasing the amounts shipped out-of-state. Similarly, most recycled material is also shipped out-of-state for reprocessing, where any potential public health or environmental threats are borne by non-Vermont residents. In our view, the state risks little in the way of overdeveloping landfills within the state at this time.

3. Public oversight of private sector waste management.

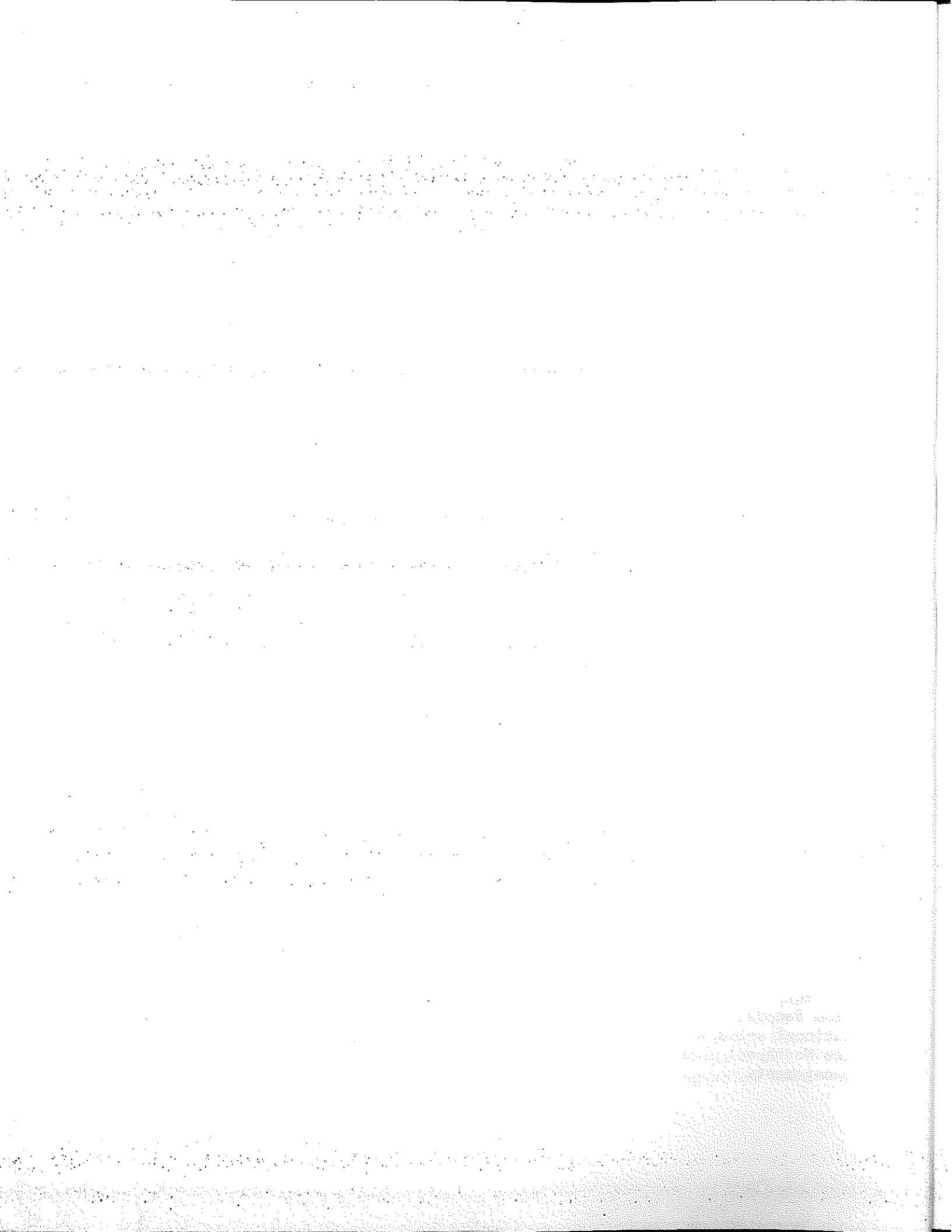
a. Avoidance of monopoly. We conclude that solid waste collection and disposal (including recycling) is not a "natural monopoly", and should not be subjected to public price regulation (as is done, for example, with electricity distribution). Therefore, according to economic theory private competition among solid waste haulers, recyclers, and disposal facilities should assure the most efficient and lowest priced provision of this service. However, there remains the practical question of whether market conditions are such as to assure that true competition is possible.

We are particularly concerned about the potential of mergers between private haulers and disposal facilities, possibly facilitated by predatory pricing, which could lead to industry concentration and to greater difficulty for potential competitors to enter the market. These conditions could in turn defeat the purpose of relying on the private sector for reasonable prices and desirable service.

b. Avoidance of organized crime. We have been warned of a possible entry of the Vermont solid waste market by organized crime, which is reported to greatly influence solid waste management operations in the most urbanized markets of the Northeast. From an economic perspective, organized crime may attempt to acquire monopoly control of the market. Other features, such as use of intimidation and violence, are objectionable and to be avoided.

c. Further legislative deliberation before decision. We urge that the legislature become fully informed of the potential drawbacks of our recommended role for the private sector in solid waste management, and explore measures to prevent monopoly conditions or organized crime activity from occurring. We offer specific recommendation later in the report.

But in addition, we urge that the legislature obtain direct testimony from federal officials responsible for enforcing antitrust laws in the national solid waste industry, and from public investigators elsewhere in the Northeast knowledgeable about organized crime involvement in solid waste management.



III. History of Solid Waste Management in Vermont.

The history of solid waste management in Vermont is one of increasing awareness of health problems associated with trash disposal as its toxicity and volume has grown. As awareness increased, the state took on a greater regulatory role while attempting to leave control of the system where it had always been -- at the local level.

Until the 1950's, most towns simply provided a dump area where its citizens could leave their trash. The local property tax paid for the acquisition and maintenance of these areas. During the 1950's, people became concerned about disease carrying vermin that were attracted to the dumps and, as a result, by the early 1960's many towns were regularly burning their dumps in order to control rats and other pests.

During the next decade, many at both the federal and state level became concerned about the aesthetic and health problems associated with the burning of trash. In 1967, the Vermont General Assembly passed a law requiring that each city and town provide and maintain either an incinerator or a sanitary landfill in which trash would be periodically covered over and compacted in order to control vermin and other animals attracted to the waste (24 V.S.A. § 2201a, Act No. 90. § 2, 1967). In 1968 the federal government prohibited burning of trash under the Clean Air Act and the Vermont Department of Health prohibited burning of municipal trash under its authority to control health problems. Vermont's 1967 law was amended in 1969 to allow a municipality to fulfill its responsibility to provide a sanitary landfill or incinerator by contracting for use of a facility owned by either another municipality or a private landfill or incinerator operator. At this point, the private sector became a major player in the sanitary landfill business and by 1973, 18 of 53 approved landfills were privately owned and operated.

During the 1970's, the law addressed the need for recycling, requiring the secretary of the Agency of Environmental Conservation (AEC) to plan for, develop, and assure the operation of recycling centers throughout the state. Additionally, Vermonters learned that many sanitary landfills were polluting the surface and groundwater. Up to this time, the federal government had recommended placing landfills in such "useless" areas as old gravel pits and wetlands, which incidentally had highly permeable soils causing the leachate to enter the ground water quickly. A consultant to the AEC found in 1973 that of 53 landfills which had been approved by the Department of Environmental Protection as operating according to Health Department standards, 80 percent were below United States Environmental Protection Agency standards for sanitary landfills and should be closed. Vermonters began to realize that the best sites for landfills were areas containing prime agricultural soils, areas suitable for farming and for other types of development. Siting a landfill on prime agricultural soils

is extremely difficult because there are generally neighbors who will fight locating a landfill near them. As a result fewer landfills were being built and people became concerned that we would soon run out of environmentally sound landfill space.

In 1976, the federal government passed the Resource Conservation and Recovery Act (RCRA) requiring that all open dumps be closed, that wastes be disposed of in an environmentally sound manner and that hazardous wastes be managed properly. Vermont, in 1977, implemented RCRA by passing its Solid Waste Management Act (Title 10, Chapter 159). This act required the AEC to develop a comprehensive statewide waste management system, to certify disposal facilities before their construction and to certify hazardous waste handlers. Responsibility for providing disposal facilities remained with the towns.

Regulations requiring proper siting, monitoring and operating of disposal facilities increased the cost of building and operating them. Towns began to find that economies of scale made sharing of facilities with other towns more practical and by 1980, the AEC reported that over half of Vermont towns used a regional landfill by contractual agreement between towns and landfill owners. Nevertheless, the cost of disposing of trash rose dramatically during the 1980's.

By the middle of the 1980's, Vermonters perceived that they were experiencing a trash disposal crisis. Many existing landfills were found to be polluting the groundwater, costs were rising, it appeared that the state would soon run out of environmentally sound landfill space and recycling goals established in the 1980 plan had not been met. The legislature enacted a "mini superfund" bill. Municipalities felt that they were burdened with federal and state regulations, yet receiving very little in the way of technical and financial assistance.

In 1985 the AEC convened a solid waste summit to address the crisis, and in 1986, Governor Kunin created a Solid Waste Advisory Committee to study the crisis. Both groups called for major changes in the way solid waste was managed in Vermont. The legislature responded with passage of Act 78 in 1987.

Act 78 of 1987.

In Act 78 the General Assembly declared that the state should play an increased role in solid waste management as a coordinator of comprehensive statewide planning, environmental regulator of facilities, provider of technical and financial assistance and provider of various incentives to municipalities to work toward state goals of waste reduction, reuse and recycling. The secretary of the Agency of Natural Resources (ANR)* was required to seek voluntary waste reduction from the packaging industry and

* In 1987 the Agency of Environmental Conservation was renamed the Agency of Natural Resources.

others responsible for the generation of waste, and the state purchasing director was required to maximize the state's use of recycled materials so as to purchase 40 percent recycled materials by the end of 1993. Further, the General Assembly declared that municipalities, working through regional organizations, should continue to plan for and provide disposal facilities and that financial support for these facilities should come from users, not from property tax assessment.

To these ends, the act directed each municipality to plan for solid waste management in compliance with state goals and the state plan that was to be adopted by the Secretary of ANR. Each municipality was directed to plan through membership in a solid waste district or in a regional planning commission, or to work independently with a regional planning commission. A municipality that did not plan in this fashion would be ineligible for state financial assistance for planning or construction of facilities, could not get a facility certified by the state, and would not be allowed to use a certified regional facility. The act provided 100 percent funding for those planning in accordance with the act, and implementation grants and loans for those who had plans approved by the ANR. Once a plan was approved, only facilities identified in the plan could be certified by the ANR.

The act directed the ANR to review all existing landfills and to determine if they should be closed, required to do remedial work, or certified for operation. Those that were to be closed or upgraded could apply for interim certification for two years. This certification could be renewed once. Standards for certification of existing and new landfills were upgraded in the act to include lined cells, monitoring of nearby waters and leachate collection among other things. The act encouraged experimentation with unlined specialty facilities that would accept only limited, non-polluting portions of the waste stream.

In order to discourage dependence on the property tax for support of facilities and to encourage municipalities to begin to measure volume of waste so that users could be charged according to the amount they generate, the act levied a statewide per volume tax on trash delivered to landfill facilities. Funds collected were to be used to support the state solid waste management program.

The act also provided for control of trash flow by directing haulers to apply to the state Department of Motor Vehicles for certification. In its facility certification, the ANR was to include the geographic area that each facility was to serve. The hauler certification was to specify to which facilities each hauler could deliver trash and from which geographic area that trash was to originate.

Amendments to Act 78.

In 1988, the General Assembly amended Act 78 to enable interim grants and loans for building of facilities to municipalities and districts prior

to completion and approval of their solid waste plans. The following year, the General Assembly extended the deadline for closing unlined landfills for one year, from July 1, 1991 to July 1, 1992. Also, the secretary of ANR was required to solicit information from manufacturers and distributors of consumer goods, relating to whether their packaging and products were recyclable or made of recycled material and relating to the quantity of packaging used.

In 1990, in order to enable unlined landfills to fill up as quickly as possible, and to accumulate the necessary funds for final closure, the General Assembly created provisional certification. This certification could allow an unlined landfill to accept waste from outside of its established service area until it had enough volume to fill existing unlined cells to an acceptable grade and until it had enough funds to close. However, provisional certification would be valid only until July 1, 1992, except that a landfill could apply for a six month extension beyond that date, if necessary.

Also in 1990, the General Assembly created the Waste Facility Panel to hear appeals of any solid waste-related permit decision by the ANR, including air, water or certification permits, or any decisions by the Act 250 District Commissions. These appeals were to be consolidated into one review by the panel.

In 1990 through 1992 the General Assembly passed bills on toxics use reduction, hazardous waste reduction, management of unregulated hazardous waste, expansion of the bottle bill, and banning landfill disposal of lead-acid batteries, white goods, used oil, tires and paint. Also adopted were measures which enhanced local powers to enact solid waste ordinances, established procedures for district condemnation of land for landfills, required a certificate of need be obtained before construction of a hazardous waste facility, established goals for the use of recycled newsprint, required shelf labeling accompany the retail sale of specified hazardous products, limited the use of heavy metals in packaging, addressed diversion of pesticides from the municipal waste stream, and endorsed the concept of manufacturer responsibility with respect to the disposal or reuse of specified hazardous products.

IV. Market Competition in Vermont.*

According to economic theory, competition among firms offering to transport and dispose of solid waste should assure the most efficient and thus lowest priced provision of these services. The practical question is whether existing conditions, or those coming into being, will assure that competition is possible.

The degree to which a market is competitive is ordinarily measured by the following:

- degree of buyer or seller concentration;
- ease or difficulty of entry into the market by a new firm; and
- degree of product differentiation achieved by individual firms.

Our assessment of competition in the Vermont solid waste industry is impressionistic, based almost entirely on our interviews. State government does not possess systematic information on the industry. This lack of information would need to be remedied were state government accurately to monitor conditions of competition in the industry.

We are not well enough informed to include recycling in our discussion of competition.

A. Market concentration.

Solid waste haulage in Vermont is provided almost entirely by private firms. Collection arrangements are either made directly between a hauler and an individual household or business, or are made between aggregations of residential or business customers and an individual hauler through contracts awarded by municipal government. We believe all parts of the state are being served.

Competition among haulers is enhanced if individual generators of waste have the opportunity to shop for a hauler. On the other hand, municipal contracts on behalf of aggregations of waste generators can be awarded on a competitive basis, and be used to help obtain quality service, stability, and volume pricing.

The degree of concentration among haulers varies around the state. In rural areas particularly, many firms are in operation, frequently small in size, with competition said to be keen.

In more urban areas, haulage firms tend to be larger. Here the opportunity exists to systematize collection routes and thereby minimize

* See Appendix B for definitions of market terms.

travel time and distance between collection stops. Individual firms may seek to take advantage of this opportunity by expanding "horizontally" through internal growth, or by merging with other firms. The result would be an individual firm serving a greater share of the market. This greater market power would not necessarily be to the disadvantage of customers, provided that competing firms continue to exist, or that new, competing firms are able to enter the market easily.

The "vertical" expansion of a firm to encompass both hauling and disposal activities, or "conglomerate" mergers between businesses offering dissimilar services, is more likely to create anti-competitive conditions. For example, we were told that predatory pricing has occurred in the Vermont haulage industry. This could happen when a vertically integrated or conglomerate firm uses funds from an operation other than haulage in a given geographic market, to offer haulage prices to customers in that market that are below cost, with the effect of eliminating competing haulers who do not have a cost-shifting opportunity.

The character of landfills serving Vermont is undergoing substantial change, occasioned largely by the conversion from unlined to lined facilities. The number of operating facilities located within the state is decreasing from dozens in existence only a short time ago, to an expected handful within the near future. Virtually all the landfills remaining will be large in individual capacity, with the previous large number of small capacity sites shrinking to but a few. Because some of the remaining capacity is expected to be in public ownership and management, the private facilities competing for waste will be still fewer.

However, in recent years more waste generated in Vermont has been disposed of at facilities located outside the state. That is, the geographic area of the competitive solid waste market servicing Vermont has expanded, with the number of landfill facilities greater than is apparent when counting only those located within the state.

One may assume this geographic expansion in the solid waste market has resulted in part from the fact that, as the cost of disposal has gone up per unit of waste, because of more costly lined facilities (or the use of other methods such as incineration), the comparatively stable cost per mile of transport has decreased in significance. Thus in theory, the cost of disposal at one site compared to another has become more influential in determining the flow of solid waste.

Whether the geographic area of the solid waste market continues to expand, or whether it contracts, remains to be seen. But the present expansion has created opportunity for greater competition among disposal facilities. Moreover, as smaller unlined facilities located outside Vermont as well as within the state continue to close, the demand for more lined facilities, at still further distances, should increase.

Thus, the greatest threat to competition would appear to remain the

opportunity for "vertical" integration between solid waste haulage firms and disposal facilities. However, we do urge the state be alert to "horizontal" monopoly behavior on the part of haulers and landfill operations.

In addition, we have been warned of possible entry into the Vermont solid waste market by organized crime, which could foster creation of monopoly market conditions. Organized crime is reported to be particularly strong in the haulage business in the most urban areas of the Northeast. In these areas, competition is reported to be curtailed by means such as: collusion between individual haulage firms to honor each other's exclusive "property rights" to specified customers; "bid rigging" between municipal officials and individual firms; collusion between labor union officials and organized crime figures; and, use of intimidation or the threat of violence to enforce these measures. We assume such activities are not now occurring in Vermont, but believe they are a potential.

B. Conditions of entry.

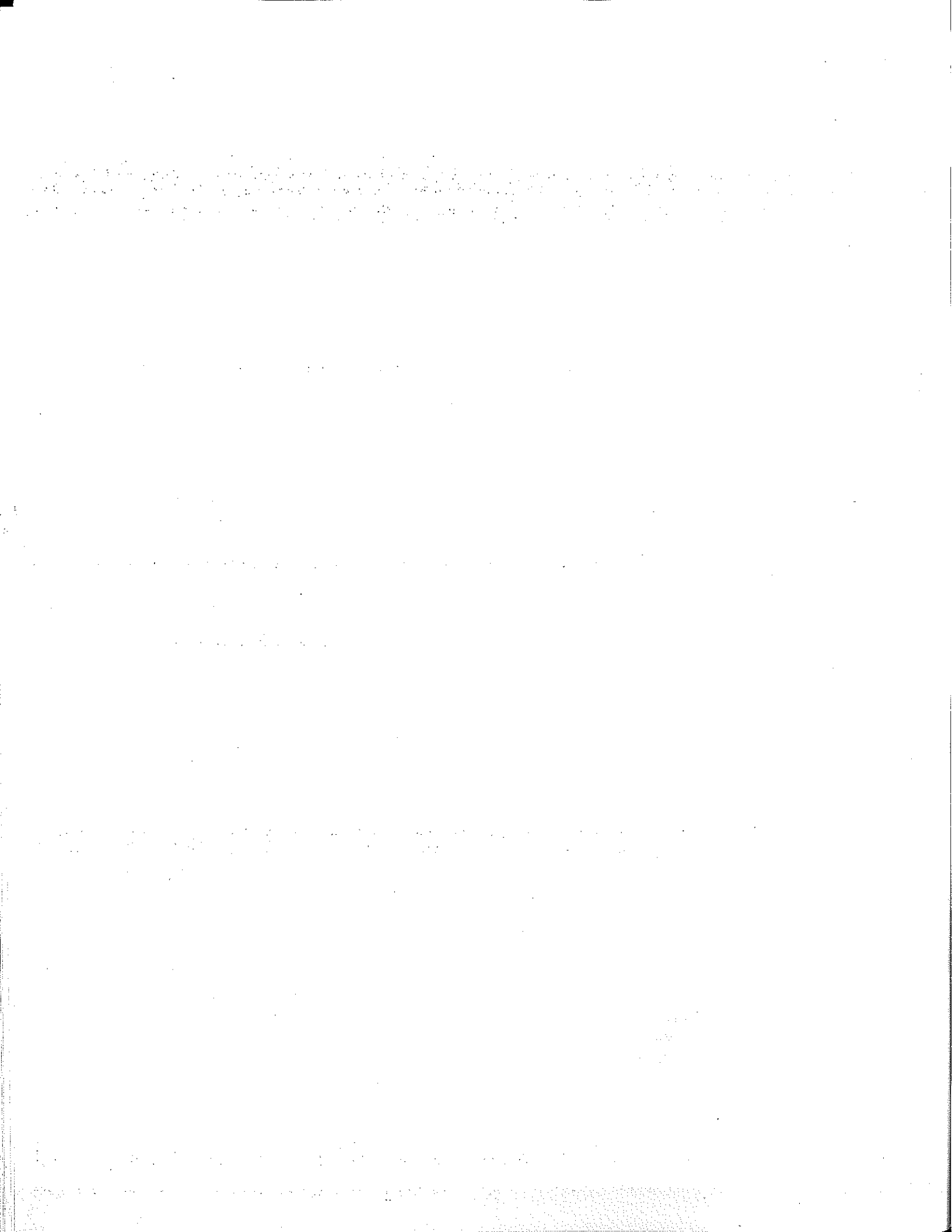
Competition is enhanced when new firms can readily enter a market. Entry can be made difficult by the need for high capital investment, high "transaction" costs (such as time and expense to comply with public regulation), or acquisition of scarce but essential information or skill.

Conditions for entering the haulage business, particularly in rural areas of Vermont, are said to be nominal. In fact, many firms are said to consist of no more than a single operator with a truck, low overhead, and a willingness to work for a lower wage than received by the competition. Entry into more urban markets may require more capital and greater information and skills, in order for a new firm to offer a greater range of services comparable to those of existing larger firms. But the mere possibility that entry is possible should enable competition in the haulage industry to thrive.

Conditions to enter the modern landfill market are obviously greater, including large capital construction costs, expanded market information and expertise, and time and expense of satisfying health and environmental regulations. But we do not believe these conditions will necessarily prevent competition.

C. Product differentiation.

Businesses which can persuade customers that their product is inherently superior to a competitor's can thereby gain greater market power. This is often achieved in other industries through advertising and the promotion of brand loyalty. It appears to us that product differentiation is of minor relevance to market competition among haulers or disposal facilities serving Vermont today. However, as individual firms grow and become more predominant or provide superior services, their products could become more highly valued, thereby reducing competition.



V. Findings.

A. Under the current system, economic incentives do not always match the policy objectives of Act 78.

Under the current system of solid waste management, economic incentives may induce people to behave contrary to the law. For example, the economic incentive for waste haulers to dispose of waste at the least cost has at times caused some of them to ignore service areas, thereby undercutting the viability of many arrangements entered into between those generating waste and those disposing of it. Accordingly, we stress that whatever form solid waste management may take in the future in the state, the incentives to those involved in waste transport and disposal must be consistent with the objectives envisioned and legal arrangements entered into for carrying out these objectives.

B. Vermont may be creating excess waste disposal capacity which could undermine state policy objectives.

Contrary to the common fear expressed in the 1980's that Vermont was running out of landfill capacity, some people today believe that we may be creating excess landfill capacity. An excess capacity is apparent to facility owners who are unable to receive volumes of trash at competitive prices sufficient to pay their capital debt obligations.

This situation is influenced by the current economic recession (and reduced growth in waste), increases in recycling, the fact that a significant share of waste generated in Vermont is disposed of out-of-state at less expensive sites, and the slow rate at which unlined landfills have closed both in Vermont and in other states.

In a situation of excess capacity, facility owners competing for the available trash have a reduced incentive to support recycling or reduction efforts. Further, because of their commitment to use this capacity, they will be unlikely to invest in new technology that may reduce volume or dispose of trash in new, more efficient or environmentally sound ways.

Therefore, we conclude that long-term financial investments in the types of waste management processes and facilities now available, should be made prudently, incrementally, and in a manner that does not foreclose future opportunities to adopt more enlightened methods as they emerge.

C. Diversity between Vermont's geographic regions calls for a variety of solid waste management techniques.

Solid waste districts have worked well in some areas, poorly in others. Two major conditions for success appear to be: (i) a sufficient quantity of

solid waste and density of population to achieve economies of scale in waste management, and (ii) previous experience with managing solutions to local government problems at a regional level.

Districts have been formed roughly along the boundaries of regional planning commissions. These geographic areas are viewed as appropriate for some solid waste activities, such as public education and the collection of recyclable materials, but may be an inappropriate size for other activities, such as siting a lined landfill or a resource recovery facility.

Some districts have experienced major controversies and operating problems with public process (public meetings and decision making, and access to public documents). This raises the question of whether the concept of a municipal legislative body is the best model for managing solid waste. In addition, economies of scale may require creation of a district entity with too many member towns to be manageable.

Therefore, we believe that reform of the solid waste management system should acknowledge the diversity that exists within the state from one geographic area to another, concerning:

- economies of scale resulting from different levels of population concentration and business activity,
- previous experiences with regional organizations for managing local government responsibilities, and
- prevailing preferences for public or private sector conduct of solid waste management activities.

Reform should not foster further, needless disruption to the existing system, merely to achieve uniformity across the state.

D. Act 78 priorities have been very well received and should not be changed. However, some provisions of the law created inefficiencies and implementation has been poor. Some change to the law is necessary.

Act 78 is credited with fostering a popular awareness of solid waste issues and of a need for less wasteful personal behavior. Further, many have stated that the abundance of recycling and hazardous waste handling programs throughout the state are a direct result of Act 78.

However, many provisions of Act 78 have not been implemented as intended, while others need specific amendments for a variety of reasons. The legislature has been criticized for creating unrealistic deadlines, making frequent changes in the requirements, and not allocating adequate resources for implementation.

1. State level planning.

No statewide, comprehensive overview exists of the solid waste management system, concerning long-term, empirically-based planning for system needs or resource allocations, source reduction, recycling, facility siting, or haulage.

2. District level planning.

District level solid waste planning as administered by the state Agency of Natural Resources has been inefficient and wasteful of state appropriations. Agency planning requirements have resulted in duplication of work by districts, excessive detail in the plans, and the analysis by some municipalities and districts of irrelevant solid waste activities.

Some have also observed that state planning aid should not have been made in the form of "grants", but rather should have been "advances" to be either repaid or applied toward the cost of facilities. The grants, it is argued, required insufficient commitment from local public officials.

Because the formation of districts came before districts prepared solid waste management plans, district size was determined by considerations other than the economic viability of solid waste management. Furthermore, some people suggest that the plans justify the programs of a given district rather than proceed from an impartial analysis of alternatives.

3. State administration.

The state Agency of Natural Resources has been credited with strong promotion of the objectives and priorities of Act 78. Individual employees of the agency have been complimented for their dedication, knowledge, and helpfulness. However, the agency has also been widely faulted for less than adequate implementation of many provisions of the law. The latter includes:

a. A general administrative behavior often perceived as inconsistent, playing favorites, and slow, plus a reluctance to provide leadership in fostering the development of a comprehensive system of solid waste management.

b. A regulatory process perceived by some as onerous and unfair, and by others as failing to provide proper protection.

c. A failure to close all unlined landfills uniformly, which is perceived as fostering confusion and cynicism, and as having creating economic advantages for some landfill operators and users, but economic disadvantages for others. Parties who have acted in accordance with the law frequently view themselves as having been penalized.

d. A perceived failure to play a sufficient role in encouraging source reduction or recycling opportunities that rely on economic forces

beyond the State of Vermont.

e. A failure to enforce laws such as service area certification. Many people acknowledge that they and others do not "obey the law". These people observe that, because the law is often not enforced, following the law may put one at an economic disadvantage compared to those who violate it, or one may be placed in a position where obeying the law is not possible. These conditions undermine the credibility of the law.

The above findings point to an apparent need for some degree of statutory revision in order to obtain a law which is workable and capable of being respected by the general public.

E. The continuing evolution of federal law has created uncertainty over the ability of the state to establish and enforce policy concerning solid waste "flow control", "service areas", out-of-state waste, and landfill operation and closure.

F. There is a need for a state-level broker for recycled materials, and for the state itself to use recycled materials.

Recycling markets are in transition to an as yet unknown configuration. For each district or individual town involved in recycling to find its own markets for recycled material is viewed as highly inefficient and ineffective. Many people urge that state government play a larger role in finding and developing markets for recycled materials, including finding uses for such material in state and local government projects.

G. Siting new landfill facilities is very difficult.

The NIMBY (not-in-my-back-yard) attitude is apparently weakest in areas which already have a landfill nearby. Both private and public entities have had extreme difficulty siting facilities at other locations.

A landfill siting initiated by a solid waste district is made more difficult by the ease with which a potential host town can leave a district, and by the possibility of a potential host town to provide for its own landfill needs through the 1,000 annual tonnage exemption from lined landfill requirements.

Philosophically, there exists in the state a range of views regarding the extent to which a host town should be offered incentives beyond narrow compensation for impacts incurred, and the point at which negotiations ought to be supplanted by formal condemnation procedures.

H. No consensus exists on optimal public or private roles, concerning any aspect of the solid waste management system, beyond the role of government to set overall standards for the system.

VI. Recommendation Details.

These recommendation details are presented to assist the legislature and the general public in discussing what to do next with respect to state solid waste management public policy and programs. The recommendations aim to build on the strengths of the existing solid waste district approach, while making it easier for the competitive market to meet the needs of towns that do not subscribe to a major public role in waste management.

In proposing greater reliance on the private sector for providing solid waste management, we assume that the state is able to protect its citizens from the creation of monopolies or the activities of organized crime. If this assumption is shown to be invalid, then we recommend the consideration of other approaches, such as creation of a state authority, establishment of a regulatory framework such as that overseen by the Public Service Board, or continuation of the present model based on state and district level public planning.

A. Role of state government.

GOAL: State government should serve as a watchdog over free market forces with respect to solid waste, and should support and complement district management of waste, where districts exist.

1. Strengthen the capacity of state government to monitor solid waste activity, and create the potential for establishing a market presence on behalf of the state.
 - a. Create an entity with membership independent of other agencies (possibly insulated from executive, to de-politicize).
 - b. Require the entity to monitor competition, costs, prices, and the availability of service, and upon a finding that monopoly conditions exist or are incipient, or that segments of the population or geographic areas of the state are not being served, allow it to:
 - cooperate with the Office of Attorney General in acting as the state agency with capacity to enforce federal antitrust laws, and
 - enter a solid waste market, as a market participant, by submitting bids on the transport or disposal of solid waste of individual customers (including municipal governments acting on behalf of town residents).

c. Enable and require the entity to purchase lands to serve as landfill reserves, to be used in the future, as needed.

d. Allow the entity to condemn existing facilities, own, site, construct and operate or arrange by contract for facility operation.

- Facilitate this action by considering establishing a "host town bill of rights", and a mandatory mediation process, which would determine appropriate compensatory action.

e. Require the entity to make recommendations regarding the adoption and implementation of a ratesetting procedure to regulate prices in the solid waste market, in the event it determines other options are not functioning properly in the public interest.

f. Allow the entity to argue at facility renewal proceedings that a particular facility ought not to be recertified because it charges unreasonable prices, and make charging of unreasonable prices grounds for refusal of recertification.

g. Require the entity to review the sale of a business with regard to its potential antitrust violation.

2. Strengthen the leadership role of state government regarding recovery and use of recycled materials.

a. Provide state owned and operated facilities on a regional basis, as necessary, for accepting recyclable materials, as authorized by existing law.

b. Assist in finding markets, for recyclables:

- (1) establish data base on markets;
- (2) assess needs of markets and establish market lists with demand and market specs;
- (3) create any needed manuals on materials collection and processing;
- (4) establish a technical information hotline and newsletter;
- (5) conduct workshops, establish and provide model contracts;
- (6) assist in siting of facilities that use recyclables;
- (7) organize cooperative marketing efforts;
- (8) cooperate with universities to test and monitor use of recycled products, and increase state use of products that perform adequately;
- (9) create incentives that make recycling profitable, e.g. competitive research grants for reusable packaging.

c. Increase the state use of recycled materials:

- (1) include recycled product procurement elements in other market development projects, (such as: plastic lumber, recycled paper, compost, animal bedding, glassphalt, glass

foam products from recycled glass cullet, drainpipes from recycled material);

(2) assure full implementation of existing state law on state government use of recycled materials;

(3) consider having the state serve as market of last resort for specified recyclable materials, and coordinate use of non-marketable materials in state projects, considering avoided costs of disposal.

d. Consider requiring industry to establish goals for use of recycled materials and report on progress in meeting those goals.

e. Consider expanding the beverage container redemption program to cover other recyclable materials:

(1) authorized recycling centers would pay set amount to Vermont residents for redemption of specified amounts of specified recyclable materials;

(2) operator of redemption center would be allowed to receive similar handling charge;

(3) pay for program by a gross receipts tax on haulers;

(4) the state would market or use the material redeemed.

3. Strengthen the role of state government regarding collection and disposal of hazardous materials.

a. Regarding hazardous household waste, assure proper collection, storing, shipping, and system financing; assure proper contract management and program oversight.

b. Continue to work with other states and with the private sector to expand on manufacturers' responsibilities, and to propose product bans, as appropriate.

4. Ensure regulatory system is receptive to small, specialty disposal or materials diversion facilities that accept only part of the waste stream, with little risk of environmental consequences.

5. Increase state government enforcement presence and capabilities.

a. Establish character requirements of principals in private solid waste businesses:

(1) prohibit operation by persons convicted of a crime punishable by incarceration for more than 6 months, or convicted of any crime involving moral turpitude, or associates of career offenders, with applicants required to demonstrate, by clear and convincing evidence, their own and their backers' financial integrity, good character, honesty and integrity;

(2) disqualify for omission, deceit or conviction;

(3) suspend or revoke license by civil or administration

procedure;

(4) conviction for racketeering or specified waste offenses leads to automatic and permanent license revocation;

(5) waste flow violations lead to license suspension or revocation.

b. Strengthen the state government capacity to function under federal antitrust law and enforcement procedures; consider enhanced state law governing practices leading to monopoly conditions:

- For example, consider providing that the attempt to monopolize leads to treble damages, injunctive relief, attorney fees, and costs; or make it an offense to sell, or contract to sell, goods or services at unreasonably low prices for the purpose of destroying competition or eliminating a competitor (perhaps add this to consumer fraud section).

c. The state should help towns to enforce municipal solid waste ordinances which are adopted to implement state policies.

6. Change manner of state financial assistance.

a. State solid waste programs would be financed by gross receipts tax on waste haulers; the state tipping fee ("franchise tax") would be repealed. This change should:

(1) decrease incentives to haul Vermont waste out-of-state, in order to avoid the state tipping fee;

(2) decrease incentives to haul to in-state facilities that are cheaper because they offer, and charge for, fewer recycling services;

(3) continue to tie program costs to the generation of wastes, and thus, constitutes a user fee;

(4) be practical to administer;

(5) provide for an assessment on commercial and industrial entities who haul their own waste;

(6) not be implemented before testimony is received from haulers.

b. A state entity should make cost-sharing recommendations, if a host town and its citizens bear an unfair burden, because of solid waste management facilities, due to costs that had not been predicted or predictable.

7. Provide adequate state government staffing.

a. Functions recommended should not be attempted unless the state is willing to provide adequate staff support on these matters, to include legal, technical, recycling and economics expertise. It is important to note that for the last decade the state Attorney General Office has had no personnel assigned to enforcement of antitrust law.

b. Employees should be compensated at levels sufficient to enable the state to hire and retain competent personnel; the program should not rely on temporary employees.

B. Municipal members of solid waste districts.

GOAL: State government should strengthen and support solid waste districts.

1. Help ensure equal economic advantage for all owners of disposal facilities.
 - a. Provide state funds for recycling and hazardous materials management (this allows tipping fee to be less, thus decreasing incentive to divert trash).
 - b. Continue to close unlined, polluting landfills (decreases diversion incentive).
 - c. Coordinate enforcement between towns and between states; give districts the power to review books of private entities that have district contracts with escalating price provisions.
2. Support and supplement district management of recycling facilities.
 - a. Repeal 24 V.S.A. § 2203b protecting private recycling facilities.
 - b. Increase state's role in marketing and using recyclables, as specified above.
3. Avoid giving towns financial incentives to leave districts.
4. Require districts to assure that citizens, towns, and advocates have adequate input at district meetings and throughout district proceedings.
5. Clarify powers that remain in municipality after it joins a district; in particular, allow towns to proceed on waste reduction and recycling matters faster than the district is proceeding, as long as to do so does not seriously undermine the districts.

UNRESOLVED QUESTION: Assuming that districts with flow control powers in their charters are able to control the flow of the waste generated within the district, should a private entity proposing to locate a solid waste facility within a district be required to be in the district plan in order to exist?

Arguments pro:

- This gives district leverage in negotiating with privates.
- This gives district control of all waste located within the district.

Argument con:

- If flow control requirements allow a district to assure the existence of a waste stream adequate to support its public facilities (because it can rely on receipt of waste from member towns), it should not be necessary to impinge on the business opportunities of waste managers located within the district that propose to deal in waste generated outside of the district.

C. Non-District Towns.

GOAL: State government should further state waste management objectives and priorities while allowing these towns to choose whether to control waste activities themselves or in conjunction with other towns, or to rely instead on the private sector.

1. Provide that facilities, in order to exist, need not be in a town, district, or state solid waste management plan.
2. Evaluate operation of the existing state law which allows towns to enforce their own ordinances before the environmental law judge.
3. Convert a town's categorical responsibility for solid waste management within its borders to a responsibility which the town always may choose to assume, but one that it may choose not to assume, preferring to rely on the private sector
4. Consider requiring disposal or recycling facilities to accept all recyclable material specified by the state (with state revenue from gross receipts tax on haulers used to subsidize noneconomic recycling).
 - a. Consider accompanying this requirement with a statewide mandatory source separation requirement.
 - b. Consider requiring that these facilities accept these materials free of charge.

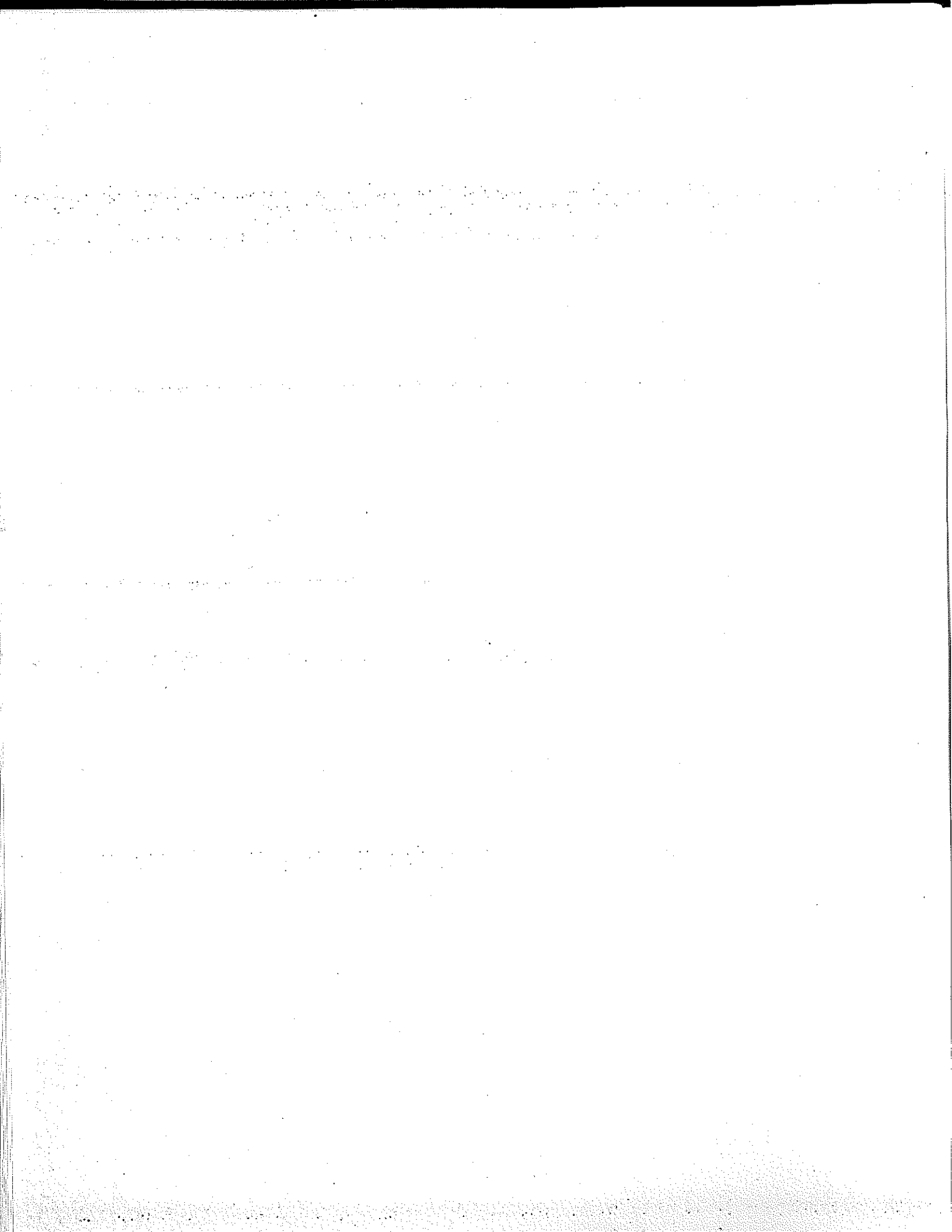
D. For further consideration are the additional recommendations from various people we interviewed.

1. There should be specified remedies for violations, by district or municipal personnel, of public meeting and access to public document laws.
2. The state should create a public advocate to represent towns in their relations with districts.
3. The state should provide mediation services to reduce disputes between districts, towns, and citizens.
4. The state should reward communities and individuals that cooperate

with their neighbors, and not reward those who think only of their own interests.

5. The state should refine a waste tracking system to assist in flow control enforcement.
6. The state should address the need for disposal of disaster waste, such as that caused by large fires and flooding.
7. The state should encourage creation of a public process before the permitting process commences, so that the public is less likely to feel rebuked, ignored and powerless.
8. The state should support flow control by solid waste districts, by:
 - a. Providing that violation of flow control provisions can cause hauler's license to be suspended or revoked.
 - b. Allocating enforcement personnel at state level, enabled to enforce flow control requirements.
 - c. Increasing fines for flow control violations.
9. The state should remove the requirement that facilities be in a plan and provide that facilities may only be certified if they are determined to be necessary to meet a public need, when viewed from a statewide perspective.
 - a. As part of public need determination, consider whether public benefits from the proposal outweigh costs to the public.
 - b. As part of need determination, consider whether or not better options to the proposed facility exist (is this the least-cost acceptable alternative?).
 - c. Require that disposal facilities be sited in a manner that anticipates a maximum amount of recycling.

(1811h)



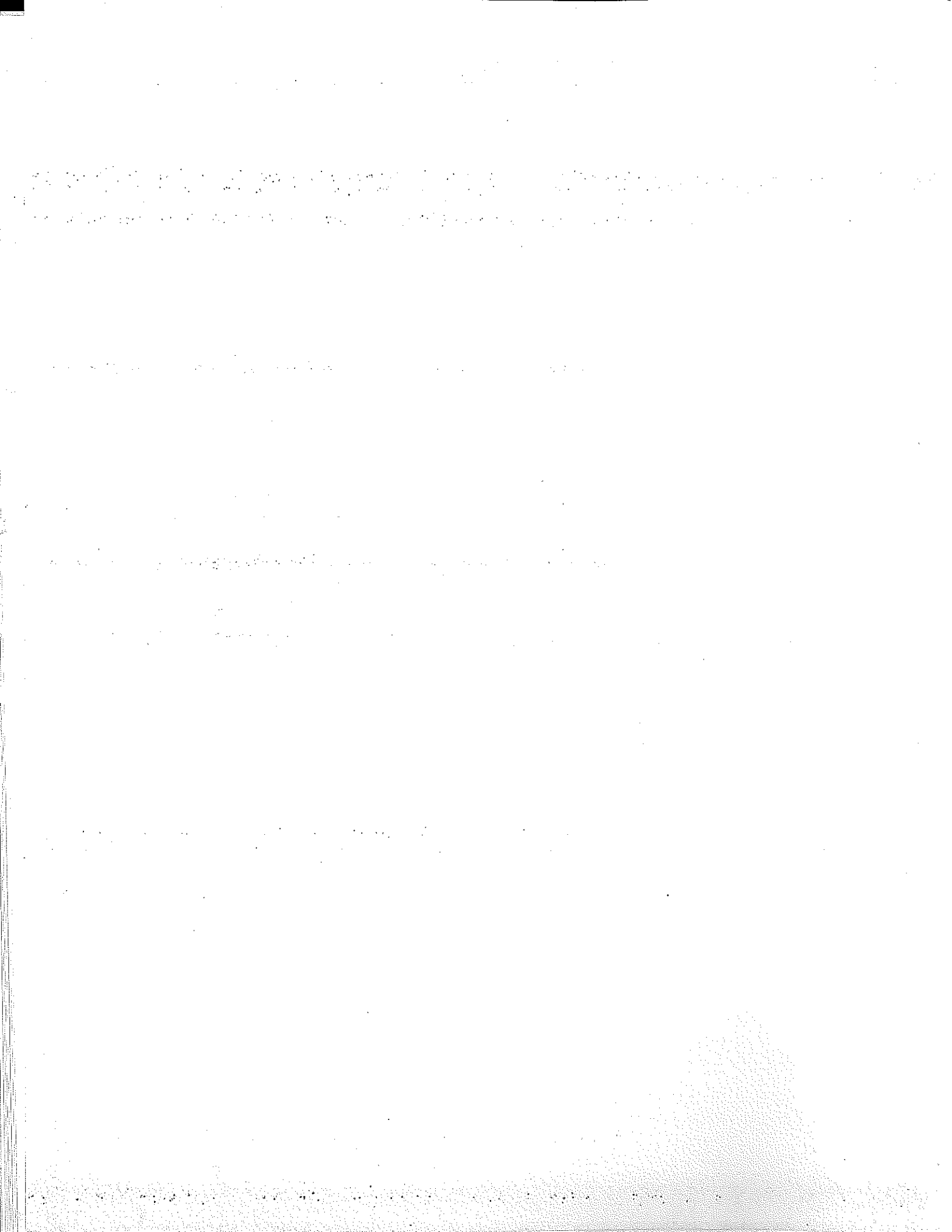
Appendix A

Act No. 256 of 1992 (1991 Adjourned Session)
(H.951)

Sec. 31d. SOLID WASTE PROGRAM EVALUATION

Staff of the legislative council and of the joint fiscal committee shall conduct a performance evaluation of the state solid waste division programs, including progress in accomplishing the goals of Act No. 78 of the Acts of 1987, and an examination of appropriate future legislative measures that might be considered by the general assembly. A program evaluation steering committee is created consisting of the chairs, or their designees, of the house and senate committees on institutions and on natural resources and energy. Individuals shall have the cooperation of staff of all public agencies and entities concerned, including the agency of natural resources, solid waste management districts and regional planning and development commissions. A report, including findings and recommendations, shall be submitted on or before January 15, 1993 to the governor and to the house and senate committees on institutions and natural resources and energy.

(1812h)



Appendix B

Summary of Market Economic Terms*

"ECONOMIC EFFICIENCY": consists of:

Efficient production: a level of production using the least cost combinations of inputs;

Efficient distribution: distribution of a product to those individuals who value it the most; and

Consumer sovereignty: the level of production and its distribution reflects the underlying tastes and preferences of consumers.

"NATURAL MONOPOLY": is an economic activity which can be accomplished most efficiently by one firm. That is, the economies of scale of this activity increase as the single firm expands, and competition among two or more firms to serve the same consumers would be less efficient. An example is the distribution of electricity.

As with any monopoly, a natural monopoly has the power to dictate prices. The consequence can be inefficient production and distribution of output. Government typically has chosen to regulate the prices of a natural monopoly, in order to realize its economic advantages while avoiding its economic disadvantages.

"IDEAL MARKET COMPETITION": fosters economic efficiency. Conditions of ideal market competition include:

Many buyers and sellers;

All participants share all relevant market information;

The "transaction" cost of bargaining among participants is zero;

All costs of production and distribution are reflected in prices (that is, no "external" costs or cost shifting exist); and

No "public goods" are produced. (A public good is one which, if consumed by one person does not ordinarily preclude its consumption by another person, for example, a radio program or a park as opposed to food or an automobile).

"INDUSTRY COMPETITIVENESS": can be assessed by where an industry falls on a spectrum of pure monopoly and ideal competition, regarding:

The degree of buyer or seller concentration;

The condition of entry to the industry by new participants; and

The degree of product differentiation achieved by individual producers.

"MARKET CONCENTRATION THROUGH MERGER": can effect market competitiveness differently, depending on whether the merger is:

Horizontal; between producers of the same good or service within the same geographic market;

Vertical; between firms which have had a buyer-seller relationship prior to merger; and

Conglomerate; between firms that neither have a buyer-seller relationship, nor produce or distribute the same goods or services in the same geographic markets.

"FEDERAL ANTITRUST LAWS": seek to assure the benefits of market competition by preventing the formation of monopoly.

Antitrust provisions are aimed at practices that eliminate competition among existing rivals through:

Full-blown monopoly, by prohibiting such practices as price fixing agreements, mergers, and predatory pricing; and

Incipient monopoly, by prohibiting the practices of price discrimination, tying contracts and exclusive dealing (that is, agreements to purchase all of a firm's needs of a particular item or material for a certain period from a certain supplier), mergers, and interlocking directorates.

* Sources: Ammer, Christine and Dean S., Dictionary of Business and Economics (The Free Press, New York, 1977); Stephen Breyer, Regulation and Its Reform (Harvard University Press, Cambridge, Massachusetts, 1982); Willard F. Mueller, Monopoly and Competition (Random House, New York, 1970).

(1813h)

Appendix C

State Spending on Act 78

Two specific sources of state funds are used to support the initiatives of Act 78. These are the state solid waste franchise tax and legislative capital appropriations of state bonded monies.

Prior to fiscal year 1992, general fund dollars were used to support a share of the solid waste program. Beginning with fiscal year 1992, no general fund monies have been appropriated for this purpose.*

A. State franchise tax.

Act 78 created a franchise tax to be paid by every party obtaining a certification under the act to operate a solid waste facility (Title 32, section 5952). The statutory amount of tax is \$6.00 per ton, or \$2.40 per cubic yard, of waste delivered for disposal at the facility.

The tax took effect on July 1, 1987 with respect to privately owned or operated facilities, and on July 1, 1988 with respect to facilities owned and operated by an individual municipality or groups of municipalities organized as a solid waste management district.

Table One indicates that during fiscal years 1988 through 1992, a total of \$7.0 million was collected in tax payments. The table also indicates the disbursement of these funds, with a total of \$6.5 million used to support state level activities of carrying out Act 78. Of this, \$3.5 million was used directly to operate the Solid Waste Division located within the state Department of Environmental Conservation. The balance of \$3.0 million was used to support state activities required in law such as a state-wide landfill technical assessment, public education, and various technical projects (a small share of these funds were also disbursed to individual municipalities).

The amount of anticipated revenue from the franchise tax appropriated for solid waste administration during fiscal year 1993 is \$1.6 million.

B. State capital appropriations.

Capital funds from state bond issues have also been appropriated annually by the General Assembly to support activities of Act 78. These are

* A separate appropriation for solid waste administration was first made for fiscal year 1988. General fund monies used were: in FY 1989, \$266,700; in FY 1990, \$397,300; and, in FY 1991, \$265,028. The total of these general fund monies were \$929,028.

indicated in Table Two and Table Three.

As shown in Table Two, a total of \$35.7 million was appropriated for solid waste activities in the capital construction acts for fiscal years 1988 through 1993. These monies are intended to be used entirely to support efforts other than by state government to carry out Act 78. Solid waste management districts have received the largest share of funds disbursed.

Of the total of \$35.7 million appropriated, a total of \$15.9 million had actually been disbursed or spent as of September 1992, with another \$4.3 million obligated but not yet disbursed, bringing the total of funds committed by state administrators for a specific use to \$20.2 million.

The amount spent or obligated leaves a total of \$15.5 million (including the fiscal year 1993 appropriation) yet to be obligated or committed by state administrators for a specific use.

Of the \$20.2 million spent or obligated, \$14.4 million, or 71 percent of the total, was for planning. Another \$5.5 million, or 27 percent of the total, was for implementation, including design and permitting. The balance of two percent of this total was for the cost of issuing the state bonds concerned.

These amounts spent for planning and implementation from capital appropriations on an annual basis are graphed in the figure labeled "State Solid Waste Grants Disbursed". The graph indicates planning grants were at their highest in fiscal year 1990, with implementation grants increasing rapidly during fiscal year 1992.

Table Three presents greater detail on the capital funds actually disbursed (which excludes amounts obligated but unspent as of September 1992), and indicates more specific purposes for use of these funds.

(1814h)

TABLE ONE

SWAFTSUM
11/92

Solid Waste Franchise Tax — Vermont
Revenue and Disbursements
(current dollar values)

	For FY 1988 through 1992	For FY 1993 (appro- priated)*	Total Solid Waste Program
A. Total Revenue	7,001,431		
B. Disbursements			
1. State program expenditures			
a. State solid waste division administration	3,540,830		
b. State solid waste program purchase of services and grants	2,968,656		
Sub-total	6,698,635	1,600,000	8,298,635
2. Balance, end of FY 1992	189,149		
3. Transfer (not used for solid waste program)	302,796		
Total	7,001,431		

Source: Vermont Department of Environmental Conservation.

* Does not include other franchise tax revenues collected during
FY 1993 (and not appropriated to state solid waste program).

TABLE TWO

SWIGTSUM
9/92

Solid Waste: State Capital Appropriations — Vermont
Fiscal Years 1988-93
(current dollar values)

Disposition of Funds Appropriated — As of September 1992

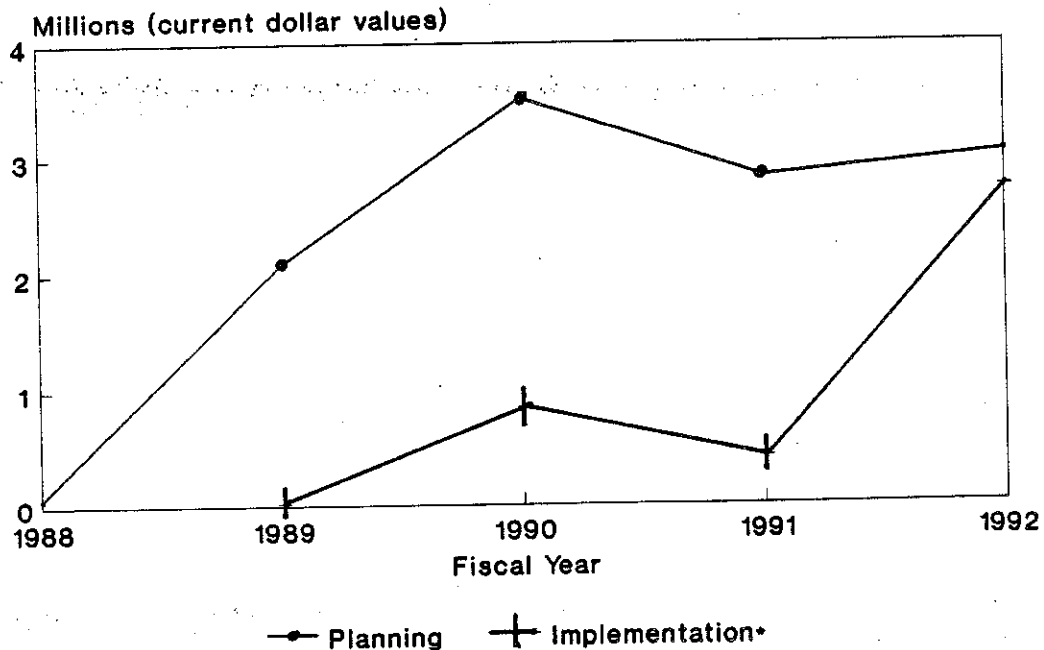
For FY 1988 through 1992

Purpose of Grant	Disbursed	Obligated but not disbursed	Un-obligated	Total	For FY 1993*	Grand Total
A. Planning	11,545,970	2,809,460	961,700	15,317,130		
B. Design and Permitting	560,569	824,300	2,313,400	3,698,269		
C. Implementation	3,459,015	695,700	1,813,200	5,967,915		
D. Bond Cost	308,092	0	0	308,092		
E. Landfill Closure	0	0	0	0		
TOTAL	15,873,646	4,329,460	5,088,300	25,291,406	10,428,400	35,719,806

* As of September 1992, none of FY 1993 appropriation had been allocated or obligated.

Source: Vermont Department of Environmental Conservation.

State Solid Waste Grants Disbursed
From Capital Appropriations Only



*Includes design and permitting.

TABLE THREE

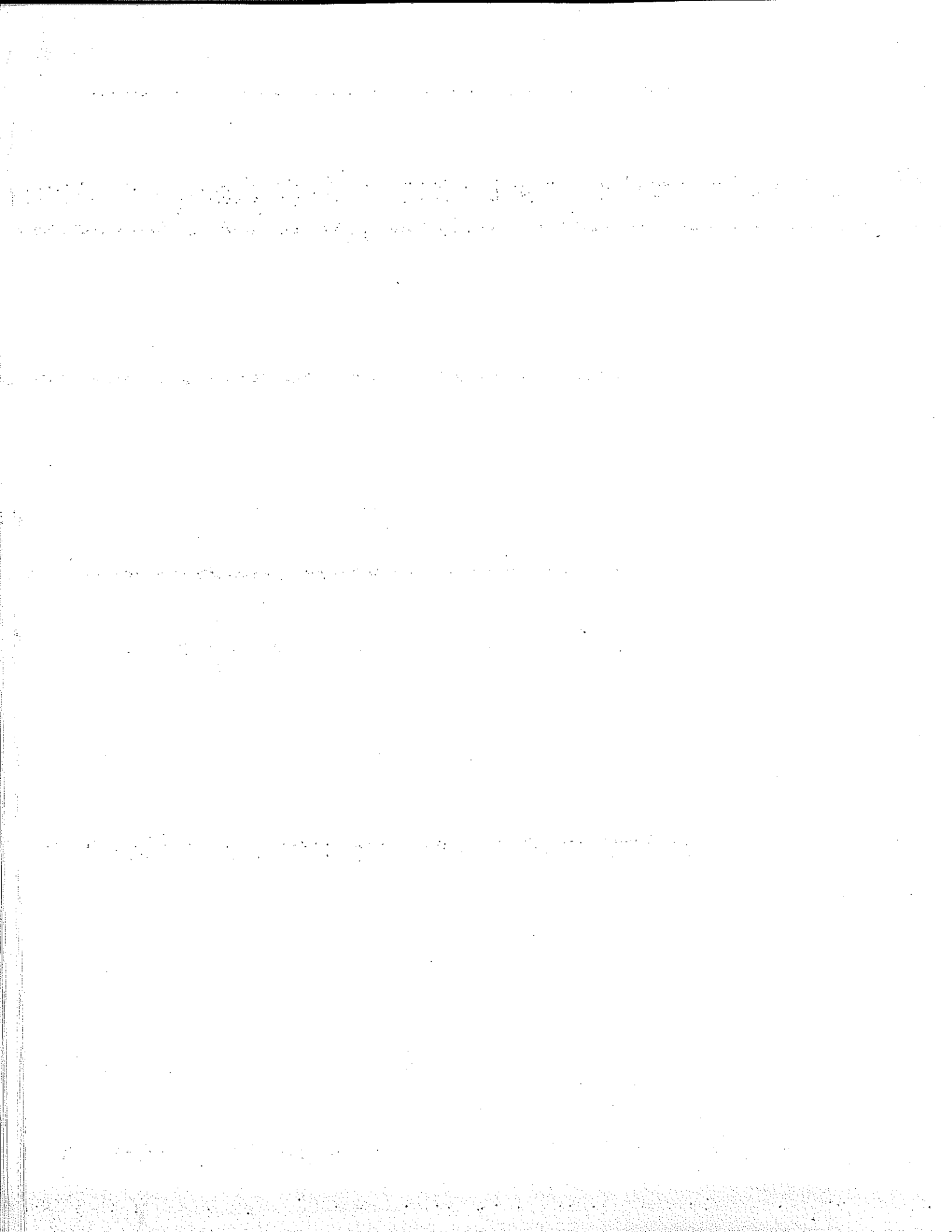
SWGTSUMD
9/92

Solid Waste; Disbursed State Capital Appropriations -- Vermont
Fiscal Years 1988-92
(current dollar values)

Purpose of Grant	Annual Disbursements					Total FY 1988-92
	Fiscal Years					
	1988	1989	1990	1991	1992	
A. Planning						
1. Preliminary RPC*	59,500	0	0	0	0	59,500
2. Early Release	0	1,914,955	134,321	0	(18,733)	2,030,543
3. Full Planning	0	175,768	3,232,057	2,817,823	2,981,237	9,206,885
4. Special (interregional)	0	0	53,730	14,888	59,254	127,872
5. Pilots	0	0	98,719	0	22,451	121,170
Subtotal	59,500	2,090,723	3,518,827	2,832,711	3,044,209	11,545,970
B. Design and Permitting	0	18,380	143,182	141,937	257,070	560,569
C. Implementation						
1. Compost, leaf and yard	0	0	0	0	7,937	7,937
2. Used Oil	0	0	0	2,600	1,515	4,115
3. Reuse and Recycling	0	0	0	0	17,063	17,063
4. Recycling Collection	0	1,625	157,116	111,171	1,356,714	1,626,626
5. Recycling Processing	0	0	0	0	791	791
6. Sludge and Septage	0	0	450,093	137,880	731,511	1,319,484
7. Special Waste	0	0	0	6,078	0	6,078
8. Transfer Stations	0	0	0	13,593	59,365	72,958
9. Unregulated Hazardous Waste	0	0	0	1,571	285,769	287,340
10. Pilots	0	0	95,667	0	20,956	116,623
Subtotal	0	1,625	702,876	272,893	2,481,621	3,459,015
D. Bond Cost	0	9,610	17,292	24,992	256,198	308,092
E. Landfill Closure	0	0	0	0	0	0
TOTAL	59,500	2,120,338	4,382,177	3,272,533	6,039,098	15,873,646

* "RPC" means regional planning commissions.

Source: Vermont Department of Environmental Conservation.



Appendix D

Solid Waste Quantities and Tipping Fees

A. Solid waste quantities.

1. Total waste generation.

The 1991 Vermont population was 566,615./¹ The quantity of solid waste generated in Vermont per capita in 1990 was an estimated 2.7 pounds per day./² This amounts to a state total of 765 tons of trash per day, or 280,000 tons per year. These figures compare to the national average per capita of 3.2 pounds of trash per day, which is projected to grow to 4.0 pounds per capita per day by the year 2000./³

2. Composition of solid waste.

The composition of the waste stream in the United States in 1988 was estimated as presented in Table One.

3. Demand for disposal capacity, net of waste reduction and recycling.

The 1989 Vermont Solid Waste Management Program projected the cumulative generation of solid wastes during the period 1987 through the year 2000, assuming full implementation of the waste reduction and recycling priorities of Act 78. Table Two reflects the assumption that waste reduction and recycling programs will take 12 years to fully implement, which by the year 2000 would mean that demand for landfill capacity would have been reduced by 40 percent. Two sets of projected demand are shown in the table, one assuming the operation of the Vicon facility in Rutland and one assuming the facility remains closed.

B. Tipping fees.

Act 78 implemented a franchise tax on solid waste facilities. The tax is imposed for each calendar quarter in the amount of \$2.40 per cubic yard of waste delivered for disposal at the facility, or at the request of a taxpayer, in the amount of \$6.00 per ton. The tax is also imposed on waste delivered to a transfer facility for shipment to a treatment or disposal facility that is located outside the state. In addition to the state franchise tax, tipping fees also include various surcharges imposed by solid waste management districts for various purposes.

Table Three presents fees for disposal charged to solid waste management districts in October, 1992, according to a survey conducted by the Joint Fiscal Office of the Vermont General Assembly.

TABLE ONE

Characteristics of U.S. municipal solid wastes by weight.
 (By percentage of annual total)

<u>Material</u>	<u>Year</u>		
	<u>1970</u>	<u>1986</u>	<u>2000</u>
Paper and cardboard	32.4%	35.6%	39.1%
Yard wastes	20.6	20.1	19.0
Food wastes	11.4	8.9	7.3
Rubber, textiles, leather, and wood	8.1	8.9	7.9
Plastics	2.7	7.3	9.2
Metals	12.0	8.9	8.5
Glass	11.1	8.4	7.1
Miscellaneous	<u>1.7</u>	<u>1.8</u>	<u>1.9</u>
Total*	100.0	100.0	100.0

Source: Franklin Associates, 1988.

* Totals may not equal 100 due to rounding.

TABLE TWO

Cumulative waste disposal demand for landfill capacity.
Net of waste reduction and recycling, as envisioned by Act 78.
 (Quantities are given in 1,000 cubic yards)

<u>Region</u>	<u>1987-1991</u>		<u>1991-2000</u>	
	<u>With Vicon</u>	<u>Without Vicon</u>	<u>With Vicon</u>	<u>Without Vicon</u>
Addison	44	140	136	371
Bennington	100	178	269	448
Central Vermont	252	252	644	644
Chittenden	614	614	1,514	1,514
Franklin-Grand Isle	168	168	442	442
Lamoille	70	70	196	196
North Eastern Vermont	244	244	642	642
Rutland	26	292	114	740
South Windsor	22	22	82	82
Two Rivers-Ottawaquechee	132	132	368	368
Upper Valley	46	46	120	120
Windham	<u>131</u>	<u>166</u>	<u>350</u>	<u>440</u>
State Total	1,849	2,324	4,877	6,007

Source: Vermont Agency of Natural Resources.

TABLE THREE

Tipping fees per ton, Vermont solid waste district, October 1992.
Includes taxes and surcharges.*

<u>District</u>	<u>Dollars per ton</u>	<u>Comments</u>
Addison		
- at Bristol landfill	\$63	
Bennington		
- at transfer station	96	Includes cost of hauling.
Central Vermont		
- at CV landfill	65	
- at Newbury landfill	55	
Chittenden	74	
Northwest		
- at Waste USA landfill	63	
Lamoille		
- at Consumate Sanco, N.H. landfill	79	Includes \$1 New Hampshire tax.
Northeast Kingdom		
- at Waste USA landfill	56	
- at Consumate Sanco, N.H. landfill	54	Includes \$1 New Hampshire tax.
Rutland		
- at Bristol landfill	64	
New Hampshire-Vermont		
- at Wheelabrator waste to energy incinerator, Claremont N.H.	94	Includes ash landfill.
Greater Upper Valley		
- at Hartford		Information not available.
Two Rivers/Ottawaquechee		
- at many different landfills		Information not available.
Windham County		
- at Brattleboro landfill	42	

Source: Joint Fiscal Office, Vermont General Assembly.

- * 1. All fees exclude cost of hauling, except for Bennington.
 2. All fees include the Vermont franchise tax.
 3. Also included are a variety of surcharges which differ from district to district and from landfill to landfill. The following are examples of these surcharges:
- District fee for operations.
 - District fee for recycling programs.
 - Settlement fee.
 - Host town fee.
 - Post closure cost.

Notes to Appendix D.

1. 1990 U.S. Census, updated by Vermont Department of Health.
2. Analysis of Solid Waste System Costs for the State of Vermont, Tellus Institute, July 1990, page 202.
3. Solid Waste Management, A Position Paper by the Business Forum on Issues Affecting Business in Vermont, June 1989, page 2.

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Appendix E

New Hampshire-Vermont Solid Waste Management District

Considerable controversy surrounds the activities of the New Hampshire-Vermont Solid Waste Management District. As we conducted our interviews, the executive branch was studying this district, and it became clear to us that tension was high among people involved in this district. For these reasons, and because of the unique issues created by the interstate nature of the district, we decided to look at this district more closely than others. Accordingly, we talked with more people involved with this district, and spent more time studying relevant documents. Although our research was far from exhaustive, we make the following recommendations for legislative action.

I. RECOMMENDATIONS REGARDING NEW HAMPSHIRE-VERMONT DISTRICT

Recommendation #1: Accountability and Conflict of Law. Vermont should obtain the cooperation of the state of New Hampshire and the United States Congress to amend the New Hampshire-Vermont Solid Waste Compact to make it clear, in general, that actions taken by the governing body should comply with the underlying general and special laws of both states, where that construction is possible. If there is a clear conflict in the laws of the two states, that conflict should be identified and resolved in a way that is approved in legislation adopted in the two states. This course of action should explicitly remove the ability of the district representatives of the two states to establish and be governed by a cooperative agreement that conflicts with and supercedes the substantive law of the two states.

Recommendation #2: Open Meeting Law and Access to Public Documents. With respect to specific provisions of state law, we recommend that the governing body should be instructed to comply with Vermont law on access to meetings and access to public documents, unless New Hampshire law requires a greater degree of access, in which case, New Hampshire law should prevail.

Recommendation #3: Incurring of Large Expenses. Similarly, we recommend that the governing body be required to receive the approval of the voters before entering into long-term debt, as appears to be the case under Vermont law. On this issue, the legislature should more clearly define the point at which the governing body can assess extraordinary costs on the member towns without first obtaining voter approval to the incurring of those costs.

Recommendation #4: Financial Audit. We recommend that the Auditor of Accounts be directed to perform a complete financial audit of the books of the Project. To the extent that the Auditor lacks the staff or the authority to perform a complete audit of this nature, the necessary staff and authority should be provided. We make this recommendation not because we believe that

any wrongdoing has transpired. Rather, we recommend this audit take place because of the confusion that has existed regarding the conflict of state and federal law, the appearance of less public accountability than would normally be the case under Vermont law, the magnitude of the unanticipated costs incurred by the Project over the years, the complexity of the accounting and financing involved, and the degree of local controversy on the subject.

II. STRUCTURE OF NEW HAMPSHIRE-VERMONT PROJECT

A. Creation of the Interstate Compact

Act No. 32 of the Acts of 1981 enacted 10 V.S.A. Chapter 46, Subchapter 2, titled the New Hampshire-Vermont Solid Waste Compact. That act authorized Vermont municipalities to enter into cooperative agreements with New Hampshire municipalities "for the construction, maintenance and operation of a resource recovery facility or sanitary landfill or both and those related services needed for the efficient operation thereof." This act was to become effective upon ratification by each of the two states and upon enactment by Congress, the latter of which took place on October 4, 1982.

B. Creation of the Vermont District

The second related enactment by Vermont took place during the second year of the 1981 biennium. Act No. 154 of the Acts of the 1981 Adjourned Session ratified the formation of the South Windsor/Windham Counties Solid Waste Management District, as specified in the agreement adopted by the Joint Municipal Survey Committee of that entity on December 16, 1981. This act took effect upon April 12, 1982.

Thus, the organizational framework includes a Vermont district (created by Vermont law), a New Hampshire district (created by New Hampshire law), and an interstate compact (enacted by both states and by Congress).

C. Creation of the Cooperative Agreement

1. Authority for Cooperative Agreements

The interstate compact required that cooperative agreements entered into under its authority would be adopted in accordance with existing statutory procedures for the adoption of intergovernmental agreements between municipalities within each state. It also required that any such agreements include various specified components, including the following:

"3. Provision for a joint board and/or administrator responsible for administering the cooperative undertaking and the powers to be exercised thereby. All municipalities party to the agreement shall be represented.

* * *

5. The manner of financing the cooperative undertaking and establishing a budget therefor.

6. The manner and method of establishing and imposing fair and equitable charges for the users of the facilities."

2. Terms of the Cooperative Agreement

Pursuant to this authority, the representatives of the two districts, acting in concert, adopted the NH/VT SOLID WASTE PROJECT COOPERATIVE AGREEMENT. The agreement provided that the districts acting in concert would be termed the "Project". The agreement establishes three purposes:

* to develop a resources recovery facility, a sanitary landfill and related services to serve the member towns,

* to foster a spirit of mutual cooperation among towns and cities along both sides of the Connecticut River, and

* to ensure mutual cooperation by encouraging full and active involvement of all interested people within the region.

The agreement provides that "All cooperative action necessary to carry out the purposes of this Agreement shall be authorized by a vote of the Joint Meeting and implemented by the Executive Committee in accordance with such vote." The Executive Committee is composed of the chair and vice-chair and three elected members from each district, and the chair and vice-chair of the Joint Meeting.

D. Application of the Structure.

Because of the foregoing, the following results: the district representatives from Vermont are designated by their selectmen. In concert with the members of the New Hampshire district, they form the Project, which is governed by all the members combined, acting as the Joint Meeting. Many decisions with regard to the course the Project is going to pursue have historically been made by the Executive Committee of the Project.

III. A HISTORY OF CONTROVERSY

Although it was not uncommon for us to find local dissension on the subject of solid waste management when we were conducting our interviews throughout the state, the depth of unrest appeared the greatest in this region. Our last three recommendations on this subject can best be understood after a brief history of the events that have transpired at the district.

In essence, although we were provided with conflicting versions of what has taken place in the region, the following, we hope, is a generally accurate account of aspects of the situation:

A. Issues Regarding the Safety of Incineration.

There is an underlying dispute, that has continued since before the incinerator was constructed, with respect to whether or not incineration is safe.

1. Opponents to incineration have grave concerns about the air quality impacts of incineration, the dangers of ash disposal, and the fact that incineration, which requires a continual flow of waste in order to remain economically viable, will encourage the burning of trash, rather than waste reduction and recycling. Specifically, they allege that air emissions, even after air pollution control measures, emit the following toxic chemicals, metals and gases, with the following possible health affects:

* hydrogen chloride (from paint, dyes, polyvinyl chloride, paper, yard and food waste) - causes acid rain; affects eyes, skin, mucous membranes, corrodes machines;

* sulfur dioxide (from tires, wallboard, vegetables, leaves) - causes acid rain and respiratory ailments;

* arsenic (from paint, ceramics, insecticides) - causes kidney damage, blood ailments;

* cadmium (from nickel-cadmium batteries, plastics, inks and paints) - may cause cancer; damages lungs, kidneys, liver, bone;

* chromium (from chrome plating, plastics, inks and paints) - causes respiratory ailments;

* dioxins and furans (from incineration process) - may cause cancer; damage reproductive and immune systems;

* lead (from lead-acid vehicle batteries, TV sets, ceramics, electronics, steel cans, plastics, inks and paints) - damages nerves, blood, kidneys and bone;

* mercury (from button-cell and flashlight batteries, fungicides, newspapers, apints and plastics) - damages central nervous system, kidneys; and

* nitrogen oxides (from yard and food wastes) - causes smog, acid rain, eye and lung irritation.

Also they allege that incinerator ash contains chromium, cadmium, arsenic, mercury, dioxins and furans. They argue that heavy metals never degrade into anything else, but remain toxic forever and that incineration has the effect of grinding up the heavy metal content of solid waste into smaller pieces, thereby vastly increasing the surface area of the heavy metals, and making them leach much more rapidly when subjected to rainwater in a landfill.

2. The incineration proponents believe that these fears are unfounded, and argue that paints, household cleaners and most hazardous wastes produced by small quantity generators can all be burned safely at the state-of-the-art Claremont facility. In fact, they argue that many organic chemicals may still create environmental or health damage after being landfilled (by leaching into groundwater or vaporizing into the ambient air), but that they can be rendered harmless by incineration at the temperatures used at the Claremont facility. They also argue that incinerator ash is a useful byproduct that can be used for concrete. One proponent called our attention to a local newspaper article that included a photograph of a reporter drinking a glass of leachate collected from the lined ash landfill, after having determined for himself that to do so would be harmless. The proponents are determined to proceed in what they believe to be the public interest.

3. There is a wide-ranging national debate on these issues, and we are not prepared to resolve them as part of this study. However, it may be safe to conclude that this underlying opposition to incineration has motivated the opposition forces to continue vigorously to oppose the proponents at many opportunities and to subject the Project to detailed scrutiny. Likewise, the underlying faith in incineration as a responsible step in waste management has motivated the proponents to vigorously defend and support decisions already made by the Project.

B. Issues Regarding the Contract with Wheelabrator.

The districts entered into a long-term contract with Wheelabrator Environmental Systems, Inc., a subsidiary of Waste Management, Inc., the nation's largest refuse management firm. The 20 year contract includes a "put or pay" provision. To simplify the contract somewhat, this provision creates an obligation that the Project deliver at least 47,500 tons of waste per year, at a current tipping fee of \$53.00 per ton (not the total costs of disposal). If the Project delivers less than that amount of trash, then it is obliged to pay the tipping fee for the amount of the shortfall, as if it had been delivered. In return for this assured flow to the benefit of the Company, the Project towns are entitled to increase their amount of trash delivered per year to a high of 58,000 tons per year.

The Project also pays for ash disposal costs for the ash created by burning up to 47,500 tons of trash. When more trash than that is burned during a year, the Company pays for it, and it pays the Project a premium of 20 percent for ash created by burning more than 58,400 tons per year. In addition to charging the Project for shortfalls in waste generated, Wheelabrator is able to sell that extra capacity on the spot market, with a result that member communities may end up paying nearly \$94.00 per ton, (an amount which includes the tipping fee at the Claremont facility, plus a fee for the ash landfill and another fee for administrative costs of the Project), while non-members only pay in the range of \$45.00 per ton. This is an extremely unpopular provision at this time, with the member towns, that have attempted to act responsibly in handling their own waste, paying much more than towns that may have done no solid waste planning, but are able to take advantage of prices Wheelabrator

offers on the spot market.

Executive Committee members, who are trying to negotiate a revised contract that would be more attractive to the members of the Project, argue that the current contract itself may turn out to be advantageous to the member towns. They point out that the contract may become attractive in the long term, as cheaper unlined landfills are closed down, and as alternative, state-of-the-art disposal options become more expensive in future years. If the prices of those new facilities become higher than the prices established in the existing contract, and if the Project towns generate more trash as the economy becomes revitalized, then the Project towns would have the benefit of increasing the amount they deliver to the incinerator, at approximately the current price.

The fact that the economy, in general, has slowed down has added to the decrease in the amount of waste generated throughout the state, and in this instance has made the delivered trash shortfall of the Project more marked than otherwise would be the case. A shortfall in trash produced, and the resulting additional costs, creates a tension with the provisions of Act 78 that establish waste reduction and recycling as priorities in the management of waste: the more the towns under the contract reduce and recycle, the more they have to pay to make up for their shortfall. This is estimated to equal \$100.00 per ton in lost revenues to the project.

C. Issues Regarding the First Ash Landfill

In addition to the apparently high tipping fee, the Project itself has incurred substantial costs flowing from the 1988 construction of an ash landfill in Newport, N.H. Apparently, construction of Stage I of the ash landfill commenced in a place that turned out to have groundwater much nearer to the surface than had been anticipated by some of the consultants involved. To respond to this situation, soil was trucked in and deposited on top of the wet ground to a point where the additional soil was more than ten feet deep. At some point, the Project suspended payment to Pike Industries, and Pike sued the Project for \$1.2 million. The Project countersued Pike and sued both Kimble Chase Co. Inc. (the engineering firm that designed the landfill and managed its construction) and Caswell, Eichler and Hill Inc. (the hydrogeologists on the Project). The Project suit reportedly charged cost overruns amounting to almost \$1 million. As the suits percolated, the Project paid legal fees of \$525,000 to the lawyer handling the lawsuit, an amount which reportedly included payments to a paralegal that totalled over \$60,000 over ten months of 1991, and which included more than \$10,000 for work done during the month of June, alone. (These are not the final totals paid to this lawyer and are in addition to the approximately \$770,000 spent in the previous two years on the Project's other lawyer, who handles regulatory and permitting issues, and who was also involved in the ash lawsuit.) Finally, the suits were settled, with the Project receiving payments from the engineering firm and the hydrogeologist, but having to pay its own legal fees and to pay out to Pike a net amount of \$615,000.

D. Issues Regarding Bonding to Pay for the Expansion of the Ash Landfill

In 1992, the Project decided to pursue issuing a bond in the amount of \$2.3 million, which would include approximately \$1.2 million for expanding the ash landfill in Newport, \$615,000 for the settlement costs relating to the construction of the first stage of the landfill, and \$500,000 for legal costs. However, as time went by, Project officials determined that they had to enter into the contract for the construction of the expansion before the bond vote had taken place, or they would incur additional costs in transporting ash to another facility, estimated to be in the range of \$1 million. Opponents attempted to enjoin entry into this contract, in a lawsuit mentioned earlier in this Appendix, on the basis that the voters had not approved the bond. Management argued that they could ask the voters to agree to bond for the improvements, but that if the voters refused, they could assess the costs on the towns through another provision of the Charters. Accordingly, management entered into the contract to construct Stage II, before receiving approval of the voters. (Project critics argue persuasively that poor planning was behind this particular controversy. They argue that the need for ash landfill expansion came as no surprise to anyone, and that if Project management simply had started sooner to obtain public approval, the time crunch would have been avoided, and prior public approval would have been obtained or withheld in an orderly manner.)

E. Issues Regarding Public Access to Meetings and Access to Public Documents

The continued tenacity of the opposition to the Project, together with the substantial costs incurred by the Project has created an atmosphere under which Project management, appropriately, feels under the gun with respect to many of its actions and is the subject of litigation and public questioning of its actions and its financial affairs. Given the initial divergence between the sides on the wisdom of incineration, the series of unfortunate expenses that have been incurred, and the inherently complicated nature of the financing involved, it is not surprising that there have been allegations of reluctance on the part of Project management to fully comply with open-meeting law requirements of Vermont law, and with the provisions of Vermont law with regard to the access to documents.

IV. ANALYSIS AND RECOMMENDATIONS

A. Accountability of Project Management

1. Powers of the Executive Committee

As disagreements developed between the members of the Executive Committee and the members of the Project that were not on the Executive Committee, the attorney for the Project was asked to write a memo explaining the power of the Executive Committee in relation to the power of the Project as a whole. As mentioned above, the Project cooperative agreement provides that "All cooperative action necessary to carry out the purposes of this Agreement shall be authorized by a vote of the Joint Meeting and implemented by the Executive

Committee in accordance with such vote." It also provides that "the executive committee shall carry out and implement all actions authorized by vote of the Joint Meeting". The attorney for the Executive Committee has advised the Executive with respect to its powers, as compared to the powers of the Joint Meeting, as a whole, as follows:

"the Executive Committee power to approve all Project contracts is independent of the authority to implement Joint Meeting votes. I base this result upon the apparent intent of the Cooperative Agreement which appears to contemplate annual Joint Meetings and day to day administration (including identifying the need for and retaining consulting/engineering services) as the function of the Project Manager who is 'directly responsible to the Executive Committee'. Thus it appears the oversight of the Project administration is with the Executive Committee. For Executive Committee contract approval authority to be effective and useful in the 'daily' operation of the Project it cannot be conditioned upon the action of annual Joint Meetings." (Emphasis added.)

2. Is the Project Bound by State Law?

Another question has developed with respect to what state law applies to the Project, since it is constituted of entities created by the two states and is sanctioned by an Act of Congress. This issue was briefed in a case this year in which the Plaintiffs (private citizens and the Vermont Public Interest Research Group) requested that the Project be enjoined from signing a \$1.4 million contract to construct Stage II of an ash landfill until the voters and taxpayers affected exercised their purported right to vote on approving or disapproving the expenditure. (The plaintiffs argued that the District Agreement required this action prior to the Project incurring long term debt.)

a. The Project's Argument

The attorney for the Project argued that the compact reserved no rights to the states of Vermont and New Hampshire to govern the financial operations of the interstate agency formed under the compact, and that therefore the state was unable to impose state law on the compact organization.

b. The Court's Opinion

The Vermont District Court, in an opinion by Judge Grussing, avoided deciding the supremacy issue, holding that "The incurring of expenses related to the operations of the NH/Vt District is delegated by the member Districts to the legislative body of the Joint District and nowhere is voter participation required by the Joint Agreement." Therefore, the court held that voter participation was not necessary.

c. Discussion of Accountability

(1) Delegation

The Compact provides that the cooperative agreement shall address: "5. The manner of financing the cooperative undertaking and establishing a budget therefor." Thus, according to Judge Grussing's opinion, in exercising power under the compact to establish a cooperative agreement, the representatives of the Project are not bound to the laws of either state. There is certainly support for this legal interpretation in Dresden v. Norwich, 124 Vt. 227, at 231, where the Vermont Supreme Court held, in the case of an interstate school district, "Compacting parties exchange for relinquished sovereign control specific contractual definitions of rights and obligations in the area of compact. Control by these contractual provisions effectively replaces the sovereign control jointly relinquished, and avoids the prospect of an abdication of legislative duty." On the other hand, the Court later points out in Dresden that the question of the legality of the organization of that district did not appear to be "raised in connection with any technical failure to comply with any statutory requirements incident to the establishment of any Vermont school district or of Dresden in particular." (at 232). From a policy perspective, however, this creates a uniquely broad delegation of legislative authority. As the Vermont Supreme Court held in In re Municipal Charters, 86 Vt. 562 (1913), the power to "constitute towns, burrows, cities and counties," vested in the legislature by the provisions of Chapter II section 6 of the Vermont Constitution, is essentially a trust, requiring the exercise of judgment and discretion in its execution, and so is nondelegable. Clearly, an interstate entity faced with directly contradictory mandates from two states cannot comply with both. Equally clearly, however, there is no need for an interstate entity to start from scratch when it is determining the details of how it shall proceed. It should be possible to fill out many of the details of a general compact mandate by inserting the requirements of the district agreement and of state law and, to us, this seems to be the most appropriate construction of such a general mandate.

(2) Insulation of the Executive Committee

The above discussion shows that according to the advice of the attorneys to the Project, the Joint Meeting is not constrained by state law in determining its operating procedures, and the Executive Committee, in entering contracts, is not bound by Joint Meeting votes. The Project, then, is free to fashion its own world, and its Executive Committee is able to enter contracts according to its even more unfettered discretion. We agree with the observation of one of the people we interviewed, that the power has passed from the people to the district, to the joint meeting, and to the executive committee, but that the accountability that is structured into the district charter and into state law in general failed to be included in the package. Thus, we have a public body, created by act of the legislature that appears to be structured in violation of at least the spirit of the Vermont Constitution, Chapter I, Article 6th, which provides:

ARTICLE 6th. [OFFICERS SERVANTS OF THE PEOPLE]

That all power being originally inherent in and co[n]sequently derived from the people, therefore, all officers of government, whether legislative or executive, are their trustees and servants; and at all times, in a legal way, accountable to them.

This explains our first recommendation that the Interstate Compact be amended to require compliance with state law and with the district agreement.

B. Open Meeting Law and Access to Public Documents

It was not necessary for us to determine whether or not violations of Vermont law on these subjects has in fact occurred, particularly because of the lack of clarity as to what laws ought to apply. However, allegations to this effect have been made, and circumstances certainly appear to be such that this may be a concern. It is our hope that when it becomes clear that the laws of both states are intended to apply, that issues relating to open meetings and access to public documents will disappear. Clearly, Vermont law holds this aspect of accountability as basic tenets. For example, according to the provisions of 1 V.S.A. § 312, "All meetings of a public body are declared to be open to the public at all times, except as provided [with respect to executive sessions]." As a general operating procedure, 1 V.S.A. § 315 provides in part:

§ 315. STATEMENT OF POLICY

It is the policy of this subchapter to provide for free and open examination of records consistent with Chapter I, Article 6 of the Vermont Constitution. Officers of government are trustees and servants of the people and it is in the public interest to enable any person to review and criticize their decisions even though such examination may cause inconvenience or embarrassment. ... Consistent with these principles, the general assembly hereby declares that certain public records shall be made available to any person as hereinafter provided. To that end, the provisions of this subchapter shall be liberally construed with the view towards carrying out the above declaration of public policy. (Emphasis added.)

In like vein, 1 V.S.A. § 316 provides in part:

(a) Any person may inspect or copy any public record or document of a public agency, on any day other than a Saturday, Sunday, or a legal holiday, between the hours of nine o'clock and twelve o'clock in the forenoon and between one o'clock and four o'clock in the afternoon; provided, however, if the public agency is not regularly open to the public during those hours, inspection or copying may be made during customary office hours.

If our first recommendation is followed and the laws of both states are clearly to apply to the Project, then these issues will be resolved as a part of that solution. However, even given the status quo, we are not convinced

that there is any reason to ignore Vermont law on these matters, even with respect to business transpiring in New Hampshire. These laws are minimum standards of public accountability, an agent of the state is free to be more accommodating of the public. An administrator of a district created by the State of Vermont and also created by the State of New Hampshire would be free to apply the law of the state that is the most accommodating to the interests of the general public, and would therefore be assured of complying with the spirit of the laws of both states. At any rate, this explains our second recommendation that the governing body should be required to comply with Vermont law on access to meetings and access to public documents, unless New Hampshire law requires a greater degree of access.

C. Incurring of Large Expenses

In Article IV of the Vermont District Charter, the Board of Supervisors is required to develop a proposed budget, which includes "the proposed assessment to each member municipality." That article also provides that on adoption of the budget, the Board shall "assess each member municipality for its proportionate share of the sums appropriated." Unfortunately, the Charter fails to specify exactly what expenses may be passed on by assessment, or the extent to which assessment may be used.

The section on long-term indebtedness does provide, however, as follows: "when the Board of Supervisors ... shall determine ... that the public interest or necessity demands improvements, and that the cost of the same will be too great to be paid out of the ordinary annual income and revenue, it may order the submission of the proposition of incurring bonded debt or other indebtedness to the qualified voters of the district at a meeting to be held for that purpose." (Emphasis added.) Although Judge Grussing held, in the case mentioned above, that the provisions of the Vermont District did not bind the Joint Meeting in determining the procedures it would follow, it is clear that the voters who entered into the district agreement anticipated that they would have the chance to vote on whether or not to support a bond proposal for improvements that cannot be paid out of current income. For example, in the letter on the first page of the booklet that contains the district agreement, it explains, "the district cannot incur long-term debt without approval of a majority of the voters in the district."

Additionally, in the preamble to the district agreement, appears the following: "control over the district rests firmly with the selectmen and citizens in each participating town." The Cooperative Agreement itself, adopted under the interstate compact, provides as follows: "it shall ... be the purpose of this Cooperative Agreement to foster a spirit of mutual cooperation among towns and cities on both sides of the Connecticut River. In order to ensure mutual cooperation, full and active involvement of all interested people within the region is encouraged." Regardless of whether or not the Project was required by law to submit the question of whether or not to bond for Stage II of the ash landfill, from a policy perspective, this seems to be the course that would be the most consistent with the system as it was created and approved by the General Assembly. For these reasons, we make

our third recommendation that the governing body be required to receive the approval of voters before entering into long-term debt. We further believe that the legislature should more clearly define the point at which the governing body can assess extraordinary costs on the member towns without first obtaining voter approval to the incurring of these costs. That is, it should be the major expenditures that should obtain approval, not just the method of financing.

D. Financial Audit

We recommend that a financial audit take place not because we believe that any wrongdoing has transpired, but because of the confusion that has existed regarding the conflict of state and federal law, the appearance of less public accountability than would normally be the case under Vermont law, the magnitude of the unanticipated costs incurred by the Project over the years, the complexity of the accounting and financing involved, and the degree of local controversy on the subject. Locally-derived charges include lack of access to financial documents, lack of adequate financial disclosure, lack of financial accountability and poor financial management. We lack the training and time to perform this analysis ourselves, and the opposing sides appear not likely to come to terms in the near future. We believe that a full, impartial review of the finances of the Project would help to clear the air, to reassure the public in general, and ultimately to free up Project management to focus more on managing waste and less on defending its finances and its financial management practices.

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Appendix F

People Interviewed During This Evaluation

The names listed are as they were given in interviews, and are not always a person's formal name. In addition, while we attempted to use correct spellings of names, some are no doubt incorrect. Finally, we have listed a person's general affiliation, rather than formal title, in order to avoid errors with those. We beg your indulgence on all counts.

The names are grouped by areas of the state as identified by the solid waste management district concerned, and are listed alphabetically.

Addison.

Porter Ball, Addison County Solid Waste Management District, Middlebury
Mike Barrett, Town and Country Rubbish and Recycling, Vergennes
Debbie Brighton, town official, Salisbury
Gerry Gossens, town official, Salisbury
Tom Howlett, town official, Bridport
Mel Hawley, Addison County Solid Waste Management District and city
official, Vergennes
Michael Ladago, town official, Sudbury
Sue Mackey, town official, Salisbury
Steve Maier, Addison County Solid Waste Management District, Middlebury
Jim Northrup, private consultant, Salisbury
Don Powers, private attorney, Middlebury
Doug Taff, Town and Country Rubbish and Recycling, Vergennes
Ken Weston, town official, Bristol
Betty Wheeler, Addison County Solid Waste Management District and town
official, Middlebury
Sandy Young, Addison County Regional Planning Commission, Middlebury

Chittenden.

Jon Anderson, private attorney, Burlington
John Franco, private attorney, Burlington
Steve Goodkind, city official, Burlington
Art Hogan, Chittenden County Regional Planning Commission, Essex Junction
Dennis Lutz, town official, Essex
Fred Moody, Chittenden Solid Waste District, Colchester
Tom Moreau, city official, Burlington
Dave Timmons, town official, Colchester
John Ready, Safety Medical Systems, Colchester

New Hampshire-Vermont.

Chuck Conklin, Wheelabrator Claremont Company, Claremont, N.H.
John Cook, NH-VT Solid Waste Management District, Bellows Falls
Lincoln Divoll, town official, Bellows Falls
Allen Dusault, NH-VT Solid Waste Management District, Claremont, N.H.
Peter Franklin, Working on Waste, Claremont, N.H.
Joseph Fromberger, NH-VT Solid Waste Management District, Chester
William Gallagher, Working on Waste, Claremont, N.H.
Kevin Greenwood, BFI Waste Systems, Rockingham
Carl Hirth, private consultant, Putney
Virginia O'Brien Irwin, NH-VT Solid Waste Management District and town
official, Newport, N.H.
Robert Jackson, city official, Claremont, N.H.
Katie Lajoie, Working on Waste, Charleston, N.H.
Thornton Lillie, town official, Bellows Falls
John Lippincott, town official, Bellows Falls
Larry Melen, town official, Ludlow
George Murry, DSM Environmental Services, Ascutney
Chet Scott, NH-VT Solid Waste Management District, Springfield
Ted Seigler, DSM Environmental Services, Ascutney
Rolf van Schaik, NH-VT Solid Waste Management District, Manchester Center
John Tuthill, NH-VT Solid Waste Management District, Acworth, N.H.
Michael Veitch, Vermont Public Interest Research Group, Bellows Falls
Hally Whitcomb, town official, Springfield

North East Kingdom.

Charles Carter, Northeast Vermont Development Association, St. Johnsbury
Bridget Collier, Northeast Kingdom Waste Management District, Northeast
Vermont Development Association and town official, Greensboro
David Dill, Northeast Kingdom Waste Management District and town official,
Lyndonville
Bill Graves, Northeast Kingdom Waste Management District and town official,
Barnet
John Hall, Northeast Kingdom Waste Management District and town official,
St. Johnsbury
Hans Klunder, Northeast Kingdom Waste Management District, St. Johnsbury
Tim O'Rourke, Vermont Rural Recyclers, Marshfield
Dean Parker, Northern Equipment, Lyndonville
Jean Pierre Rancourt, Waste U.S.A., Coventry
Charles Safford, town official, Hardwick
Joel Schwartz, Northeast Vermont Development Association, St. Johnsbury
Don Showalter, private consultant, Kirby
Henry Stuart, town official, Concord

Rutland.

Dick Brigham, town official, Shrewsbury
John Casella, Casella Waste Management, Rutland
Tim Hubbard, Hubbard Brothers Inc., Rutland
Kevin Jones, city official, Rutland
Dave Lewis, town official, Sherburne
Patty McWilliams, town official, Middletown Springs
Tom Ryan, Rutland County Solid Waste District, Rutland
Mike Sampson, Rutland County Solid Waste District, Rutland
John Vihinen, Vermont Integrated Waste Solutions, Rutland

State government employees.

William Brierly, Department of Environmental Conservation
Andrea Cohen, Division of Solid Waste Management
Richard Cowart, Public Service Board
George Desh, Division of Solid Waste Management
Kati Gehr, Division of Solid Waste Management
Julie Hackbarth, Division of Solid Waste Management
Elaine Hiney, Vermont Environmental Board
Edward Leonard, Division of Solid Waste Management
Ron Macie, Department of Motor Vehicles
Elizabeth McLain, Department of Environmental Conservation
Al Morrison, Division of Solid Waste Management
Ron Shems, Office of Attorney General
Kerry Sleeper, Department of Public Safety
Chris Wagner, Division of Solid Waste Management
James Walton, Department of Public Safety

Other individuals.

Michael Bender, Central Vermont Regional Planning Commission, Montpelier
Paul Hughes, town official, Stowe
Anne Landberg, Vermont Retail Association, Essex
Tex Larosa, private consultant, Montpelier
Jonathan Lash, Vermont Law School, South Royalton
Lew Milford, Conservation Law Foundation, Montpelier
Joan Mulhern, Vermont Public Interest Research Group, Montpelier
Frank Reed, private consultant, Randolph
Susan Sinclair, Central Vermont Regional Planning Commission, Montpelier

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