

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

CITIZENS LEAGUE REPORT

KEEPING THE WASTE OUT OF WASTE

**A proposal to minimize the risks by decentralizing
the solid waste disposal system**

Prepared by
The Committee on Solid Waste Flow Control
Joan Forester, Chairman

Approved by
Citizens League Board of Directors
May 27, 1981

Citizens League
84 S. Sixth Street
Minneapolis, MN 55402
338-0791

TABLE OF CONTENTS

INTRODUCTION	I
BACKGROUND ON DISPOSAL	2
BACKGROUND ON COLLECTION	5
FINDINGS.	6
CONCLUSIONS	11
RECOMMENDATIONS	13
DISCUSSION OF RECOMMENDATIONS.	15
WORK OF THE COMMITTEE.	16

INTRODUCTION

The 1980 Legislature authorized the Metropolitan Council to give operators of resource recovery facilities monopoly control over the supply of waste within a designated geographic area, and thereby reduce for investors the risks that facilities will not receive enough waste to operate economically.

The Citizens League Board of Directors concluded that the potentially negative consequences in establishing such monopoly arrangements, warranted an attempt to find an alternative way to make resource recovery possible.

The Board's concern was based primarily upon work done by the Citizens League on solid waste management in 1975. A committee working at that time found significant arguments against 'flow control', as the monopoly arrangement is called. The Board also felt that, on principle, it is wise to avoid, wherever possible, reliance upon one supplier of service.

BACKGROUND ON DISPOSAL

"RESOURCE RECOVERY", AS THE TERM USED IN OUR REPORT, REFERS TO THE RECOVERY OF ENERGY FROM WASTE MATERIALS THROUGH HIGH TECHNOLOGY PROCESSES THAT INVOLVE INCINERATION.

The recovered energy is generally used to heat buildings, produce electricity or drive manufacturing processes. Today, there are approximately 40 resource recovery plants in the United States; some are built and operating, some are constructed but inoperative, and some are still in the planning or construction stage.

In Minnesota, a resource recovery plant has been built in Duluth. Plants are being proposed in the cities of Red Wing, Collegeville, Saint Paul, and in Hennepin County.

In the Twin Cities, resource recovery facilities are to be planned along with the implementation of other policies as part of a larger solid waste management program whose primary goal is to abate the need to bury solid waste in landfills. Other abatement policies that are included in the program are: 1) *waste reduction*, which involves trying to reduce the amount of waste produced, either by changing product designs or consumer behavior, 2) *mechanical volume reduction*, which can involve bailing techniques that increase the density of waste or shredding of waste to reduce its volume, and 3) *source separation*, which usually involves recycling efforts by homeowners, businesses, and governmental offices.

THERE ARE THREE BASIC TYPES OF RESOURCE RECOVERY FACILITIES. THEY CAN BE DISTINGUISHED BY THE AMOUNT OF PROCESSING THAT OCCURS BEFORE WASTE IS INCINERATED.

Mass Burning Facilities

In these facilities little or no processing of the waste is done prior to incineration. Waste is simply dumped into the facility and burned. There are over 200 such facilities in the world today. In the United States examples of mass burning facilities can be found in Nashville, TN, Hampton, VA, and Saugus, MA.

Semi-suspension Plants

In these facilities some separation of materials is done mechanically to recover metals and non-burnable waste, prior to incineration. In the United States, examples of such plants can be found in Akron, OH; Niagara Falls, NY; and Hamilton, Ontario.

Refuse-derived Fuel Facilities (RDF)

These facilities are intended to produce a fuel from refuse which can then be used as an alternative fuel in conventional fossil fuel-fired energy systems. RDF plants involve a higher degree of processing than do the other two types of plants. Sometimes this processing involves shredding the refuse into small (six inch squares, for example) pieces. Examples of RDF plants can be found in Ames, IA and Duluth.

TODAY, THE PRIMARY METHOD OF DISPOSING OF SOLID WASTE IN THE TWIN CITIES, AND MINNESOTA, IS BURYING THE WASTE IN LANDFILLS.

There are currently 11 sanitary landfills operating in the Twin City metropolitan area. Approximately 90% of the waste generated in the region is disposed of in these landfills. About 8% of the region's waste is currently recycled.

Today, all the landfills are privately owned. Three of the landfills, all owned by Browning-Ferris, take in approximately 60% of the region's waste. Negotiations are also underway which could make Browning-Ferris the owner of a fourth landfill here. Consequently, there is only limited competition in disposal today.

There are also seven transfer stations operating in the region. Refuse haulers can bring their waste to a transfer station, where it is then moved into trucks of larger capacity for transport to a landfill.

According to Metropolitan Council studies, at current waste generation rates and current licensed landfill capacity, the region's existing landfills will all be full by the end of the 1980s. Some of the landfills here are located on sites large

enough to accommodate expansion, but few people accept such expansion as a long-term strategy for disposing of solid waste.

THE STATE OF MINNESOTA HAS RECENTLY ADOPTED A POLICY TO SHIFT GRADUALLY AWAY FROM LANDFILLING TOWARD RESOURCE RECOVERY AS ITS PRIMARY METHOD OF DISPOSING OF SOLID WASTE.

The policy is reflected principally in the 1980 Waste Management Act, which stipulates that:

- No landfills are permitted in the metropolitan area in the future without a certification of need showing no feasible alternatives are available.
- Counties can, upon receiving Metropolitan Council approval, override local restrictions to establish resource recovery facilities.
- Beginning in July 1982, the Metropolitan Council may require that all waste generated in the metropolitan area be delivered to designated resource recovery facilities.
- The state Waste Management Board may use up to \$8.8 million, on a statewide basis, to demonstrate solid waste processing facilities, including resource recovery facilities.

The policy is also reflected in the Metropolitan Council's objectives for land disposal abatement.

- By the Year 2000 the Council recommends that the region should be recycling 12% to 16% of its solid waste and that 56% to 75% of the region's waste be disposed of in resource recovery facilities. The remaining waste (9% to 32% of the total waste stream) would be buried in landfills.

There are two main reasons for shifting away from landfilling and toward resource recovery.

- It is becoming increasingly difficult to establish new landfills.

Despite the fact that it is possible to construct environmentally safe landfills (under current standards), public opposition to landfills is growing. Land pollution incidents have occurred in the past, and there is growing attention to possible pollution near landfills today. Also, there is opposition to making landfills out of what are now parks or farms.

- There is support for recovering energy from materials that are now buried in the ground.

In conjunction with the shift toward resource recovery, Twin Cities communities are planning other methods of abating land disposal.

As required in the 1980 Waste Management Act, the Metropolitan Council completed and submitted to the metropolitan counties, a report on methods of reducing land disposal of solid waste. The counties, by April 1982, and after considering the Council's report, must submit to the Council proposals to abate the need for land disposal through waste reduction, source separation, and resource recovery.

THE CITY OF SAINT PAUL AND HENNEPIN COUNTY ARE SEPARATELY STUDYING THE FEASIBILITY OF RESOURCE RECOVERY SYSTEMS FOR THEIR AREAS.

Saint Paul has identified a number of potential sites for resource recovery facilities.

Currently one option being studied is either a mass burning or RDF plant at the Champion International paper manufacturing plant (formerly owned by Hoerner-Waldorf Corporation). A second option being studied in detail is a mass burning facility at 3M's Maplewood facility. The City plans to pursue siting, construction, and operation of one or more resource recovery facilities so that any necessary bonds can be issued by August 1982.

Hennepin County is investigating three possible applications of resource recovery systems.

One would involve constructing an RDF plant to produce solid waste fuel for use by Northern States Power Company (NSP) at its Riverside plant. The plant's existing boilers would need to be redesigned to accept RDF. A second application involves siting several small waste burning facilities. A third application is a new solid waste fired boiler plant and to supply district heating to the Minneapolis downtown and steam to NSP.

It is expected that governments will play a growing role in solid waste management in the future.

Local governments in the metropolitan area, and throughout the state, are expected to play a central role in the shift toward resource recovery. They may own facilities. They may operate facilities. They might also issue tax exempt bonds to assist construction of private facilities.

Local governments, especially counties, are also required to play an expanded role in planning for landfill needs of the region. In addition to submitting proposals to the Metropolitan Council to abate the need for land disposal, the metropolitan counties are required to identify and acquire sites for new landfills that are needed.

THERE ARE A NUMBER OF RISKS INVOLVED IN SHIFTING TO RESOURCE RECOVERY.

Public opposition may prevent or delay siting of resource recovery facilities.

We were told that it is no easier to site a resource recovery facility than it is to site a landfill. The Twin Cities has had experience with public opposition to siting resource recovery facilities in the past. In 1975 residents of neighborhoods near the then Hoerner-Waldorf plant in Saint Paul objected to proposals for a resource recovery facility there.

Construction may be delayed, or costs for materials and equipment increase.

This risk is incurred with almost any major construction project. With resource recovery facilities, however, the expense of such delays or such changes can be high, considering that resource recovery systems may cost \$100 million to build. Costs do vary considerably, depending partly on the size of the plants, however. Facilities with capacities of less than 100 tons per day have been built for under \$5 million.

Composition of the waste can change, reducing its value for recoverable energy.

Changes in the composition could result in a lower quality of combustible material or less combustible material, and thereby reduce the revenue generating potential of a resource recovery system.

The quantity of waste coming to the plant may diminish.

Waste quantity could diminish due to recycling or waste re-

duction efforts, or due to competition from other disposal facilities. The volume of waste available in the Twin Cities also changes from one season of the year to another, with the highest volume being generated in the summer months, and the lowest quantity being generated in the winter.

A facility may not operate to specifications.

The history of resource recovery in the United States is marked by a number of facility breakdowns. We were told that, generally, the mass burning plants around the world have worked reasonable well, compared to the semi-suspension and RDF plants.

The mass burning plant in Saugus, MA is working well. The mass burning facility in Hampton, VA is also working to the satisfaction of the city. In contrast, semi-suspension plants in Hamilton, Ontario and Niagara Falls, NY have had considerable difficulty performing to specifications and are heavily subsidized by those cities. Major problems with technical operations have occurred with the RDF plants in Duluth and Lane County, OR. Both facilities are inoperative at this time. RDF plants in Ames, IA and Madison, WI; however, have worked well, according to Dr. Charles Johnson of the National Solid Waste Association. He attributed the success of these plants to the fact that they accept only residential refuse. The relatively uniform composition of this waste, compared to commercial and industrial waste, reduces the incidence of technical breakdowns.

Markets for materials or recovered energy may be unreliable.

This risk can be costly, because recovered energy is a primary revenue source for operating a plant. Ronald Swegler, a consultant on resource recovery projects, and an employee of Browning-Ferris Company in Los Angeles, CA, described for the Minnesota Solid Waste Management Association, how the city of Milwaukee ran into problems trying to market the RDF it produced to a local utility. The utility refused to accept the product after initial use. Similarly, the operators of the RDF plant in Baltimore, MD have been unable to find a market for their product.

BACKGROUND ON COLLECTION

MOST OF THE SOLID WASTE GENERATED IN THE TWIN CITIES IS COLLECTED BY PRIVATE HAULERS, AND THERE ARE MANY HAULERS HERE.

Solid waste in Saint Paul is collected entirely by private haulers. There are now about 50 haulers licensed by that city to provide collection services. In Minneapolis, part of the waste is collected by private haulers and part of it is collected by city crews. There are approximately 40 private hauling companies working in the City of Minneapolis.

The size of the private companies varies considerably also. There are one-truck companies in both cities, as well as at least one company, Browning-Ferris Industries, that operates nationally. The abundance of small private hauling companies here makes the Twin Cities unusual, compared to other metropolitan areas.

THE EXPERIENCE OF A NUMBER OF MUNICIPALITIES DEMONSTRATES THAT HOUSEHOLDS CAN ENJOY SIGNIFICANT SAVINGS FOR REFUSE COLLECTION WHEN A NUMBER OF COMPANIES COMPETE WITH BOTH PRICE AND SERVICE.

In 1975 the Citizens League documented that collection costs varied widely among communities in the area, with costs being lowest in communities that contracted for service with private haulers. A 1979 Citizens League survey showed the same results.

Furthermore, the data showed costs to be especially low in communities that contracted through a competitive bidding system. Recently, a group of residents in the Tangletown neighborhood of Saint Paul joined together to contract for refuse collection through a competitive bid process and realized considerable cost savings over what residents had been paying individually.

The League survey in 1979, and the experience of the Tangletown Neighborhood Association showed that price for

collection is only partially dependent upon service provided. Some communities receive more service and pay less than other communities. It appears that competition leads to greater efficiency in providing services.

THERE ALSO IS AGREEMENT THAT COMPLETELY OPEN, DISORGANIZED COMPETITION IS NOT THE MOST COST EFFECTIVE METHOD OF PROVIDING COLLECTION SERVICE.

The Citizens League's 1975 committee on solid waste concluded that one of the major elements of an efficient collection system is organized collection routes. City officials in Minneapolis and Saint Paul also recognize the merits of organizing the collection system. Today, the City of Minneapolis has an organized trash collection system. According to a recent report issued by the Saint Paul Department of Public Works, "organized collection would eliminate the many different trucks that presently run down the same streets and alleys. Consolidating routes would increase the productivity and efficiency of the haulers. Fuel and operating costs would be reduced by cutting down on the miles driven and, consequently, reducing air and noise pollution."

Saint Paul's collection system remains unorganized, but the city has decided to work toward organizing the system by encouraging haulers to voluntarily exchange customers. There is concern, however, about whether this approach is workable. Two haulers might agree to exchange customers, for example, but it might not be legally possible to prevent a third hauler from soliciting business from those customers.

In recent weeks discussions have started about the possibility of the City of Saint Paul organizing collection by negotiating one contract with a consortium of haulers. This policy would effectively eliminate competition among haulers. Consequently, city officials would like to avoid it.

FINDINGS

UNLESS THE EXISTING LAW IS CHANGED, STARTING IN JULY 1982, IT WILL BE PERMISSIBLE TO MANDATE THE DELIVERY OF WASTE TO A DESIGNATED RESOURCE RECOVERY FACILITY.

The 1980 Waste Management Act gives this authority to the Metropolitan Council and outlines the process the Council must use before it can invoke the requirements.

Under the law the Council would be permitted to "require that all or any portion of the solid waste that is generated within the metropolitan area or any service area thereof and is disposed of in the state be delivered to a resource recovery facility designated by the Council or a transfer station servicing such a facility. The Council may designate a facility under this section without the approval of the State Waste Management Board except that the approval of the Board shall be required when the solid waste required to be delivered is generated outside of the metropolitan area."

The city of Saint Paul is considering adoption of an ordinance change that would give the city the same kinds of powers with respect to waste generated in the city.

The Saint Paul Department of Public Works has proposed that the City Council adopt an ordinance change that would permit the department to stipulate, at the time licenses are issued to refuse haulers in the city, where haulers must dispose of their refuse.

THE MAIN REASON FOR THE AUTHORITY TO MANDATE USE OF DISPOSAL FACILITIES IS THAT MOST PEOPLE BELIEVE SUCH FACILITIES WOULD NOT BE BUILT UNLESS THEIR USE CAN BE GUARANTEED.

Mandating use is done to make bonds salable.

The absence of development of resource recovery facilities during the 1970s has convinced most observers that private investors are not likely to invest in resource recovery facilities of substantial capacity unless they can be sure the facilities will be used.

Income to finance the operations of resource recovery facilities is generated partly through fees paid by haulers who

dispose of their trash at the facilities, and through the sale of recovered energy.

Before bonds can be sold to finance resource recovery facilities investors want to know that the facilities will attract an adequate supply of waste, and that markets for recovered energy are available. Mandating use of facilities is done to assure investors that facilities will have an adequate supply of waste.

It is possible that haulers will decide on their own to use resource recovery facilities.

Under current conditions it is more economical for haulers to dispose of their trash at landfills than at resource recovery facilities. Currently haulers pay disposal fees at area landfills ranging from approximately \$4.50 to \$9.00 per ton of waste dumped. It is anticipated that the dumping charges at a resource recovery facility would need to be considerably higher—closer to \$20.00 to \$25.00 per ton.

Under these conditions most haulers, if left on their own to decide where to dispose of their refuse, would not go to a resource recovery facility. It would be less expensive for them to go to a landfill.

In the future, however, the differences between dumping charges at landfills and resource recovery facilities are expected to diminish. This is due partly to expected increases in landfill expenses. Existing landfill operators will face higher costs for fuel used in machines that spread dirt over refuse once it is dumped. Increases can also be expected due to regulations. As landfills fill up operators are likely to raise dumping fees.

We are already seeing dramatic increases in dumping charges at existing landfills. Between 1979 and 1980 dumping charges at the Burnsville landfill, for example, increased from \$2.12 per ton to \$9.00 per ton; charges at the Freeway landfill went from \$3.30 per ton to \$6.00 per ton; charges at the Pine Bend landfill went from \$2.70 per ton to \$6.50 per ton and the operator there recently increased the fee to \$7.50 per ton.

Expenses at new landfills are expected to be higher than those at existing sites, for new landfills will be relatively

expensive to site and they will have advanced environmental engineering features.

It is not clear, however, how many haulers will find it more economical to use resource recovery facilities instead of landfills. This would depend on many factors, including location of disposal facilities and who owns the new landfills.

THERE IS CONCERN ABOUT THE WISDOM OF MANDATING THE USE OF RESOURCE RECOVERY FACILITIES.

There is concern that mandating use of designated disposal sites would remove the economic incentives for operators of those facilities to contain expenses and provide responsive service.

Under mandatory disposal, refuse haulers would have no choice as to where to dispose of their trash. Consequently, operators of disposal facilities would not have to be concerned that high prices or poor service which would lead haulers to go elsewhere with their trash.

An analogy has been drawn between mandating disposal of solid waste at resource recovery facilities and mandating that people ride the bus. With a guaranteed supply of passengers, the bus company operator would have little incentive to provide low cost, high quality service—so the reasoning goes.

Concern about the implications for cost containment and service quality has been expressed by legislators and government staff as well as the Citizens League in the past.

Some people think incentives for cost containment and providing quality service could exist, even though the disposal facility operator had a guaranteed supply of waste. One member of our committee suggested that professional standards for facility operators would encourage efficient performance. He also suggested that public officials could oversee the operation of a plant in an effort to insure efficient performance.

There is concern that mandating disposal sites would lead to cheating on the part of haulers and a need for enforcement by local governments.

We were told by several people, including private haulers, that cheating would be likely to occur if haulers faced increased expenses at resource recovery sites compared to landfills. Haulers would be able to save money by going to a landfill.

Considering the possibility of cheating, local governments

would need to make sure haulers took their loads to a resource recovery plant. Enforcing mandatory disposal could be very difficult, considering the large number of haulers operating in the region.

Some evidence indicates that, under certain conditions, enforcement of mandatory disposal is not difficult. In the Western Lake Superior Sanitary District surrounding Duluth (the only area in Minnesota where a mandatory disposal ordinance exists) cheating is possible. Two privately owned landfills exist in the Duluth environs. Officials of the Sanitary District say the enforcement is not a problem though. One of the landfills is far enough away from the city to make it uneconomical for haulers to go there. The other private landfill is restricted to use for dumping demolition debris. Officials say that residents living near the landfill report trucks that use it to dump municipal solid waste. (The resource recovery facility in Duluth is inoperative.)

Some people think mandating disposal facilities amounts to an invisible subsidy of resource recovery.

It is clear that, at least for the foreseeable future, in order for resource recovery facilities to have lower tipping fees than landfills, and therefore compete effectively against them, some public subsidy will be needed. Some forms of subsidy are more visible than others though.

One way to subsidize a facility would be to levy a tax specifically for the purpose of paying part or all of its operating costs. This kind of subsidy would permit the public to clearly identify the costs associated with running the plant and to see that other disposal options were less expensive. The merits of the subsidy could also be evaluated periodically prior to the levying of the tax.

This form of subsidy is more visible and therefore, in the minds of some people, preferable to mandatory disposal. Under mandatory disposal, a subsidy could be provided without levying a tax. Haulers would merely pass along to homeowners the increased costs of disposal associated with resource recovery. The subsidy would not be publicly debated periodically under this plan, nor would the total cost of the subsidy be clearly recognizable. Furthermore, most people are not likely to know what the cost of disposal at a resource recovery plant will be before the plant is built. When the subsidy comes through a tax, public officials are likely to require a judgment on the level of subsidy needed to operate the plant, before they support its construction.

Some people think mandating disposal facilities spreads the burden of financing the subsidy for resource recovery plants over too narrow a base of payers.

Under mandatory disposal the increased costs of disposal due to resource recovery plants would be assessed only on people generating waste within the area required to use the plant. Some people feel it is unfair to require these people to pay the higher costs for disposal, when the resource recovery facilities would benefit everyone in the region by abating the need for landfills.

It would be possible, theoretically, to build a plant with a capacity large enough to take in waste from the entire region. Under mandatory disposal, then, all people in the region would share in the additional costs of resource recovery. The sharing might be unequal, for people living farther from the facility would probably be charged more than those living near the facility.

Some people think mandating facilities would prevent refuse haulers from organizing their collection routes in the most cost effective manner, and thereby impose economic hardships on them.

Some haulers have organized their routes in a way that allows them to make pickups along a relatively straight path to a landfill. This usually means that those haulers make pickups in many communities along the way to a disposal site. Under mandatory disposal there is no assurance that a hauler's route would be included in its entirety within the geographic area that must use the resource recovery plant. Haulers might, therefore, be required to alter their routes. These alternations could add to their costs of transportation or cause them to incur costs associated with forfeiting some customers and soliciting new customers.

It is true, however, that some haulers have all their pickups entirely within one community. Under mandatory disposal, if the geographic boundaries of a mandatory disposal district were drawn to reflect community boundaries, these haulers might not have to significantly alter their routes.

The location of a plant would also affect the extent to which mandatory disposal forced changes in a hauler's route. In Duluth, for example, officials of the Western Lake Superior Sanitary District contend that use of the resource recovery facility would not force significant changes in a hauler's route. In the past, most haulers disposed of their waste at a landfill at one end of town. Now that the resource recovery facility is located at the opposite end of town, were it operating, haulers would merely reverse the order in which they make their pickups. They would not have to alter the path of the pickups.

Some people also point out that the existing collection system is not organized in the most cost effective way in many communities. Reorganization might permit a com-

munity to achieve cost savings in collection that might balance, to some extent, the increased cost of disposal of resource recovery plants.

There is some concern that mandating disposal sites could reduce competition in collection of solid waste.

The experience of a number of communities indicates that there are benefits in terms of both cost and service to competition in collection of solid waste. Some people suspect that the high cost of disposal in communities that have resource recovery plants might reduce the number of hauling companies operating there, and thereby reduce competition in collection.

There is concern that mandating disposal sites could eliminate the incentive to reduce waste generated, or to recycle.

Waste reduction and recycling are among the region's waste management goals. Part of the reason for mandating use of resource recovery facilities, however, is to guarantee a supply of waste for operators of such facilities. If such guarantees are granted, there is little incentive to encourage reduction of waste or recycling.

THE MINNESOTA LEGISLATURE HAS DISCUSSED THE ISSUES SURROUNDING MANDATORY DISPOSAL, AND HAS RECOGNIZED MANY POTENTIAL PROBLEMS WITH IT.

The Legislature first discussed the issues, as they pertain to the metropolitan area, in their 1975-76 session, and decided not to permit mandating use of designated disposal sites.

At that time, consensus in the state Senate was that resource recovery ought to be encouraged and that it would not occur without government intervention. The Senate supported the proposal to give local governments authority to mandate use of disposal sites as a way to make resource recovery possible.

The majority of the state Representatives, however, felt that resource recovery would occur in the region without mandatory disposal provisions. Increasing energy prices, in particular, but also support for energy conservation suggested that resource recovery would be attractive to consumers.

Many legislators were also concerned about preventing one resource recovery facility from being established which would have a monopoly on the stream of waste in the region. There was concern that such a monopoly would permit the resource recovery operator to charge extremely high prices for disposal.

Some legislators also wanted to prevent a dependence upon one high technology system, that might not work as projected.

A compromise was reached when the Legislature passed a bill on solid waste, which included the stipulation that the Metropolitan Council could restrict the area from which a resource recovery facility operator could draw waste but did not permit the Council, or any other government, to dictate where waste within a specific geographic area must be disposed of.

Issues surrounding mandatory disposal were discussed again in the 1977-78 session of the Legislature, but action on mandatory disposal was deferred, along with other issues.

During this period the city of Fairmont, MN, wanted to build a resource recovery facility, and wanted the Legislature to grant the city, mandatory disposal authority. Also, some non-metropolitan communities, finding that landfills in their areas were losing money, wanted to institute mandatory disposal provisions in order to keep them economically viable.

Many other issues pertaining to solid and hazardous waste also were discussed, and at one time approximately three dozen bills had been introduced on related subjects.

The Legislature decided to coordinate all the discussion by establishing a joint legislative committee to study several questions and report to the 1980 Legislature. The work was intended to form the foundation of comprehensive action in the 1980 session.

The 1980 Legislature enacted a comprehensive solid waste management bill, which included authorization for the Metropolitan Council to mandate use of disposal sites starting in 1982.

By 1980 it had become clear that resource recovery facilities were not going to come into the metropolitan area in the foreseeable future without some form of public assistance. Mandating disposal sites was seen as a way to provide that public support.

According to testimony we received, by 1980 the politics of land disposal were starting to become more important in legislative debates over resource recovery. Public opposition was growing, partly due to incidents of pollution from hazardous waste disposal, but also related to concerns about the failure to utilize the energy potential in refuse.

During the legislative debate, the Citizens League and others spoke strongly against the use of mandatory disposal

provisions as a way to make resource recovery possible. The arguments had less appeal, however, as consensus was building to move away from landfilling as a primary method of disposal.

Again, the Legislature compromised on the issue of mandatory disposal by delaying the authority to implement it until July 1982. The Legislature also took steps to indicate its concerns with its use:

- It enumerated several criteria the Metropolitan Council must consider prior to designating and requiring use of a resource recovery facility.
- It outlined a process the Council must follow before designating and requiring use of such a facility. The process includes an attempt to first contract with those who would otherwise be required to use such a facility.
- It established the Legislative Commission on Waste Management to generally oversee implementation of the 1980 Waste Management Act, but to also identify and evaluate alternatives to mandatory disposal.

EVIDENCE OF THE POTENTIAL PROBLEMS WITH MANDATING USE OF A RESOURCE RECOVERY FACILITY CAN BE FOUND IN MINNEAPOLIS TODAY.

Mandating use of a facility makes the operator of that facility a monopoly supplier of disposal services to the community. The implications of this monopoly arrangement, in terms of price for disposal, can be inferred from the recent experience of Minneapolis when it solicited bids for the operation of its transfer facilities.

The city solicited bids on a contract to operate the city-owned transfer stations and dispose of the city's waste area landfills. The city received only one bid, however, and the price bid was approximately 60% higher than what the city is currently paying for this service. The reason the city got only one bid is that there is only one company in the region that could operate a transfer facility and also guarantee access to enough landfill space to dispose of five years worth of Minneapolis waste. This company, consequently, has monopoly control over the service Minneapolis is seeking.

There is no indication that the company submitted a bid that did not represent the cost of providing the service. Still, the availability of only one bid clearly limits the flexibility of the city to negotiate price and service levels.

THERE ARE OTHER METHODS OF REDUCING THE RISK ASSOCIATED WITH THE FLOW OF WASTE BE-

SIDES MANDATING DISPOSAL AT DESIGNATED RESOURCE RECOVERY FACILITIES.

Reduce or remove the disposal fees at resource recovery plants.

Under this plan the public would agree to pay part or all of the operating costs that would otherwise be recovered through a dumping charge assessed to haulers who brought their trash to the facility. The objective would be to make resource recovery facilities competitive with landfills.

Raise the price of dumping at landfills.

To increase the cost of disposal at landfills, one suggestion was made to tax landfills. Another suggestion was to increase regulations to insure that dumping charges at landfills reflect all costs associated with landfilling. The objective would be the same as that involved in reducing or removing dumping charges at a resource recovery facility, namely, to make resource recovery facilities competitive with the landfills.

Contract with haulers for collection and delivery of waste to resource recovery facilities.

Under this arrangement a public agency could contract with haulers for collection of waste within a specified

geographic area. The agreement would stipulate that haulers would dispose of their waste at the resource recovery facility. Collection and disposal of waste in Minneapolis is handled under such an arrangement today.

Presumably the contracting could be done through negotiations with a consortium of haulers, or an open bid basis with separate haulers.

The 1980 Waste Management Act requires that, before the Metropolitan Council can require use of a resource recovery plant, attempts must be made to contract with haulers to use the plant.

Sign "put-or-pay" contracts with the facility operators.

Under this plan the public would agree to pay part or all of the operating costs of the facility, should it fail to receive enough waste to generate sufficient income on its own.

The public might also design a plan that combined any or all of these methods of mitigating the risk.

For example, the public could decide to reduce the dumping charges at a resource recovery facility, but then require the facility operator to solicit contracts with haulers to bring their waste to the facility.

CONCLUSIONS

THERE ARE SUBSTANTIAL RISKS INVOLVED IN RESOURCE RECOVERY, INDEPENDENT OF THOSE ASSOCIATED WITH THE FLOW OF WASTE.

These include: public opposition to siting, changes in the composition of waste, and uncertainties surrounding the market for recovered energy.

Perhaps the most significant risk is that the facility will not operate to technical specifications. Several communities in the United States have experienced costly problems because resource recovery facilities did not work as projected.

A number of people including state legislators, have expressed concern that the Twin Cities not get stuck with a "white elephant" as they move into resource recovery. We share this concern.

STILL, WE RECOGNIZE THAT PUBLIC INTEREST IN RESOURCE RECOVERY IS GROWING, AND WE KNOW THAT PLANTS CAN BE MADE TO WORK.

Resource recovery facilities have been operated successfully in Europe for many years. In addition, there are a number of successful operations in the United States. The cities of Albany, NY; Madison, WI; and Ames, IA; have technically successful facilities. Presumably, a resource recovery facility could be made to operate successfully in the Twin Cities as well.

PUBLIC OPPOSITION TO LANDFILLS HAS BEEN DEVELOPING FOR SEVERAL YEARS.

This opposition is concentrated among citizens that do not want a landfill near them, but it includes other concerned citizens as well. The near continuous stream of reports by the media in recent weeks about potential pollution problems at landfills in the state is likely to intensify opposition to this method of disposal. And there may be real environmental hazards with existing landfills, although we have not investigated that possibility.

THE PUBLIC MUST RECOGNIZE THAT MOVING TO RESOURCE RECOVERY IS LIKELY TO REQUIRE PUBLIC SUBSIDY.

Proposals are likely to come to provide assistance during construction in the form of public tax exempt financing. Proposals to assist the operations of a facility, in any of the various forms of subsidy we describe in this report, can also be expected.

We think the community should be fully cognizant of the need to subsidize resource recovery and the amount of subsidy that is provided to any facility.

AS A METHOD OF SUBSIDIZING OPERATIONS OF RESOURCE RECOVERY FACILITIES, MANDATING USE OF DESIGNATED FACILITIES HAS MANY POTENTIAL DISADVANTAGES, INCLUDING THE LACK OF ADEQUATE INCENTIVES TO HOLD DOWN THE COSTS OF DISPOSAL.

We have outlined in our report many of the criticisms of mandating use of a resource recovery facility. We are convinced that these disadvantages warrant avoiding this method of subsidy as long as possible.

IF THE PUBLIC DECIDES IT WANTS RESOURCE RECOVERY FACILITIES, AND WANTS TO SUBSIDIZE THEM, THEN MANDATING USE OF DISPOSAL SITES SHOULD BE IMPLEMENTED ONLY AFTER OTHER METHODS OF SUBSIDY HAVE BEEN EVALUATED, NOT BEFORE.

We are convinced that there are enough potential disadvantages to mandating use of designated disposal sites to warrant avoiding this method of subsidy as long as possible.

We think the other methods of supporting the operations of a resource recovery facility should be evaluated first.

IN AN EFFORT TO REDUCE THE COSTS OF REFUSE DISPOSAL AND PROMOTE OVERALL EFFICIENCY IN SOLID WASTE MANAGEMENT, WE THINK ALL COMMUNITIES SHOULD DEVELOP AN ORGANIZED SYSTEM OF REFUSE COLLECTION.

Some communities in the metropolitan area already have organized collection systems. Their experiences show that cost savings can be obtained through organizing the routes.

We have not quantified these savings, but we think they are sufficient to merit pursuit. Furthermore, any savings in collection might help balance increases in costs associated with disposal at a resource recovery facility.

RECOMMENDATIONS

COUNTIES AND CITIES SHOULD EVALUATE PROPOSALS FOR RESOURCE RECOVERY SYSTEMS WITH A GOAL OF SELECTING THOSE WHOSE SIZE MINIMIZES TECHNICAL AND ECONOMIC RISKS AND THE LIKELIHOOD THAT FLOW CONTROL WILL BE NEEDED.

In the next several months proposals will surface for construction of resource recovery facilities. We think counties and cities should evaluate each proposal on its own merits, but generally we urge public officials to minimize the technical and economic risks and avoid the need for flow control.

Communities in other parts of the country have had, at best, mixed success with resource recovery technology. Systems have not worked as intended, and costs have been high. We think the Twin Cities should avoid these problems.

Perhaps the best way to accomplish this goal is to avoid building one or two very large, centralized resource recovery facilities. Economies of scale may not necessarily justify building such facilities and there may be several advantages to building smaller facilities and working toward a decentralized system of disposal.

Economies of scale depend on a number of factors, including location of landfills, and it is not always more economical to build larger rather than smaller. Hennepin County studies also indicate that it could build one 4000 per ton RDF facility for about \$265 million or four 1000 per ton facilities for about \$277 million.

One of the advantages to building smaller facilities and a decentralized system is that this would enable the community to shift incrementally toward resource recovery as a primary method of disposal, changing systems or technology as demand for service changes and technology improves.

Putting disposal facilities close to where waste is generated would also minimize transportation costs of refuse haulers. A decentralized disposal system would also minimize disruptions in disposal service for the community if technical breakdowns interrupt facility operations. Such a system might also give the region an opportunity to compare the

operations of different facilities and thereby encourage efficiency and competition among facilities.

Finally, building smaller facilities may be the only way a community can avoid the need for mandating that haulers use specified disposal facilities. If the amount of waste needed for efficient operation of a facility is relatively small, it may be possible for the operator to contract with haulers for delivery to a plant. If the community builds one or two very large facilities it will have no clear, realistic, easy choice about whether to mandate that haulers use such facilities, and may have to accept all the potentially negative consequences of flow control.

We are aware of arguments against the strategy we have outlined. Some have said there are not enough small markets for steam to accomplish substantial reductions in the landfill needs. Siting controversies would also be significant with small facilities just as they will be with large facilities.

Conditions may change, however, to nullify some of these arguments. More small markets for steam may be found or formed in the future, as the price of other energy sources increases. Technological breakthroughs may make it economical to generate electricity at small facilities. Other uses for refuse, besides generating energy, may be developed. One company in Saint Paul has already proposed to use refuse to make building products.

(We think county and city officials should preserve their flexibility to adapt to these changes, particularly considering the apparent advantages of establishing a decentralized disposal system.)

BEFORE ANY GOVERNMENTAL UNIT MANDATES USE OF A SPECIFIC RESOURCE RECOVERY FACILITY IT SHOULD EVALUATE VARIOUS ALTERNATIVE METHODS OF SUBSIDIZING RESOURCE RECOVERY FACILITIES.

These alternatives include:

- Removing or reducing dumping charges at a resource recovery facility.
- Raising dumping charges at a landfill.

- Contracting with haulers to deliver waste to a resource recovery facility.
- A combination of any of these subsidy arrangements.

The evaluation should be made based upon the following criteria:

- Whether the subsidy will facilitate construction of a plant.
- The impact of the subsidy on the total cost to the community for collection and disposal of solid waste.

(We think the cost should be minimized.)

- Whether the subsidy encourages use of the resource recovery facility.

(We think, if public subsidies are provided, they should be reasonably effective.)

- Whether all who benefit from the facility (either directly or indirectly) should share in financing the subsidy.

(We think all should share.)

- Whether the subsidy permits haulers to organize their routes in an efficient manner.

(We think routes ought to be organized.)

- Whether the subsidy promotes or diminishes competition in collection.

(We think there ought to be competition in collection.)

- Whether the subsidy preserves incentives for facility operators to contain expenses.

(We think such incentives should exist.)

- The relative ease with which the subsidy can be withdrawn.

(We think the subsidy should be easily withdrawn.)

- Whether the subsidy is visible to public officials and taxpayers.

(We think the subsidy should be visible, at least to public officials.)

- Whether the subsidy makes haulers 'tax collectors'.

(We do not think haulers should perform what is properly a function of government.)

THE CITY OF SAINT PAUL SHOULD NOT SUPPORT REFUSE DISPOSAL FACILITIES BY CHANGING ITS ORDINANCES IN A WAY THAT WOULD PERMIT CITY OFFICIALS TO STIPULATE WHERE HAULERS LICENSED IN THE CITY MUST DISPOSE OF THEIR REFUSE WITHOUT FIRST EVALUATING ALTERNATIVE METHODS OF SUBSIDY.

THE CITY OF SAINT PAUL SHOULD ATTEMPT TO ORGANIZE COLLECTION ROUTES IN THE CITY BY ESTABLISHING COLLECTION DISTRICTS AND PUTTING THESE DISTRICTS UP FOR COMPETITIVE BID.

The City should build off of its existing collection system whereby individual homeowners buy refuse collection services, based on price and service from a large and diverse group of haulers.

Specifically, the City should encourage, and make it possible for homeowners to get together to buy this service jointly, in the manner recently followed by the Tangletown Neighborhood Association. The City should work through neighborhood associations or district planning councils. Alternatively, the City could run an open bidding system on behalf of the residents of individual small geographic areas (perhaps district council areas). The City would act as an agent. Bidding would be done by individual district.

Following this plan the City would achieve the benefits of efficiency in collection routes, and of price competitive for services.

DISCUSSION OF RECOMMENDATIONS

WHY DIDN'T THE COMMITTEE CHOOSE FROM AMONG, OR AT LEAST PRIORITIZE, THE ALTERNATIVE METHODS OF SUBSIDIZING OPERATIONS OF A RESOURCE RECOVERY FACILITY?

Without specific proposals for subsidies, we did not think it was possible to tell what the impact of various methods of subsidy would be in terms of the criteria we think are important.

DID THE COMMITTEE RATE THE CRITERIA THAT ARE TO BE USED IN THE EVALUATION OF METHODS EQUALLY, OR DOES THE LIST REFLECT THE RELATIVE IMPORTANCE OF THE CRITERIA?

The list reflects how we would prioritize the criteria.

WORK OF THE COMMITTEE

CHARGE TO THE COMMITTEE

"The committee should have a specific assignment to propose a way to make resource recovery plants possible without requiring a monopoly on control of the supply of solid waste within a given area. Unless existing legislation is changed, beginning in 1982 the Metropolitan Council will have authority to require all solid waste collected within certain cities be disposed of only at a designated resource recovery site. Consequently, solid waste haulers in such cities would have no option but to accept whatever price were charged for disposal at a resource recovery site. Resource recovery plants, however, need the assurance of a continuous stream of solid waste to assure their economic viability. The committee will try to find a way that preserves competition for disposal, thereby holding down dumping charges, and yet enables resource recovery plants to be constructed.

The committee will relate its work to the implementation of Citizens League proposals on how solid waste collection in Saint Paul should be organized."

COMMITTEE MEMBERSHIP

A total of 13 people participated regularly in this project. These included:

Joan Forester, Chairman
Carl M. Carlson
Curt K. Carlson
Leo Foley
Charlotte Helseth
Henry Hoklas
John Leadholm*

Todd Lefko
Tim Madigan
David Rosedahl
Frances Sontag
Tom Triplett
Carol Thacher

The committee met 17 times. Meetings were held weekly

on Tuesdays. The committee started its work on October 4, 1980 and held its last meeting on April 20, 1981.

During the first several meetings the committee heard testimony from resource people in the community to develop background on the issues related to solid waste, resource recovery facilities, and flow control. The Citizens League would like to thank these resource guests:

Ed Gregory, vice president, G & H Sanitation, Inc.
Dr. Charles Johnson, technical director, National Solid Waste Management Association
Barbara Kelley, executive director, Minnesota Waste Association
Chuck Kutter, hauler
Luther Nelson, director, Environment & Energy, Hennepin County
Rick Person, project manager, St. Paul Resource Recovery Siting Project
Mike Robertson, director, Legislative Commission on Waste Management
Paul Smith, staff, Metropolitan Council
Tom Todd, research staff, House of Representatives
Carol Trusz, vice president, Community Development, Northwestern National Bank of St. Paul
Les Weber, manager, Research, Northern States Power Company

Staff assistance to the committee was provided by Bradley Richards, and Donna Keller. Printing was done by Brian Sullivan.

* John Leadholm could not support the committee's first recommendation.

WHAT THE CITIZENS LEAGUE DOES

RESEARCH PROGRAM

- * Four major studies are in progress regularly.
- * Each committee works 2½ hours per week, normally for 6-10 months.
- * Annually over 250 resource persons made presentations to an average of 25 members per session.
- * A fulltime professional staff of seven provides direct committee assistance.
- * An average in excess of 100 persons follow committee hearings with summary minutes prepared by staff.
- * Full reports (normally 40-75 pages) are distributed to 1,000-3,000 persons, in addition to 3,000 summaries provided through the CL NEWS.

CL NEWS

- * Four pages; published every two weeks; mailed to all members.
- * Reports activities of the Citizens League, meetings, publications, studies in progress, pending appointments.
- * Analysis, data and general background information on public affairs issues in the Twin Cities metropolitan area.

PUBLIC AFFAIRS ACTION PROGRAM

- * Members of League study committees have been called on frequently to pursue the work further with governmental or nongovernmental agencies.
- * The League routinely follows up on its reports to transfer, out to the larger group of persons involved in public life, an understanding of current community problems and League solutions.

COMMUNITY LEADERSHIP BREAKFASTS

- * Public officials and community leaders discuss timely subjects in the areas of their competence and expertise for the benefit of the general public.
- * Held from September through May at 7:30 - 8:30 a.m.
- * Minneapolis breakfasts are held each Tuesday at the Grain Exchange Cafeteria.
- * St. Paul breakfasts are held every other Thursday at the Pilot House Restaurant in the First National Bank Building.
- * South Suburban breakfasts are held the last Friday of each month at the Lincoln Del, 494 and France Avenue South, Bloomington.
- * An average of 35 persons attend the 64 breakfasts each year.
- * The breakfast programs attract good news coverage in the daily press, television and radio.

QUESTION-AND-ANSWER LUNCHEONS

- * Feature national or local authorities, who respond to questions from a panel on key public policy issues.
- * Each year several Q & A luncheons are held throughout the metropolitan area.

PUBLIC AFFAIRS DIRECTORY

- * A directory is prepared following even-year general elections, and is available to all members.

INFORMATION ASSISTANCE

- * The League responds to many requests for information and provides speakers to community groups on topics studied.

Citizens League non-partisan public affairs research and education in the St. Paul-Minneapolis metropolitan area. **84 S. 6th St., Minneapolis, Mn. 55402 (612) 338-0791**

Application for Membership (c.l. Membership Contributions are tax deductible)

Please check one: ☐ Individual (\$20) ☐ Family (\$30) ☐ Contributing (\$35-\$99) ☐ Sustaining (\$100 and up)
Send mail to: ☐ home ☐ office ☐ Fulltime Student (\$10)

NAME/TELEPHONE

ADDRESS

CITY/STATE/ZIP

EMPLOYER/TELEPHONE

POSITION

EMPLOYER'S ADDRESS

CL Membership suggested by

(If family membership, please fill in the following.)

SPOUSE'S NAME

SPOUSE'S EMPLOYER/TELEPHONE

POSITION

EMPLOYER'S ADDRESS

Citizens League non-partisan public affairs
research and education in the St. Paul-
Minneapolis metropolitan area. **84 S. Sixth St.,**
Minneapolis, Mn. 55402

Nonprofit Org.
U. S. POSTAGE

PAID

Minneapolis, Minn.
Permit No. 414