

**POTENTIAL FUNDING MECHANISMS
FOR A GRANTS-IN-AID PROGRAM
FOR RESOURCE CONSERVATION
AND RESOURCE RECOVERY**

Special Report

To the 69th Session

of the Legislature of Minnesota

Minnesota Pollution Control Agency

January 1975

At the Agency meeting on December 17, 1974, MPCA Board members unanimously passed a resolution that this staff report be approved and transmitted to members of the Legislature.

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FOR A GRANTS-IN-AID PROGRAM
FOR RESOURCE CONSERVATION
AND RESOURCE RECOVERY

by

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STAFF REPORT

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BACKGROUND

In 1973 the Minnesota State Legislature initiated a major effort to deal with the mounting problem of solid waste. Initially the Legislature established a \$1.5 million grants-in-aid program to encourage resource conservation. Grants were to be made for:

"(1) the development of feasibility studies for resource recovery systems or facilities; (2) the construction of a resource recovery facility or implementation of a resource recovery system; and (3) the development of programs to encourage solid materials conservation and the reduction of environmental impact from solid waste, including but not limited to, public education and encouragement of market demand for reusable or recyclable materials."¹

Grants were to be made on a 50% matching basis and the program was to be administered by the Minnesota Pollution Control Agency.

The State Legislature sought to partially offset the \$1.5 million appropriation by establishing a user fee of 15¢ per cubic yard which would have been paid by landfill and incinerator operators at permitted facilities. The fee would have been remitted to the Department of Revenue by operators of permitted landfills and incinerators without heat recovery when the incinerator capacity was greater than 400 pounds per hour. To cover increased costs, landfill operators were to raise the dumping rates by 15¢ per cubic yard. Because refuse haulers would then have been forced to pay more for dumping,

they would have raised their collection charges to homeowners. It was expected that homeowners would have paid an increase of from 3.5 to 5¢ per person per month.

Two exemptions from the user fee were allowed:

1. Companies that disposed of by-product materials produced by its manufacturing, construction, power generating, or mining processes, when such materials were disposed of at the company's private disposal facility.

2. Refuse haulers who were under a contract to dispose of solid waste if the contract could not be renegotiated to reflect the increased cost due to the user fee. This exemption lasted until the contract expired.

The user fee generated a great deal of opposition, eventually leading to its repeal. Major opposition came from three particular special interest groups.

Outstate Areas

Residents of rural areas objected to a tax increase of any sort. Many of these residents are elderly people living on fixed incomes. Increased taxes would add to the strain on their already tight budgets.

Because costs for refuse collection are often minimal in rural areas, occasionally less than \$5 per household per year, the increases due to the user fee represented a significant increase in collection charges. It was expected that charges for refuse collection would have increased by \$1.50 or \$2.00 per household per year as a direct result of the user fee. In

one northern city, this would have represented a 50% increase. By contrast, similar dollar increases would have represented a much smaller percentage increase to metropolitan collection charges. Outstate constituents felt that the percentage increase was unfair and that the increase would represent a more serious burden on them.

Additionally, outstate constituents did not believe they would obtain any direct benefits from the resource recovery grants-in-aid program. They argued that due to a low population density the amount of recoverable items would have been minimal. High transportation costs to carry the recyclables to distant markets prohibited an economically viable recycling program. They felt that only metropolitan areas would obtain benefits from the program and that rural areas would be subsidizing metropolitan interests.

The rural sector had only recently begun to comply with the state's solid waste management programs which included the shutdown of open dumps and the construction of sanitary landfills. These changes were not popular with rural residents since sanitary landfills charge a dumping fee and are often located further away than open dumps. The imposition of a user fee on landfills was viewed as a penalty to those counties that had complied with state solid waste regulations by constructing landfills. No tax would have been assessed on the remaining open dumps and this appeared to be a subsidy on those counties that had not complied with state solid

waste regulations.

There was an additional fear on the part of some rural officials that the institution of the 15¢ user fee would discourage the utilization of the already unpopular landfills while encouraging random dumping in lakes, rivers, or along roadsides. This tax, argued outstate constituents, would have negated the progress that had already been made in county solid waste management programs. Another problem arose at those outstate landfills that did not maintain an operator on the site at all times. At such locations it would have been difficult to calculate the amount of refuse dumped, the amount that each hauler should have been charged, and the method of collecting the fee.

Landfill Operators

Landfill operators in all areas of the state also argued against the user fee. Solid waste is generally delivered at the landfill in standard cubic yard packer trucks.* The capacity of packer trucks vary, but a 16 cubic yard truck is the average size. Under the 15¢ user fee, when a 16 cubic yard packer truck drove through the gate of a landfill, the operator would have charged the driver 15¢ times 16 yards.

* These trucks contain a hydraulic pump which compacts the refuse left by a householder to a greater density. Refuse left in its uncompacted state has a density of 200 pounds per cubic yard. After being compacted in the packer truck this refuse has a density of from 400-600 lbs./yd³ depending upon the equipment and the nature of the refuse.

However, not all refuse is delivered in packer trucks. Often an individual homeowner would haul his own refuse in a pick-up truck. Since this refuse would not be compacted, disposing of it would have been more costly. The tax would have discriminated against such hauling. If there were no collection service available, landfill operators anticipated that homeowners would dispose of refuse in illegal promiscuous dumps. The operators also argued that problems would be created by residents delivering refuse that could not have been assessed in cubic yards, such as discarded tires, refrigerators, stoves, televisions, or boats. Charging by the number of cubic yards presented a problem. Landfill operators also objected to the additional administrative burden of recording and filing returns to the Department of Revenue.

Refuse Haulers

Refuse haulers objected to the user fee on many of the same grounds as the landfill operators.

They felt they would incur higher dumping costs and would therefore have been forced to raise collection fees for some customers. Many times a refuse hauler serves both contract and non-contract customers. Because a clause in the act would have exempted refuse haulers who were under contract, only customers who did not have a contract would have been charged an additional fee. Thus, packer trucks could contain refuse that was subject to the 15¢ user fee and refuse that was not. This posed problems to both the refuse hauler who would have

had to estimate the percentage of the refuse for which the fee should be paid and the landfill operator who would have had to assess the truck's content.

Led by rural residents, landfill operators and refuse haulers, opposition to the user fee continued to mount. The 1974 Legislature presented several bills to modify the user fee. One bill was introduced to limit the user fee to the seven county metropolitan area and another to limit the user fee's imposition to counties with a population of 50,000 or more. With this limitation, only counties that paid the fee would have been eligible for the 50% matching grants for resource recovery projects. However, all efforts to modify the user fee failed and it was repealed on February 27, 1974. The State Legislature allowed the \$1.5 million appropriation for the grants-in-aid program to continue for the existing biennium but required that the Pollution Control Agency conduct a study of alternative funding mechanisms.

SUMMARY OF CONSIDERED ALTERNATIVES

Tax incentive proposals to reduce solid waste and the environmental impact from solid waste have been offered on both a federal and state level. Unfortunately, the number of proposals available for analysis is limited. In this introduction we will provide a brief overview of four alternatives. A more thorough analysis of the advantages and disadvantages of each alternative will be explained in the body of the report.

The alternatives that will be discussed are taxes that:

1. Assess a disposal cost of one penny per pound on all materials entering the solid waste stream. This tax is referred to as the penny-per-pound tax.
2. Assess a charge of one penny per unit on all rigid or semi-rigid containers sold at retail. This tax is referred to as the penny-per-unit tax.
3. Assess a recycling tax as a percentage of the solid waste collection fee. This tax is called the recycling tax.
4. Derive funds for reducing solid waste from the general revenue fund. There would be no separate taxing mechanism.

Penny-Per-Pound

This proposal was presented at the federal level in

S. 1879, introduced by Senators Hart, Moss, and Proxmire in 1973. Hearings on S. 1879 were held before the Subcommittee on Environment of the Commerce Committee of the U. S. Senate in the spring and early summer of 1973. This bill proposed a national disposal cost system which would have required the Administrator of the Environmental Protection Agency to write regulations to establish a schedule of national disposal cost charges. These charges would have been applied at the rate of one cent per pound on the sale of all products, except consumables, which had a service life of less than thirty years. The charge would have been assessed at the point of the product's final configuration. An additional charge equal to all disposal costs in excess of the penny-per-pound charge would have been assessed on products when the Administrator found that such additional costs could be reasonably attributed to particular products. The charge would have been paid by the person who manufactured, produced or imported the product and made the first sale of the product in its final form.

A credit against the charge would have been allowed in two cases:

1. If the product consisted of recycled or reused products;
2. If the product was designated as returnable.

Penny-Per-Unit

A second alternative, a unit tax, was attempted on a state level by the New York State Legislature in 1971. This alternative was similar to the penny-per-pound tax in that it was a tax on packaging. This tax would have been assessed by unit of packaging rather than weight of packaging. This tax, proposed by the New York City Environmental Protection Administration, would have assessed a tax on all rigid or semi-rigid containers of plastic, glass, metal, or paperboard used to package anything sold in the city except for industrial goods and food stuffs not subject to the sales tax. The tax would have varied depending upon the materials used in the manufacture of each container. Higher rates were to have been assessed on materials that were deemed relatively difficult to collect, recycle, incinerate, or dispose of. It was assumed that the higher tax rates would have encouraged manufacturers and consumers to switch to less burdensome materials. The proposal also would have allowed a credit of one cent on any container certified by its manufacturers to be made of a prescribed minimum percentage of actually recycled scrap material. Another one cent credit would have been allowed on any container certified by the manufacturer to be part of a line of containers at least 60 percent of which were actually reused. The tax collection would have occurred at the wholesale level, although ultimate liability would have been on the retail level.

This proposal was passed by the New York Legislature for implementation in New York City. However, the New York City Council accepted only that part of the proposal allowing a three cent tax on plastic containers. This modification was viewed by the Society of the Plastics Industry (SPI) as discriminatory and the SPI took their case to court. The litigation that followed led to the ultimate demise of the proposal.

Recycling Tax

While the first two alternatives consider a tax on what can be termed the front end of the solid waste stream, the third alternative assesses a tax on the collection of the solid waste. A tax of 4 or 5% would be assessed on the homeowner's collection bill. The tax, collected by the garbage hauler, would be paid to the Department of Revenue. A tax of this sort has never been attempted.

General Revenue

A final option would be to take the funds from general revenue.

A more complete discussion of these alternatives follows.

PENNY-PER-POUND

A bill proposing a national disposal cost system was introduced by Senators Hart, Moss and Proxmire on May 23, 1973. The bill included several provisions to deal with the solid waste problem, one being a disposal charge of at least one cent per pound on all materials entering the solid waste stream. The costs would have been assessed at the rate of one cent per pound on the sale of all products, except consumables which have a service life of less than thirty years.

The EPA Administrator would also have been given the authority to adjust charges on products which would have resulted in unreasonable, adverse effects on public health or the environment, provided that a disposal charge would not have been less than the one cent per pound. This penny-per-pound charge would have been assessed on manufacturers at the point of the final configuration of the product prior to sale. This cost would undoubtedly have been passed on to the consumer. A credit against the charge could have been allotted in two cases: 1) if the product consisted of recycled or reused materials, 2) if the product was designated as returnable. The money raised from the tax would have been placed in an Environmental Trust Fund. Grants could then have been made to carry out the purposes of the Environmental Policy Act. The grants would have been administered by the Environmental Protection Agency.

This rate of one cent per pound was determined by calculating the costs of disposal for most municipal solid waste. A ton of waste costs approximately \$20 to collect, transport, and dispose of. This figure which adjusts to approximately one penny-per-pound became the basis for the proposed tax.

The objective of the tax was to internalize the costs of disposal and to assess the costs of disposal on the initial purchasing costs. In this way, a product that was costly to dispose of would also be costly to purchase and it was anticipated that this would provide an incentive to consumers to opt for products which were easier to dispose of.

Revenue Estimate

It is difficult to estimate the amount of revenue that would be raised as a result of such a tax. The Environmental Protection Agency estimated that \$800 million would be raised if the tax were perceived as a packaging tax. If a broader range of products was included, it would have generated as much as \$2 billion or more on the Federal level. On a solid waste per capita basis, this would convert to roughly \$40 million for Minnesota.

In order to reduce the amount raised, Minnesota could assess the disposal rate at less than one cent per pound. However, this might increase the administrative burden while decreasing the effectiveness of the tax.

Analysis

This proposal has been discussed at length at the Federal level. A series of hearings on this and other proposals was held on June 11 and 22, July 18, 19, 20, and 26, 1973. Testimony was presented by experts with a wide variety of technical and scientific backgrounds. Very few of the experts gave unqualified support to the tax proposal.

Proponents of this tax claim that the tax would create important environmental advantages including a reduction in the generation of solid waste while encouraging the recycling of materials. They argued that because a manufacturer would have been charged for disposal, he would face an economic incentive to reduce disposal costs. A reduction could be achieved by reducing the weight of the product, utilizing recycling materials, or making a product returnable. Steelmakers who utilize ferrous scrapmetal and paper manufacturers who utilize bottles would all receive reduced charges. A manufacturer who failed to reduce the disposal costs would find his product more expensive and less competitive than that of a manufacturer who successfully reduced his disposal costs. The demand for recycled materials would increase and this incentive would create a market for recycled materials. With more recycled materials used, fewer raw materials would be necessary.

Studies indicate that a one cent per pound tax on packaging at the federal level would reduce solid waste generation

by 441,000 tonnes per year and reduce raw materials consumption by 597,000 tonnes per year.²

When the demand for recycled materials increases, the prices being offered for recycled materials will also increase. For example, since paper manufacturers utilizing reclaimed fiber (recycled newsprint) will reduce their disposal fee, they will be inclined to buy more recycled newsprint to use in their manufacturing processes. This will increase the demand for recycled newsprint. In order to attract a supply of recycled newsprint, the prices for newsprint will rise. As the prices offered for recycled materials increase, more recyclable materials will be recovered from the solid waste stream. When it becomes economically viable, municipalities will make an effort to recover and sell their products to manufacturers. This will provide additional sources of revenue to municipalities while reducing the solid waste stream. A reduction in the solid waste stream would alleviate the burden on landfills. This reduced need for landfills would represent a savings to municipalities in land and equipment used for landfills.

Other advantages of a tax based on weight are: 1) it prevents discrimination against any one material, and 2) it is the least disputable method to measure the costs for collection and disposal of solid waste. The weight of materials would be fairly easy to assess at the time of shipping.

Opponents of the "penny-per-pound" tax argue that there are many weaknesses to this tax. Both environmental representatives and industry representatives opposed the tax.

Opposition centered on the administrative burdens inherent in the tax. A tax on weight would require a new bookkeeping system and an expanded bureaucracy to monitor the penny-per-pound tax, since no taxes are presently assessed by weight. This objection was offered in the previously mentioned congressional hearings by representatives of the General Council of the Treasury, The Institute of Scrap Iron and Steel, Inc., The Environmental Protection Agency, The Glass Container Manufacturers Institute, and the Treasury Department. Particular concern was expressed over the complexity, effectiveness, and enforcement of the tax. As one representative stated: "Taxes which are complex and which have unreasonable effects do not aid in achieving voluntary compliance which is so vital to the method under which our tax system operates."³

Two particular administrative problems were identified:

1. No procedure was defined for collection of the tax.

2. The penny-per-pound tax would have to be integrated into the existing provisions of the Internal Revenue Code relating to excise taxes since disposal charges would be excise taxes on the sale of products. This process would necessitate costly administration.

The bill would have provided the Administrator of the Environmental Protection Agency with the authority to vary the tax in the case of products which were either environmentally undesirable or which required higher than average disposal costs. However, tax variances would not be less than one cent per pound. This provision was criticized because it gave the Administrator too much latitude. It also gave him excessive flexibility to increase the charge at a later date and the legality of providing the Administrator with such authority was questioned.

Another argument was that a tax on weight would provide an incentive to switch to lighter weight materials such as aluminum and plastics, neither of which represents a sound environmental improvement. Plastics are a petroleum based material and their use for shortlived or "throwaway items" is of questionable value, especially when alternatives such as returnable glass exist. Manufacture of aluminum is highly energy-intensive. Information presented at the hearings compared the weight of competing packaging materials for beverage containers, in order to illustrate the discrepancy that would exist in the tax structure. The competing materials are aluminum, glass, and steel. A 12-ounce returnable glass beverage bottle weighs about 7.02 ounces; a steel can with aluminum end weighs about 1.9 ounces and an all-aluminum can weighs 0.77 ounces. The penny-per-pound tax would result in

the following added cost per 1000 12-ounce units.

| | |
|----------------------|--------------------------|
| Aluminum | \$0.48/1000 |
| Steel (alum. top) | \$1.18/1000 |
| All Steel | \$1.33/1000 |
| Glass Non-returnable | \$4.39/1000 |
| Glass Returnable | \$6.60/1000 ⁴ |

It is evident that such a tax would discriminate against the heavier materials of glass and steel and would encourage the production of plastic and aluminum. From an environmental standpoint, legislation should encourage glass returnable bottles and discourage the use of aluminum and disposable containers. Returnable containers, by virtue of the fact that they can be reused many times, reduce the amount of solid waste. On the other hand, non-returnable containers are used only once before being disposed of, thus adding unnecessarily to the solid waste stream. Returnables should be encouraged. This tax would not provide an incentive for reuse.

As well as encouraging lighter weight materials, this tax might have also encouraged an artificial reduction in product quality in order to achieve a lighter weight status. This might have actually resulted in increased waste, greater breakage in the transportation of the product, and reduced product lifetime. Such ramifications may be difficult to predict.

While proponents argued that the weight of products would be easy to ascertain, additional equipment and personnel

would be required to cover the weighing of products, resulting in increased expenditures by industry for office work and bookkeeping. These costs would have been passed onto consumers in the form of higher prices.

A penny-per-pound tax has been criticized for its regressiveness. The less affluent members of the economy generally spend a greater percentage of their incomes on products than do people with a high income. The affluent spend their money on luxuries, travel, and services as well as products. Therefore a tax based on the weight of products could be expected to result in a greater burden for the low-income people.

The effectiveness of the tax is also questionable. Since a charge of a penny-per-pound is a small percentage of the total cost of the product or package, it is unlikely that the charge will greatly influence consumer behavior. Consumers have become accustomed to inflationary price increases and it is unlikely that another increase would result in changed consumer buying patterns.

Possibly an effective way of applying the tax would be at the wholesale level, where the wholesaler would be aware of a substantial increase in costs for certain types of products and materials. However, the wholesaler could simply ignore the increased costs and pass them onto the consumer.

Testimony presented argued that other considerations, such as the ease or difficulty of collection, volume product

durability, and recycling feasibility should be taken into account. One environmentalist argued that incentives to use recycled materials may be preferable to "tax policies which tend to lock industries into special interest categories."⁵

It was pointed out that across-the-board increases may result in a vast difference as a percentage value of the product. A penny-per-pound tax on newspapers would represent 6.7% of its value while the same rate charge on a \$10 transistor radio would represent 0.1% of the radio value.⁶

Nearly every problem mentioned above would also be experienced on a state level. A further administrative complication might arise by its imposition on a state level since products move freely across state borders. The tax would only be established in Minnesota and not in neighboring states, creating a problem in taxing by weight those products entering Minnesota from other states.

Since the tax would be intended to raise only the \$1.5 million necessary to offset the money appropriated for the resource recovery grants-in-aid program, only a percentage of the penny-per-pound would be implemented. Perhaps one-tenth (or less) of a penny-per-pound would finally be assessed. This might further complicate the bookkeeping and administration of the tax and would increase the confusion over its implementation.

The Department of Revenue would undoubtedly encounter difficulties in auditing this tax. The costs of auditing and enforcing the tax would be high relative to the amount of revenue generated by the tax. As a result, it is conceivable that some retailers could avoid paying the tax entirely. The problem of enforcement is a serious one for without strong enforcement many advantages of the tax would be lost.

PENNY-PER-UNIT

A second alternative to the user fee would be to resurrect a tax that was attempted in New York City in 1971. The New York City Environmental Protection Administration submitted this proposal to the New York State Legislature, who in turn gave New York City the authorization to enact the tax in its entirety. This tax was called the recycling incentive tax, and is casually referred to as the penny-per-unit tax.

Under the New York proposal the tax was assessed on all rigid or semi-rigid containers of plastic, glass, metal or paperboard used to package anything sold in the city except for industrial goods and food stuffs not subject to the sales tax. The tax on each container varied from 1 to 3 cents depending upon the materials used in the manufacturing process. Higher rates would be assessed on materials that were difficult to collect, recycle, incinerate or dispose of. The higher rate was intended to encourage consumers to switch to more environmentally desirable containers. Containers using more than one component material were discouraged by establishing a tax rate based on the most expensive element used in the container. Thus, a package consisting of paper, aluminum and plastic would be taxed according to the most expensive material used, in this case, plastic.

Two tax credits were allowed under the New York pro-

posal. The first provided a one cent credit on the tax on any container certified by its manufacturer to be made of a certain percentage of recycled scrap material. It was reasoned that this would create a certain demand for scrap waste materials. The second credit was granted to any container certified by the manufacturer to be a type of container of which at least 60% was reused.

The tax did not vary according to the size of the container. A quantity of a product purchased in one large container would be charged one cent while the same quantity of product purchased in several smaller containers would be charged one cent for each container. This would encourage larger containers, which represent a high ratio of product to package, while avoiding the administrative difficulties that would be associated with trying to assess different rates on different sizes. Products which are contained in several packages e.g. a shampoo bottle inside a box, would be assessed for each container. It was believed that such practices would discourage excess packaging.

The New York City tax was to be collected at the wholesale level. However, a retail outlet that did not buy from a New York wholesale outlet would have been liable for the tax. For example, New York retailers who purchased goods from a Connecticut wholesaler would be liable for the tax.

This tax was designed to accomplish several objectives. First, it was meant to reduce the solid waste volume. This

would be accomplished in two ways. Initially there would be a market for recycled materials and it was anticipated that solid waste would be separated and the recyclables removed from the stream at the source. Incentives to reduce the solid waste stream would also be through the consumer's incentive to buy products that are easier to dispose of and products that are not encased in excessive packaging.

Second, the tax was intended to encourage recycling. It was also hoped that the tax would encourage a more easily managed combination of materials entering the solid waste stream.

Although the New York State Legislature gave New York City the authorization to enact the tax, the New York City Council implemented only the plastics portion of the tax. This was viewed as discriminatory by the Society of the Plastics Industry, which subsequently litigated this case. The SPI won the case with the tax being declared unconstitutional.

The implementation of this tax in the State of Minnesota would require altering the original proposal. Rather than varying the tax depending upon the material used in the manufacture of the container, the rate should be one cent per package to avoid the administrative and constitutional problems. The tax credit should also be excluded in the early stages in order to avoid excessive administrative difficulties. Because this tax may be regressive, it is recommended that food not subject to the sales tax be exempted from the penny-per-unit

tax. The tax would be imposed at the retail level. The retailer would keep track of the number of units sold in his establishment and pay one penny for each unit to the Department of Revenue. This increased cost to the retailer would be passed on to the consumer through higher prices.

Revenue Estimate

It is fairly difficult to estimate the amount of revenue that would be generated from this tax. Preliminary estimates from the Department of Revenue indicate that approximately \$10-15 million per year would be generated. Since it is difficult to estimate such sums accurately this figure should be viewed as a rough estimate of potential tax revenues.

If the tax were intended to raise only \$1.5 million, a percentage of the tax would have to be implemented. Perhaps one-tenth of one cent would be assessed on every rigid or semi-rigid container.

Analysis

The strongest argument in favor of the penny-per-unit tax is that it would encourage large containers and a reduction in excess packaging. Such a tax would complement current MPCA authority over packaging which does not presently cover packaging size or a "box within a box" excess packaging. Incentives for this plan would be similar to the New York City tax. A quantity of product that is purchased in one container will be taxed one cent. The same quantity of product that is pur-

chased in several smaller containers would be taxed one cent for each container. Thus since they are actually getting more for their money, consumers should be receptive to the idea of purchasing products in larger containers. Since large containers offer a higher ratio of product to package, they encourage less packaging per unit of product which ultimately lowers the amount of solid waste. Since large containers represent a reduced amount of solid waste and require less energy and mineral resources per unit of product, they should be encouraged.

In addition to discouraging large containers, the penny-per-unit tax would discourage excess packaging. Each packaging layer would be taxed one penny. A shampoo bottle inside a box will be charged two cents. Bottled shampoo without any outside container would be charged one cent. Under this tax, it would be cheaper to purchase products that are not encased in excess packaging. If fewer consumers buy multipackaged goods due to their higher prices, the demand for such packaging should decrease.

Studies indicate that a one cent tax per unit of packaging at the federal level would reduce solid waste generation by 2.3 million tonnes annually and reduce raw materials consumption by 3 million tonnes per year⁷.

A tax of this sort would be fairly easy to administer since it would not involve taxing a segment of the economy that had never before paid taxes. Since retailers presently remit

the sales tax to the Department of Revenue, the institution of a penny-per-unit tax would require the retailer to increase the amount of revenue remitted to the Department of Revenue and increase the cost of products to the consumer. The Department of Revenue has indicated that it is administratively easier to impose a new tax on a group that has a history of paying taxes than to impose a fresh tax on a new segment of the economy.

The earlier revenue estimate predicts that \$10-15 million would be raised each year in Minnesota. Although Minnesota would initially implement only a percentage of the penny-per-unit (perhaps one-tenth of a penny-per-unit) it could later expand the tax to a full penny-per-unit to generate additional funds. These funds could be used for larger solid waste projects, provided that extensive studies are done to determine economic feasibility and environmental benefits and costs.

However, this tax proposal is not without its problems. Representatives from the Department of Revenue speculated that difficulties would be encountered in auditing and enforcing the tax⁸. It is difficult to justify major auditing and/or enforcement of a tax which will generate only \$1.5 million. As a result, it is conceivable that some retailers could avoid paying the tax.

Just as the penny-per-pound tax tends to be regressive so does the penny-per-unit system. In general, people with a lower income generally spend a larger proportion of their in-

comes for products than do people with high incomes. This tax would therefore tend to penalize the lower-income groups. It could also become burdensome for elderly people living on fixed incomes since the prices of products would go up while their incomes remained stable. Economically, both of these results are undesirable.

Since the penny-per-unit tax may raise \$10-15 million or even more and appropriated grants-in-aid funds are but \$1.5 million, obviously a penny-per-unit tax could provide a workable funding alternative. Current grants-in-aid requirements could probably be met with a one-tenth of one cent per unit tax, which would raise the appropriate amount of revenue. However, such a fractionalization could complicate administrative procedures. It could also create problems for retailers who attempted to raise prices to cover the cost of the tax. Since a fractional increase would be impossible, in all probability they would raise individual product costs by a penny, representing an unfair burden for the consumer.

If the state should later wish to fund solid waste projects at higher levels, the penny-per-unit tax appears to be a feasible mechanism to generate the revenue with definite environmental advantages. However, at this time, applying a penny-per-unit tax to raise only \$1.5 million is not recommended.

RECYCLING TAX AS A PERCENTAGE OF THE SOLID WASTE BILL

A third alternative to the tax on solid waste at its final disposal site, as proposed under the 15¢ user fee, would be a tax on the party or parties that generate the solid waste. This tax would be assessed with refuse collection fees. A refuse hauler who presently charges a householder a monthly fee would be required to assess a 4 or 5% recycling tax on the normal collection charges. These funds would then be remitted to the Department of Revenue.

In order to determine the different methods of assessing for collection and disposal of solid waste, letters were sent to all village clerks listed in the League of Municipalities directory. Approximately 50% of the municipalities replied to the inquiry.

Responses indicate four methods of assessing for the collection and disposal of solid waste. Among the four methods, the most common is a separate bill for refuse removal on a monthly or quarterly basis. The second method is to provide the refuse collection service with charges included on water, sewer, or general utility bills. The third method of charging is through the sale of bags. Citizens pay for the bags necessary to dispose of solid waste. The price they pay, generally from 35-40¢ per bag, represents the cost of collection and disposal of solid waste. Under this method, the cost for

service is directly proportional to the amount of waste generated. The final method of charging for solid waste indicated by responses is for municipalities to provide refuse collection and to pay for the service out of the general fund. The citizens pay for this service indirectly through their property or real estate taxes.

The response to the PCA inquiry provided the following information.

- Sixty percent of the municipalities responding to the inquiry, representing forty-one percent of Minnesota's population reported that they used the separate billing method.
- Twenty percent of the municipalities responding to the inquiry, representing seven percent of Minnesota's population, reported that refuse collection charges were included on the water, sewer, or utilities bill.
- Ten percent of the municipalities responding to the inquiry, representing one percent of Minnesota's population employ the bag system.
- Six percent of the municipalities responding to the inquiry, representing fourteen percent of Minnesota's population, assess refuse collection via property or real estate taxes.

(For details see Appendix A)

Revenue Estimate

In order to determine the amount of revenue that would be raised by a tax on collection bills, it was necessary to estimate the amount of money spent yearly for refuse collection.

The following figures* were based on the response to the PCA letter inquiring into the methods of charging for refuse collection. The figures represent only those fees collected in municipalities responding to the PCA inquiry (63% of Minnesota's population).

The following revenue is spent in each of the four different methods:

| | |
|---|------------------|
| Separate billing | \$15,965,400 |
| Charges included with utilities | 2,593,998 |
| Bag system | 394,218 |
| Charges Assessed Through Property or Real Estate Taxes | <u>5,629,899</u> |
| Total | \$24,583,515 |

A total of \$24,583,515 was spent by 63% of Minnesota's population. A 4% recycling tax on this sum would generate \$983,341. A 5% recycling tax on this amount would generate \$1,229,176.

Since these figures cover only 63% of Minnesota's population, total revenues generated by such a tax would

* A more complete breakdown of the calculations are given in Appendix B.

obviously be even greater. An estimate based on the state's total population indicates the following possibilities:

A 4% recycling tax would raise approximately \$1.6 million.

A 5% recycling tax would raise approximately \$2 million.

Analysis

The existence of several different methods of assessing for the collection of solid waste requires that any legislation cover all existing financing methods. In addition to the methods mentioned above, some residents have no refuse collection at all. In these cases, the residents either haul their own refuse to the sanitary landfill or dispose of the refuse on their own property. Collecting the fee from such citizens would be difficult.

This proposal has many of the advantages of the user fee while creating fewer administrative difficulties. Walter Heller, a renowned economist from the University of Minnesota, expressed support for the 15¢ user fee for the following reasons:

- "1. It makes recycling more competitive with other forms of disposal;
2. It is administratively less costly and simpler than alternatives such as regulation or packaging taxes;
3. It attempts to assess a 'cost for natural resources

depletion and environmental impact' which present accounting methods fail to address. General revenue fails to do this."

A 4 - 5% recycling tax would retain the last two advantages while reducing administrative problems.

There would be no problems in establishing the unit of measurement, as experienced for the user fee.

In addition, this tax is more fair to rural constituents. As explained in the background section, rural collection fees are often less than metropolitan fees. Because the user fee would increase the collection charges by a given amount per year (\$1.50 - \$2.00 per household per year) this represents a greater percentage increase in rural areas than in metropolitan areas (see page 3). The proposal for a four or five percent tax on collection bills avoids this problem and represents a more equitable increase in collection fees.

The tax, by its assessment on solid waste collection, will be a periodic reminder that solid waste necessitates a costly disposal process. Such reminders should be encouraged so that Minnesotans will begin to realize the expense of refuse disposal and will attempt to reduce solid waste.

This suggestion does present some problems for solid waste haulers. These people would collect the tax and remit the fee to the Department of Revenue. Representatives of the Department of Revenue have indicated that it is generally more

difficult to administer a tax on a segment of the economy that has never before remitted taxes. This creates difficulty in familiarizing all refuse haulers affected with the tax procedures. A new bookkeeping procedure would have to be established to accommodate the new tax.

The refuse haulers would voice serious objection to a tax of this sort. Their objection would be similar to the objections voiced against the user fee because they oppose an additional tax burden and argue that services are not normally taxed.* They are also concerned that they will not receive the cooperation of their customers in paying an increased collection bill and will be forced to absorb the additional cost of the tax themselves.

Rural residents can be expected to object to this tax on many of the same grounds that they raised against the user fee. They are likely to oppose a tax for which they may receive no benefits. They perceive the grants-in-aid program as a benefit to metropolitan interests rather than to rural areas. The principal argument supporting this conclusion is that rural areas are not yet ready to implement resource recovery programs. Rural areas produce smaller amounts of solid waste due to low population density. There is also a problem associated with transporting recovered materials to distant markets. Rural officials argue that resource recovery is not

* An exception to this is the telephone company.

economically feasible in rural communities.

Thus rural leaders see little reason to support the grants-in-aid program.

An additional disadvantage of this tax is that it will not vary according to the quantity of goods purchased and thrown away. The tax will be a percentage of the solid waste collection bill which does not vary with the amount of solid waste generated, except in the case of the bag system.

A recycling tax on the collection bill would not affect those people who haul their own refuse. This tax might act as an incentive to terminate collection services and to carry refuse on an individual basis. This would not be a desirable reaction.

Many commercial and industrial groups provide their own collection services. Since they do not pay a separate collection fee, a recycling tax on the collection fee would not affect this group. The commercial and industrial sectors contribute a significant amount to the solid waste stream and should pay part of a solid waste tax.

Although the recycling tax does not create the same administrative problems as the user fee, it fails to appease political opposition. The refuse haulers are now organized through the Minnesota Waste Association, an association that was organized in the summer of 1973 specifically to assist in repealing the 15¢ user fee.

The political opposition to this proposal would make its implementation difficult. Although it maintains many of the advantages of the user fee and generates the appropriate amount of revenue, it also is certain to produce opposition equal to that of the user fee.

GENERAL FUND

A final alternative would be to take the funds out of general revenue. The arguments for this alternative, are that:

- 1) Administrative problems would be few.
- 2) There would be no costs for billing, collecting, and administering a new tax.
- 3) Everyone who pays taxes generates solid waste, therefore, the tax should be retrieved from the general fund, which is contributed to by all taxpayers.

The length of the resource recovery grants-in-aid program has not been determined. However, it will not be a perpetual program. Since it may be relatively short-lived, it is argued that it would be wiser to take the money from the general fund than to establish a new administrative tax structure for a tax that may not last longer than a few years.

Also, the intent is to raise only the \$1.5 million that was appropriated to the Pollution Control Agency. It is difficult to impose a tax intended to generate such a small amount.

As witnessed by the letters included in Appendix C, most of the groups that have been contacted regarding the alternatives feel that taking the revenue from the general fund, without any means to replenish the fund, is the best means of financing the current grants-in-aid program.

The main problem with this suggestion is the financial

limitation of the general fund. Although there is presently a \$300 million surplus, there are also many suggestions for utilizing the surplus. The solid waste program would be forced to compete with all other public services and other programs have traditionally fared better than solid waste programs. To recommend funding the grants-in-aid program out of the general fund without creating an alternative funding mechanism could jeopardize the entire program.

This alternative also has no source reduction incentives and the financing mechanism is in no way related to the amount of solid waste generated. The general revenue is usually furnished by taxes that do not relate to the amount of refuse generated. As a result, individuals would have no reason to reduce their particular amount of solid waste.

Considering the administrative difficulties of the three alternatives mentioned earlier, the option of taking the funds from the general revenue may be the most acceptable means of providing the \$1.5 million. If larger sums of money were required, the penny-per-unit or the recycling tax would be suggested. Taking funds from general revenue should be done with the understanding that the grants-in-aid program would not be perpetual.

CONCLUSION AND RECOMMENDATIONS

The weaknesses of the penny-per-pound proposal exceed its strengths. The penny-per-pound would create serious problems in administration and enforcement. Although the objectives of the proposal should be encouraged, they should not be established under the auspices of a penny-per-pound tax.

A tax of a penny-per-unit is recommended over a tax on a penny-per-pound of solid waste. The penny-per-unit tax, although it does present some administrative difficulties, would be easier to administer than a tax on weight. However, a penny-per-unit tax to raise only \$1.5 million is of questionable value, since the administrative costs of the tax would be significant. The state may later wish to fund solid waste projects at higher levels, and if so, it appears that the penny-per-unit tax would be a feasible mechanism for raising the funds and it would also have environmental advantages.

The recycling tax also appears to be feasible but would be subject to objections similar to those raised against the user fee.

Taking the funds from general revenue appears to be the best alternative for raising \$1.5 million. This sum of money is fairly small in terms of tax revenue and it is difficult to impose a tax meant to generate such a small amount of money. The program will not be perpetual and it would be best not to create a new, complicated tax structure for a program

that will exist for a short period of time and that does not require large amounts of money. This option would avoid administrative problems and would probably be supported by all special interest groups that might otherwise be affected by any one of the other alternatives. If larger amounts of money should later be needed, the penny-per-unit or the recycling tax should be considered. Letters included in Appendix C of this report support taking the funds from general revenue.

FOOTNOTES

- 1 Minn. Stat. §116F.03 (supp. 1973)
- 2 Taylor Bingham, et. al. An Evaluation of the Effectiveness and Costs of Regulatory and Fiscal Policy Instruments on Product Packaging (Research Triangle Park, North Carolina, March, 1974) p. 88.
- 3 Martin J. Bailey, Deputy Assistant Secretary for Tax Policy, Treasury Department in Hearings before the Subcommittee on Environment of the Committee on Commerce United States Senate Ninety-Third Congress First Session on S. 1112, S. 1593, S. 1816, S. 1879 and S. 2753. Miscellaneous Recycling and Solid Waste Source Reduction, June 11, 22, July 18, 19, 20, and 26, 1973, p. 496 (hereinafter referred to as Hearings before).
- 4 Statement presented by the American Iron and Steel Institute in Hearings before op. cit. p. 533.
- 5 Pat Taylor, Environmental Action, in Hearings before op. cit. p. 418.
- 6 Leonard S. Wegman, President, Leonard S. Wegman Co., Inc. in Hearings before op. cit. p. 324.
- 7 Taylor Bingham, et. al. op. cit. p. 102.
- 8 Meeting with representatives of the Department of Revenue, Oct. 24, 1974.

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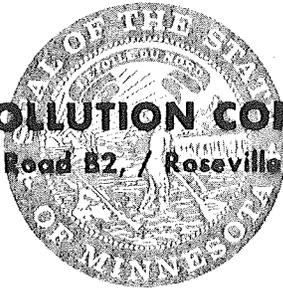
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- League of Women Voters of the United States. Recycle: In Search of New Policies of Resource Recovery (League of Women Voters Education Fund publication 132, Washington, D. C., 1972).
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- Robinson, Robert M. "Answering the Public's Cry". The APWA Reporter, Dec., 1973.
- United States Environmental Protection Agency. Guidelines for Local Governments on Solid Waste Management, a publication developed for the federal solid waste management program by the National Association of Counties Research Foundation, (an environment protection publication, Washington, D. C. 1971) chapter 6.

Appendix A

This appendix includes copies of the letters that were sent to all clerks listed in the directory of the League of Municipalities requesting information on methods of charging for solid waste collection and a summary of the data generated by the inquiry.

MINNESOTA POLLUTION CONTROL AGENCY

1935 W. County Road B2, / Roseville, Minnesota 55113



612-636-5740

March 28, 1974

Dear Sir:

The 1973 Minnesota Legislature passed a resource recovery act in May 1973. One section of the act appropriated \$1.5 million to the Minnesota Pollution Control Agency to institute a grants program for resource recovery throughout the state of Minnesota. This appropriation was to be funded by a 15¢ user fee on each cubic yard of solid waste that was disposed of in sanitary landfills and incinerators.

The 15¢ user fee was repealed in this session of the legislature in an amendment requiring that a study of alternative methods for future financing of the grants-in-aid program be completed by the MPCA by December 31, 1974. This study will be in cooperation with the League of Minnesota Municipalities.

In order to complete the study, it is necessary to compile a data base of the methods of financing the collection of solid waste throughout the state of Minnesota. Collection is financed through various means ranging from the property or real estate taxes to assessment through the water bill. In many communities the residents contract for the collection of solid waste on a private basis and pay the hauler through a solid waste bill.

It would be greatly appreciated if you could help provide this information. If you are unable to provide this information, we would also appreciate being directed to the proper contacts.

You may send this information to my attention or call us at (612) 636-5740, ext. 297. This number will be changed to 296-7297 after April 1.

Thank you for your cooperation.

Sincerely yours,

Constance C. Ennenga

Constance C. Ennenga
Research Scientist

CCE/re

MINNESOTA POLLUTION CONTROL AGENCY

1935 W. County Road 82, / Roseville, Minnesota 55113



612-296-7297

June 12, 1974

Dear Sir:

A letter dated March 28, 1974 was sent to all village clerks of the League of Minnesota Municipalities requesting information on the methods of financing the collection of solid waste/garbage. In order to complete a study of alternatives to the 15¢ user fee, a data base of the methods needs to be compiled. Although we know there are four basic methods of charging for solid waste including private billing, billing with the utilities, billing included in the property or real estate tax, and billing by the bag system, we do not know which methods are most frequently used throughout Minnesota. We would like to obtain this information in as complete a form as possible.

If you have not already replied to the March 28 letter, I would greatly appreciate your help in compiling this information. You may send this information to my attention (kindly include my name on the outside of the envelope) or call us at 296-7297.

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Ennenga".

Constance C. Ennenga
Research Scientist

CCE:ec

MUNICIPALITIES UTILIZING SEPARATE BILLING
FOR
COLLECTION OF SOLID WASTE

| <u>Municipality</u> | <u>Population</u> | <u>Municipality</u> | <u>Population</u> |
|--|-------------------|--|-------------------|
| Aitkin | 1553 | Bejou | 157 |
| Albertville | 451 | Bigfork | 399 |
| Alden | 713 | Big Lake | 1015 |
| Aldrich | 85 | Bird Island | 1309 |
| Altura | 334 | Birchwood | 926 |
| Amboy | 571 | Biscay | 105 |
| Apple Valley | 8502 | Bloomington | 81,970 |
| Arden Hills | 5149 | Blue Earth (part of city on bag system) | 3965 |
| Argyle | 739 | Bowlus | 268 |
| Arlington | 1823 | Braham | 744 |
| Askov | 287 | Brainerd | 11,490 |
| Aurora | 2531 | Branch | 880 |
| Austin (wet garbage, see also prop./real estate tax | 26,210 | Brandon | 414 |
| Avon | 725 | Breckenridge | 4200 |
| Badger | 327 | Brooklyn Park | 29,945 |
| Barnsville | 1782 | Brooks | 163 |
| Bayport | 2987 | Browerville | 665 |
| Belview | 429 | Browntown | 688 |
| Bemidji | 11,490 | Burtrum | 135 |
| Bertha | 512 | Byron | 1419 |
| | | Caledonia | 2619 |

| | | | |
|--|--------|--|---------|
| Callaway | 233 | Dellwood | 524 |
| Cambridge | 2720 | Dennison | 203 |
| Canby | 2147 | Detroit Lakes | 6352 |
| Carlos | 278 | Dodge Center | 1603 |
| Carlton | 884 | Duluth & surrounding areas | 100,578 |
| Carver | 669 | Eagan | 10,398 |
| Cass Lake City (city garbage from general acct. funds) | 1317 | Eagle Bend | 557 |
| Centerville | 534 | East Bethel | 2586 |
| Chaska | 5398 | Echo | 356 |
| Chatfield | 1885 | Eden Prairie | 6938 |
| Claremont | 520 | Eden Valley | 776 |
| Clarissa | 599 | Edina | 44,046 |
| Clements | 252 | Elk River | 2252 |
| Coleraine (part out of general fund) | 1086 | Elkton | 134 |
| Cologne | 518 | Elrosa (split between indiv. and city) | 203 |
| Coon Rapids | 20,505 | Erskine | 521 |
| Cottage Grove | 13,419 | Eyota Village | 639 |
| Crosslake | 894 | Fairfax | 1432 |
| Crystal | 30,925 | Farmington | 3104 |
| Currie | 368 | Fertile | 955 |
| Danmark | | Flensburg | 259 |
| Dayton | 2675 | Floodwood | 650 |
| Deephaven | 2853 | Foley | 1271 |

| | | | |
|---|--------|----------------|------|
| Forest Lake | 3207 | Hayward | 261 |
| Foxhome | 185 | Hewitt | 198 |
| Freeport | 593 | Hokah | 697 |
| Fridley | 29,233 | Hollandale | 287 |
| Garvin | 210 | Houston | 1090 |
| Gem Lake | 216 | Hugo | 2669 |
| Glenville | 740 | Isle | 551 |
| Glenwood | 2584 | Jackson | 3550 |
| Golden Valley | 24,246 | Jasper | 754 |
| Goodview | 1829 | Jeffers | 436 |
| Grand Meadow | 869 | Jenkins | 148 |
| Granite Falls | 3225 | Karlstad | 727 |
| Greenbush | 787 | Kasson | 1883 |
| Greenfield | 977 | Kennedy | 424 |
| Greenwood | 587 | Kenyon | 1575 |
| Grey Eagle | 325 | Kettle River | 173 |
| Hammond | 179 | Kiester | 681 |
| Hanley Falls | 265 | Lake Elmo | 3565 |
| Hardwick | 274 | Lake Lillian | 316 |
| Harris (See also bag system) | 559 | Lake Park | 658 |
| Hartland | 331 | Lake Wilson | 378 |
| Hastings (see also 12,195 special taxes) | | Lakefield | 1820 |
| Hayfield | 939 | Lakeland Shore | 72 |
| | | Lakeville | 7556 |

| | | | |
|--------------------------------------|--------|-----------------------------|--------|
| Lancaster | 382 | Medina | 2396 |
| Lanesboro (option for bag system) | 850 | Menahga | 835 |
| La Prairie | 413 | Mendota Heights | 6565 |
| Lauderdale | 2530 | Middle River | 369 |
| Lexington | 2165 | Millerville | 109 |
| Lino Lakes | 3692 | Minnetonka | 35,776 |
| Little Falls | 7467 | Minnetrista | 2878 |
| Little Sauk | | Moorhead | 29,687 |
| Littlefork | 824 | Morristown | 659 |
| Long Beach | 219 | Motley | 331 |
| Long Lake | 1506 | Mound on Lake Minnetonka | 7572 |
| Longville | 171 | MoundsView | 10,599 |
| Loretto | 340 | New Brighton | 19,507 |
| Lucan | 254 | New Hope | 23,180 |
| Madison | 2242 | New Ulm | 13,051 |
| Maple Grove | 6275 | New Munich | 307 |
| Mapleview | 328 | New York Mills | 791 |
| Maplewood | 25,186 | North Branch | 1106 |
| Marietta | 264 | North Oaks Village | 2002 |
| Marine on St. Croix | 513 | North St. Paul | 11,950 |
| Marshall | 9886 | Northfield | 10,235 |
| Mazeppa | 498 | Northome | 351 |
| McGregor | 331 | Norwood | 1058 |
| McIntosh | 753 | Oak Park Heights | 1256 |

| | | | |
|-----------------------|--------|------------------|--|
| Oakdale | 7795 | Rollingstone | 450 |
| Odin | 166 | Roseau | 2552 |
| Onamia | 670 | Rosemount | 4047 |
| Ormsby | 199 | Roseville | 34,438 |
| Orono | 6787 | Rush City | 1130 |
| Park Rapids | 2772 | Rutledge | 123 |
| Paynesville | 1920 | St. Anthony | |
| Pequot Lakes | 499 | St. Bonifacius | 685 |
| Perham | 1933 | St. Francis | 897 |
| Pine City | 2143 | St. James | 4027 |
| Pine Island | 1640 | St. Louis Park | 48,883 (Yr. bill = \$42/residence) |
| Pine River | 803 | St. Michael | 1021 |
| Plainview | 2093 | St. Paul | 309,866 (service to 15,500 pvt. haulers to 47,000 6-10,000 - no collection service at all) |
| Plymouth | 18,077 | St. Paul Park | 5587 |
| Prior Lake | 3660 | Savage | 3611 |
| Proctor | 3123 | Shafer | 149 |
| Racine | 197 | Shoreview | 10,978 |
| Raymond | 589 | Shorewood | 4223 |
| Red Wing (rural area) | 12,834 | Silver Lake | 694 |
| Revere | 166 | Skyline | 400 |
| Rice | 366 | South St. Paul | 25,016 |
| Richfield | 47,231 | Spring Lake Park | 6417 |
| Rock City | | Spring Valley | 2572 |
| Rockville | 302 | | |
| Rogers | 544 | | |

| | | | |
|-----------------------------------|--------|-------------------------------------|-----------|
| Staples | 2761 | West St. Paul | 18,802 |
| Stewartville | 2802 | Westbrook | 990 |
| Sturgeon Lake | 167 | Williams | 220 |
| Sunfish Lake | 269 | Windom | 3952 |
| Taconite | 352 | Winnebago | 1791 |
| Taylor's Falls | 587 | Winona (dry garbage - see gen. tax) | 26,438 |
| Tracy | 2516 | Woodbury | 6184 |
| Trimont | 835 | Woodland | 544 |
| Tyler | 1069 | Wrenshall | 147 |
| Urbank Village (Parks Prairie) | 125 | Wykoff | 459 |
| Utica | 1240 | Young America | 611 |
| Vadnais Heights | 3411 | Zimmerman | 495 |
| Vermillion | 1359 | Zumbro Falls | 203 |
| Victoria | 850 | | |
| Virginia | 12,450 | | |
| Waconia | 2445 | | |
| Wadena | 4640 | | |
| Wahkon | 208 | | |
| Waldorf | 285 | | |
| Walnut Grove | 756 | Municipalities Reporting | 278 |
| Waltham | 189 | | |
| Wanamingo | 574 | Total Population | 1,543,323 |
| Waseca | 6789 | | |
| Watertown | 1390 | | |
| Welcome | 694 | | |

MUNICIPALITIES UTILIZING BAG SYSTEM

FOR

COLLECTION OF SOLID WASTE

| <u>Municipalities</u> | <u>Population</u> | <u>Municipalities</u> | <u>Population</u> |
|-----------------------|-------------------|--|-------------------|
| Adams | 771 | Lafayette | 498 |
| Ashby | 415 | Lamberton | 962 |
| Balaton | 649 | LeRoy | 870 |
| Barrett | 342 | Lyle | 522 |
| Battle Creek | | Lynd | 267 |
| Beaver Creek | 235 | Melrose | 2273 |
| Browns Valley | 906 | Morton | 591 |
| Brownsdale | 625 | Nashua | 114 |
| Clara City | 1491 | New Auburn Village | 274 |
| Cottonwood | 794 | Nowcross | 137 |
| Courtland | 300 | Pemberton | 128 |
| Dalton | 221 | Prinsburg | 448 |
| Elbow Lake | 1484 | Red Lake Falls | 1740 |
| Elizabeth | 188 | Rose Creek | 390 |
| Erdahl | | St. Clair | 488 |
| Fairmont | 10,751 | Sargeant (balance paid w/federal rev. sharing) | 85 |
| Gaylord | 1720 | Tintah | 167 |
| Hanska | 442 | Truman | 1137 |
| Herman | 619 | Underwood | 278 |
| Heron Lake | 777 | Wendell | 247 |
| Hoffman | 627 | West Concord | 718 |
| Kandiyohi | 295 | Winthrop | 1391 |
| Kasota | 732 | Municipalities Reporting | 45 |
| | | Total Population | 38,109 |

MUNICIPALITIES INCLUDING BILLING
FOR SOLID WASTE COLLECTION ON
WATER, SEWER/UTILITIES BILL

| <u>Municipalities</u> | <u>Population</u> | <u>Municipalities</u> | <u>Population</u> |
|---|-------------------|-----------------------|-------------------|
| Adrian | 1350 | Eagle Lake | 839 |
| Albany | 1559 | Easton | 352 |
| Alberta | 140 | Ellsworth | 588 |
| Alvarado | 302 | Elmore | 910 |
| Audubon | 297 | Eveleth | 4721 |
| Aurora | 2531 | Excelsior | 2563 |
| Blaine | 20,568 | Fosston | 1684 |
| Blooming Prairie | 1804 | Frazee | 1015 |
| Brandon | 414 | Fulda | 1226 |
| Brewster | 563 | Gibbon | 877 |
| Bricelyn | 470 | Grygla | 211 |
| Chokio | 455 | Halstad | 598 |
| Clarks Grove (split between utility & gen. revenue) | 480 | Hamburg | 405 |
| Cleveland | 492 | Hancock | 806 |
| Cokato | 1735 | Harmony | 1130 |
| Cosmos | 570 | Hawley | 1371 |
| Dassel | 1058 | Henderson | 730 |
| Dawson | 1699 | Hendricks | 712 |
| Delavan | 281 | Hills | 571 |
| Dilworth | 2321 | Howard Lake | 1162 |
| Donnelly | 252 | Hutchinson | 8142 |
| | | Jordan | 1836 |
| | | Kinney | 325 |

| | | | |
|----------------|--------|-----------------------------|---------|
| Kerkhoven | 641 | Sacred Heart | 707 |
| Lake City | 3857 | Sartell | 2027 |
| Le Sueur | 3745 | Sebeka | 668 |
| Lester Prairie | 1162 | Shakopee | 7904 |
| Luverne | 4703 | Silver Bay | 3504 |
| Mabel | 888 | Sleepy Eye | 2530 |
| Madison Lake | 587 | Spring Grove Village | 1290 |
| Mankato | 30,895 | Springfield | 2530 |
| Maple Lake | 1124 | St. Peter | 8339 |
| Minneota | 1320 | Starbuck | 1138 |
| Montivideo | 5729 | Stewart | 666 |
| Mora | 2582 | Stillwater | 10,208 |
| Morgan | 972 | Thief River Falls | 8618 |
| Nielsville | 156 | Verndale | 570 |
| Northfield | 10,235 | Vernon Center | 347 |
| Ogema | 236 | Vesta | 330 |
| Ogilvie | 384 | Walters | 152 |
| Oklee | 536 | Waterville | 1539 |
| Olivia | 2553 | Waverly | 573 |
| Osakis | 1306 | Wells | 2791 |
| Pipestone | 5328 | Wheaton | 2029 |
| Preston | 1413 | White Bear Lake | 23,313 |
| Redwood Falls | 4774 | Wilmont | 390 |
| Rothsay | 448 | Winton | 193 |
| Rushmore | 394 | Worthington | 9916 |
| Russell | 398 | Municipalities Reporting | 95 |
| | | Total Population | 250,753 |

MUNICIPALITIES FINANCING SOLID WASTE COLLECTION
OUT OF
PROPERTY/REAL ESTATE TAXES

| | | | |
|---------------------|---------|-----------------------------|---------|
| Alexandria | 6973 | Twin Lakes | 230 |
| Austin (dry refuse) | 26210 | Waite Park | 2824 |
| Bloomquist | | Wayzata | 3700 |
| Bovey | 858 | Winona | 26,438 |
| Buffalo | 3275 | Winsted | 1266 |
| Chisholm | 5913 | | |
| Crosby | 2241 | | |
| Cuyuna | 82 | | |
| Ely | 4904 | | |
| Ghent | 301 | | |
| Hills | 571 | | |
| Hoyt Lakes | 3634 | | |
| Keewatin | 1382 | | |
| LeCenter | 1890 | | |
| Mayer | 325 | | |
| Mc Kinley | 317 | | |
| Minneapolis | 434,400 | | |
| Minnetonka | 586 | | |
| Beach | | | |
| Monticello | 1636 | | |
| New Germany | 303 | | |
| Red Wing | 12,834 | | |
| Renville | 1252 | Municipalities Reporting | 28 |
| Spicer | 586 | Total Population | 544,222 |
| Steen | 191 | | |

Appendix B

This appendix includes the calculations made to determine the amount of revenue that would be generated by the third alternative, recycling tax as a percentage of the solid waste collection bill.

REVENUE ESTIMATE FOR RECYCLING TAX

Available data indicates that roughly \$2.78 per household per month or \$33 per household per year is expended for solid waste collection. The U. S. Bureau of the Census states that an average household in 1971 contained 3.19 persons.* These two figures were used in the following calculations.

Separate Billing

Population: 1,543,323
Population/3.19 = 483,800 households
Households X \$33/year = \$15,965,400 = amount spent/year

Charges Included On Utility Bill

Population: 250,753
Population/3.19 = 78,606 households
Households X \$33/year = \$2,593,998 = amount spent/year

Bag System

Population: 38,109
Population/3.19 = 11,946 households
Households X \$33/year = \$394,218 = amount spent/year

Charges Assessed Via Property or Real Estate Taxes

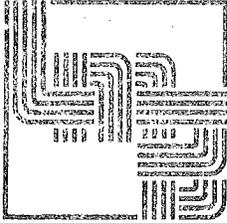
Population: 544,222
Population/3.19 = 170,603 households
Households X \$33/year = \$5,629,899 = amount spent/year

| | |
|--|--------------|
| Total revenue expended per year on solid waste collection | \$24,583,515 |
| A 4% tax would generate | 983,341 |
| A 5% tax would generate | 1,229,176 |

* U. S. Bureau of Census, Statistical Abstract of the United States, 1972 (93rd edition) p. 38.

Appendix C

This appendix includes the letters received regarding the alternatives discussed in the body of the report.



-65-

league of minnesota municipalities

November 12, 1974

Mr. Grant J. Merritt
Executive Director
Minnesota Pollution Control Agency
1935 W. County Road B2
Roseville, Minnesota 55113

RE: Alternatives to funding the recycling and resource recovery program

ATTN: Ms. Constance C. Ennenga
Research Scientist

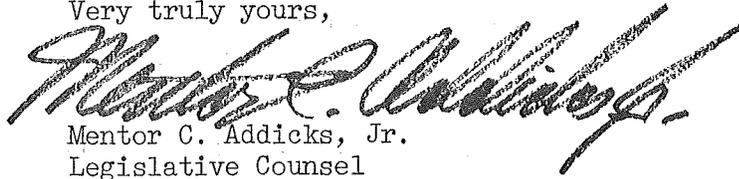
Dear Mr. Merritt:

We have reviewed the several alternative proposals for funding the P.C.A. comprehensive recycling and resource recovery program. These funding sources included: a penny tax on containers; the 15¢ per cubic yard user fee; a penny a pound; and a percent tax on the collection bill.

We concur with the effort to initiate a comprehensive recycling and resource recovery program, to conserve material and energy resources and to reduce the total amount of solid waste. However, in view of the importance of these efforts, they should be supported by state general revenues and need not be self-funding.

This position was adopted by the League membership at its annual meeting and will be our position in the 1975-1976 legislative sessions.

Very truly yours,


Mentor C. Addicks, Jr.
Legislative Counsel

MCA:ls

HENNEPIN COUNTY

3 December 1974

Ms. Constance C. Ennenga
Research Scientist
Minnesota Pollution Control Agency
1935 West County Road B2
Roseville, Minnesota 55113

Dear Connie:

I have reviewed the proposed "Container Tax Act" which proposes establishing a .one cent per container tax on containers used in Minnesota. I have also discussed this proposed tax with other Hennepin County Environmental Division staff and, as you recall, this was discussed in an informal meeting held at the Pollution Control Agency on November 7th to discuss this tax.

It is not necessary to state in this letter all the pros and cons of this proposed tax and other alternatives available to fund a resource recovery grants-in-aid program. After considering the advantages and disadvantages of each alternative, it is my opinion that in consideration of the amount of funds needed and in consideration of the purpose of the grant-in-aid program, the best funding source would be the general tax rather than another special tax.

Thank you for the opportunity to comment on this proposed container tax.

Sincerely,



David G. Winter
Management Analyst
Environmental Division

DGW/lp

cc: Luther D. Nelson, P.E.
Chief, Environmental Division



Metropolitan Inter-County Council

55 SHERBURNE
ST. PAUL, MINNESOTA 55103
(AREA CODE 612) 222-5823

December 13, 1974

Ms. Connie Ennenga
Research Scientist
Minnesota Pollution Control Agency
1935 W. County Road B2
Roseville, Minnesota 55113

Dear Ms. Ennenga:

For your information, I am writing to communicate the recent policy action of the Metropolitan Inter-County Council with regard to the extension and further funding of the PCA Resource Recovery Grants-in-Aid Program. On December 11, 1974 in regular session, the Board of Directors of MICC adopted the following policy position:

The Metropolitan Inter-County Council endorses and supports the extension of the MPCA Resource Recovery Grants-in-Aid Program for the next biennium and the funding of such a program from the State general revenue fund.

I would like to thank you for including MICC in your discussions over the past year on this matter and commend you and your staff on an objective and credible review of the problems. The overriding conclusion of MICC as reflected in the afore stated policy, is that the administrative difficulties and problems of equity which stem from a "special revenue source" are prohibitive for consideration. The general revenue fund, on the other hand, does provide logic and equity considering the conclusion that resource recovery is in fact "everybody's problem".

If we can provide you with additional information, or address these concerns further, do not hesitate to contact our office.

Sincerely,

Ralph L. McGinley
Deputy Director

RLM/cs

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