REPORT OF THE
JOINT SUBCOMMITTEE STUDYING

The Means and Methods of Providing for Safe, Economical and Efficient Disposal of Recycling Residues and Examining Tax Incentives to Encourage Recycling in the Commonwealth

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

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TABLE OF CONTENTS

Report of the Joint Subcommittee
Studying the Means and Methods of Providing
for Safe, Economical and Efficient Disposal of
Recycling Residues and Examining Tax Incentives
to Encourage Recycling in the Commonwealth
To
The Governor and the General Assembly of Virginia
Richmond, Virginia
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I. INTRODUCTION

The 1989 Session of the General Assembly passed House Joint Resolution 384, which requested that a joint subcommittee be established to (i) study means and methods of providing for safe, economical and efficient disposal of recycling residues and (ii) examine tax incentives to encourage recycling in the Commonwealth. A copy of HJR 384 (1989) is attached as Appendix A.

The membership of the Joint Subcommittee, appointed in accordance with HJR 384 (1989), consisted of the following individuals: Delegate Ford C. Quillen of Gate City (patron of HJR 384); Delegate Watkins M. Abbitt, Jr., of Appomattox; Delegate Jay W DeBoer of Petersburg; Delegate Lewis W Parker, Jr., of Mecklenburg; Senator Clive L. DuVal 2d of McLean; Senator Joseph V Gartlan, Jr., of Fairfax; Senator Madison E. Marye of Shawsville; William D Holly III, John W Olver; B. David Peck; and Betty Byrne Ware.

II. EXECUTIVE SUMMARY

The Joint Subcommittee established pursuant to HJR 384 (189) held four meetings during the course of its study At its first meeting, the Joint Subcommittee was briefed on the current state of scrap metal recycling in the Commonwealth, the concerns of scrap metal recyclers, and the type of tax incentives which have been enacted by Virginia and other states to encourage recycling.

At the Joint Subcommittee's second meeting, a representative of the scrap metal recycling industry in Virginia presented a detailed proposal designed to allow nonhazardous recycling residues generated by the industry to be deposited in landfills at tipping fees no greater than those charged for the disposal of nonhazardous municipal solid waste. The Joint Subcommittee also received testimony and proposals from individuals interested in promoting the recycling of oil.

The Joint Subcommittee's final two meetings consisted of work sessions to consider (i) the scrap metal recycling industry's proposal for recycling residues, (ii) tax incentives to encourage recycling, (iii) a requirement that plastic container products be labeled with a description of the type of plastic resin from which they are made, (iv) methods to encourage the recycling of lead acid batteries, (v) authorization for local governments to adopt ordinances granting the same price preference for the purchase of recycled paper as is currently given to the Commonwealth, (vi) means to assist local governments in complying with the recycling percentage mandates enacted by the 1989 Session of the General Assembly, (vii) a proposal designed to encourage recycling industries to locate in the Commonwealth, (viii) procurement and use of recycled products by state agencies, (ix) inclusion of recycling instruction in school curriculums, and (x) increased use of recycled materials in Department of Transportation construction projects.

After considering these proposals, the Joint Subcommittee developed the following recommendations:

1. That legislation be enacted which encourages landfills to accept nonhazardous recycling residues at reasonable tipping fees;

2. That the current litter tax be doubled in order to allow the Department of Waste Management to develop and implement a model recycling program serving one or more rural counties;

3. That all plastic container products sold or offered for sale in the Commonwealth should be labeled with information sufficient to determine the plastic resin used to produce the plastic container product;

4. That retailers and wholesalers of lead acid batteries should be required to take back used lead acid batteries from customers and that environmentally unsafe methods of disposing of such batteries be declared unlawful;

5. That legislation be enacted to allow localities to grant price preferences for the purchase of recycled paper to be used by any division, department, or agency of the local government;

6. That the Department of Waste Management be requested to identify current barriers to the procurement and use of recycled products by state agencies and to develop recommendations for removing such barriers;

7 That the Department of Education should develop guidelines for school recycling programs and include recycling instruction in school curriculums; and

8. That the Department of Transportation should use recycled materials in its construction projects.

III. BACKGROUND

In 1987 the Virginia General Assembly, recognizing that the Commonwealth, like most other states, was facing a solid waste disposal dilemma, initiated a study of alternatives for improving waste volume reduction and recycling efforts (Senate Joint Resolution 132, 1987) At that time, local governments in Virginia had the unenviable task of disposing of the ten million tons of nonhazardous waste being generated annually in the Commonwealth. The SJR 132 study subcommittee determined that while the amount of solid waste being generated within the Commonwealth continues to increase, landfill capacity is declining as many existing landfills reach capacity and new landfills become increasingly difficult to site due to public opposition, a lack of available open space suitable for landfill siting, and the environmental risks associated with the burial of solid waste. At the conclusion of its first year of the study, the subcommittee decided that a comprehensive statewide waste management program should be developed which would emphasize reducing the amount of solid waste generated, recycling, recovery of energy from solid waste which cannot be recycled, and the disposal by landfilling or other method of solid wastes which cannot be recycled and from which energy cannot be recovered. A statewide goal of recycling twenty-five percent of Virginia's solid waste stream by 1995 was recommended by the subcommittee and endorsed by the 1988 Session of the General Assembly For a report of the SJR 132 study subcommittee's activities during 1987, see Senate Document 22, 1988.

Pursuant to House Joint Resolution 80, 1988, the SJR 132 study was continued for an additional year in order to evaluate methods of promoting waste volume reduction and recycling, including the establishment of redemption values and recycling rates for beverage containers, regionalized approaches to solid waste management, and disposal methods for hard-to-recycle products. During 1988, many of the individuals who testified before the subcommittee indicated that recycling would be successful only if markets could be developed for products manufactured from recycled materials. Representatives of the scrap metal recycling industry told the subcommittee that federal regulations dealing with the disposal of certain recycling residues made it difficult to successfully conduct their business. Following numerous meetings in 1988, the subcommittee recommended that legislation be enacted which would require local governments to prepare solid waste management plans which identify how their locality or region could achieve the following recycling rates: ten percent by 1991, fifteen percent by 1993, and twenty-five percent by 1995. That legislation, together with a tire tax bill (also recommended by the HJR 80 study subcommittee) designed to promote the proper disposal and recycling of waste tires in the Commonwealth, was enacted by the 1990 Session of the General Assembly. In addition, the HJR 80 study subcommittee recommended that there be a further study of how best to dispose of certain recycling residues, including "fluff." The General Assembly agreed and enacted HJR 384 (1989), which called for the creation of the Joint Subcommittee submitting this report. For a report of the HJR 80 study subcommittee's activities during 1988, see House Document 60, 1989

IV. RECYCLING RESIDUES

During the course of its study, the Joint Subcommittee received extensive testimony and information regarding recycling residues, including the types and amounts of recycling residues currently generated, the reasons why such residues cannot be reused or recycled, and the problems associated with the disposal of certain recycling residues. Most of the testimony and information provided to the Joint Subcommittee related to the residues generated by the scrap metal recycling industry in Virginia.

Recycling is generally recognized as being a multiple-step process. Initially, used products, composed of one or more types of material, are collected from the waste stream. Materials recovered from these products which can be utilized in manufacturing new products are then segregated and reused. Unusable materials or materials remaining after the desired substances have been removed are commonly known as "recycling residues." The Joint Subcommittee learned that recycling residues are currently not reused or recycled for one or more of the following reasons:

1. No technology exists to convert certain materials into a reusable form;

2. Conversion technology currently exists, but its cost is prohibitive;

3. Affordable conversion technology exists, but markets for products manufactured from such materials do not exist or are too small to promote recycling; or

4. Certain residues may contain potentially harmful substances which prevent their safe reuse.

The disposal of recycling residues, like most solid waste, has traditionally been accomplished by landfilling. However, as landfill capacity in Virginia and throughout the nation continues to dwindle, the cost of residue disposal at landfills is rapidly increasing. In addition, recycling residues which contain potentially harmful substances may require more expensive disposal techniques due to increased federal and state environmental regulations. Furthermore, fear of the potentially large liability which may attach as a result of the mismanagement and improper disposal of certain contaminated recycling residues has caused tipping fees charged for the disposal of these residues to sky rocket.

A. Liability and Federal Law

Four federal laws exist under which liability may attach for the improper disposal or handling of certain recycling residues. The Toxic Substances Control Act of 1976 (TSCA) was the first of these laws to be enacted by Congress. Under TSCA, liability may attach for the improper disposal of materials containing polychlorinated biphenyls (PCB's) or other toxic substances. Congress has also enacted the Resource Conservation and Recovery Act of 1976 (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA); and the Superfund Amendments and Reauthorization Act of 1986 (SARA)

While RCRA focuses primarily on the management and regulation of hazardous waste disposal, CERCLA targets the cleanup of existing hazardous waste sites. RCRA and CERCLA authorize the federal government to clean up dangerous hazardous waste sites and to bring suit to recover the cleanup costs from the parties responsible for creating the site. To deter violations of these statutes and to finance the necessary cleanup of hazardous waste sites, both acts contain criminal and civil liability provisions. The civil liability provisions of RCRA and CERCLA designate categories of persons (generators, transporters, and disposal site owners/operators) responsible for the creation of hazardous waste sites and subject them to liability for the cleanup costs. Civil liability under these statutes is joint and several. The legislative intent behind CERCLA is to hold responsible for cleanup those persons who were involved in creating the hazardous waste and those who profited from its disposal. The scope of liability was contemplated to be extremely broad, including all parties who in some way contributed to the contamination or creation of the waste site. Cleanup costs generally run quite high. For example, from 1984 through 1985, the average cleanup cost at a Superfund site exceeded $12 million. Due to the statutes' joint and several liability provisions, any party that contributed to the contamination of the site can be held liable for the cleanup of the entire site, no matter how small that party's contribution.

With the enactment of SARA, Congress attempted to strike a greater balance between needing a comprehensive response to a serious problem and mitigating against the harsh operation of joint and several liability SARA includes a provision which directs the United States Environmental Protection Agency (EPA) to promulgate regulations for settlements with "de minimus" potentially responsible parties. EPA has now adopted these regulations, thereby providing for some correlation between the amount of liability imposed and the relative degree of contribution to the hazardous condition. However, as of June 1989, the use of "de minimus" settlements was extremely limited: such settlements had occurred in approximately three percent of all cases.

B. Liability and State Law.

In addition to the federal legislation, Virginia's statutes and regulations, as well as the common law doctrine of nuisance, may be relevant in determining to whom liability attaches for the improper disposal of recycling residues. Virginia Code § 10.1-1408.1 prohibits the disposal of solid waste in open dumps. That section also prohibits any person from owning, operating or allowing an open dump to be operated on his property Virginia Code § 10.1-1400 defines the term "open dump" as "a site on which any solid waste is placed, discharged, deposited, injected, dumped or spilled so as to create a nuisance or present a threat of a release of harmful substances into the environment or present a hazard to human health."

Virginia Code § 10.1-1402 authorizes the Virginia Waste Management Board to "[t]ake actions to contain or clean up sites or to issue orders to require clean up of [a] site where solid or hazardous waste, or other substances within the jurisdiction of the Board, have been improperly managed and to institute legal proceedings to recover the costs of containment or clean-up activities from the responsible parties." The section also authorizes the Board to "[c]ollect, hold, manage and disburse funds received for violations of solid or hazardous waste laws and regulations or court orders pertaining

thereto ..., for the purpose of responding to solid or hazardous waste incidents and clean-up of sites which have been improperly managed, including sites eligible for joint federal and state remedial projects under [CERCLA] ..., as amended by [SARA] ..., and for investigations to identify parties responsible for such mismanagement."

Finally, particularly relevant to the disposal of fluff is the Virginia Waste Management regulation regarding the disposal and storage of PCB's. This regulation specifies as follows:

> A. Solid wastes containing PCB's with concentrations of 50.0 ppm or more are regulated by the U.S. Environmental Protection Agency (EPA) and may not be disposed of or stored in the State without specific approval of the EPA. This prohibition includes all spill cleanup residues.
>
> B. Solid wastes containing PCB concentrations between 1.0 ppm and 50.0 ppm are restricted to disposal in sanitary landfills or industrial waste landfills with leachate collection, liners, and appropriate ground water monitoring as required in Part V of these regulations.

C. Fluff.

As previously indicated, most of the testimony and information provided to the Joint Subcommittee regarding recycling residues concerned those residues generated by the scrap metal recycling industry These residues, commonly referred to as "fluff," include materials such as foam rubber, plastics, and other nonmetallic materials generated by the shredding of automobiles, white goods (e.g. refrigerators, freezers and other large appliances), and other metal products.

Representatives of the scrap metal recycling industry testified at each meeting of the Joint Subcommittee. They indicated that the scrap metal recycling industry in Virginia currently employs 1,000 workers who are directly involved in the recycling of scrap metal. The industry also affects the jobs of thousands of other individuals employed by businesses which supply raw materials to the industry, or mills and foundries which receive the processed scrap. In 1988, the industry processed over one million tons of scrap metal in Virginia, while it generated approximately 165,000 tons of fluff.

Industry representatives voiced concern over the future of scrap metal recyclers in Virginia. They predicted that both the amount of residue which they generate and residue disposal costs they are forced to pay will increase. Unlike other industries, scrap metal recyclers cannot pass increasing disposal costs on to the consumer because the steel industry sets the prices for scrap metal. Neither can they offset increasing disposal costs by paying less for the metal objects they receive, because to do so would discourage the recovery of those types of waste. The Joint Subcommittee was informed that the threat of potential liability which may attach to the industry under CERCLA has produced a "chilling effect." A copy of a portion of the extensive position statement supplied to the Joint Subcommittee by representatives of the scrap metal recycling industry is attached as Appendix B.

V. TAX INCENTIVES TO ENCOURAGE RECYCLING

In addition to addressing the recycling "disincentives" currently faced by the scrap metal recycling industry, the Joint Subcommittee also considered ways to encourage recycling in the Commonwealth through the use of tax and other financial incentives. The Joint Subcommittee examined (i) recycling tax incentives enacted by other states, (ii) recycling incentives previously enacted in Virginia, and (iii) further tax incentives which might promote recycling in Virginia.

A. Recycling Tax Incentives Enacted by Other States.

As a majority of the nation's existing landfills are predicted to reach capacity in the next few years, many states have begun to enact legislation in an attempt to preserve and enhance their remaining disposal capacity Numerous states have considered tax legislation as a means of changing individual and corporate conduct regarding recycling.

The Joint Subcommittee was informed that some states currently impose a tax on the disposal of all waste in order to discourage disposal. Other states provide tax incentives for residents or businesses which recycle. For example, New Jersey, Oregon, and North Carolina provide state and local tax credits for the purchase of recycling equipment which will be used exclusively within the state. Attached as Appendix C is a matrix detailing each state's tax legislation enacted to encourage recycling or environmental protection.

Other states' recycling tax incentives can generally be divided into the following four categories: tax credits, tax exemptions, facility surcharges, and packaging or product taxes. Critics of current tax incentives indicate that few states have launched innovative or aggressive incentive programs to encourage industry to substitute recovered materials for virgin materials in their manufacturing processes or to encourage consumers to purchase items made from recovered materials in lieu of items made from virgin sources. They complain that tax credits, as usually structured, increase profits for businesses that already use recovered materials, but fail to increase the use of recovered materials by other businesses. They recommend that in order to develop markets for additional recovered materials, states must refocus tax incentives to encourage manufacturers to use more recovered materials in their manufacturing operations and to encourage consumers to purchase products made from those materials. In order to promote the use of recovered materials, these critics suggest that a tax policy should be implemented which makes recycled materials significantly cheaper to use than virgin materials. Furthermore, they contend that if industry is to increase its use of recovered materials, these businesses must also be assured of a significant consumer market for products made from recovered materials, a result critics believe can only be accomplished through the establishment of tax credits. To the extent that a product made from recovered materials is cheaper than, and of the same quality as, a competing item made from virgin materials, its sales should theoretically be competitive with products made from virgin sources. However, critics indicate that a number of market forces may prevent products made of recovered materials from developing an appropriate share of the market. According to these critics, tax incentives given to the consumer of the product would help overcome this problem.

B. Recycling Incentives Previously Enacted in Virginia.

The 1989 Session of the General Assembly enacted House Bill 1745, which requires the collection of a sales tax of fifty cents on each new tire sold in the Commonwealth. Revenues generated by this tax will be used to alleviate tire disposal problems in Virginia. The Joint Subcommittee was informed that although this bill is arguably the only "tax incentive" legislation ever enacted in Virginia to encourage recycling, the General Assembly has passed a number of other measures intended to promote recycling in the Commonwealth. A brief summary of this legislation is attached as Appendix D.

The Joint Subcommittee also learned that the use of tax incentives to combat environmental problems is not a novel approach in the Commonwealth. Tax incentives previously enacted in Virginia include income tax credits for renewable energy source expenditures; property and sales tax exemptions for certified pollution control equipment; property tax exemptions for certified solar energy equipment, facilities and devices; real estate and personal property tax exemptions for generating and cogenerating equipment used for energy conservation; the litter tax; and the soft drink excise tax. Consequently, the adoption of additional tax incentives to encourage recycling would be consistent with existing tax policies of the Commonwealth.

Information provided to the Joint Subcommittee indicates that despite the current lack of tax incentives to encourage recycling in Virginia, the Commonwealth has attempted to promote the waste minimization efforts of local governments. Since 1987, Virginia's Department of Mines, Minerals and Energy (DMME) has offered annual competitive grants to assist localities in studying alternatives to the landfilling of solid waste. These grants require a cash match, usually fifty percent, with a maximum of $20,000 provided by DMME. In 1988, DMME provided grants totaling $237,000. These grants were used by localities to conduct two waste-to-energy studies and twenty recycling studies. DMME allocated $350,000 for grants in 1989

C. Further Tax Incentives for Recycling.

At the Joint Subcommittee's request, the Department of Waste Management (DWM) presented a number of tax incentive options designed to encourage recycling in Virginia. DWM was specifically requested to calculate the revenues which would be generated by (i) doubling the rate of the current litter tax, (ii) tripling the rate of the current litter tax, (iii) creating a new solid waste management tax on all businesses similar to the existing soft drink excise tax but based on the number of employees of each business, (iv) increasing the list of business categories which must pay the current litter tax, (v) creating a new tax on all businesses based on gross receipts, and (vi) placing a fee on each ton of solid waste brought for disposal to a landfill or incinerator (a surcharge add-on to tipping fees)

According to estimates received from the Department of Taxation, for fiscal year 1988-89, DWM will receive approximately $1.5 million in litter control funds from revenues generated by the litter tax, soft drink tax, and beer and beverage tax. Fifty-one percent of these funds are anticipated to come from beer and beverage tax revenues, thirty-nine percent are expected to come from litter tax revenues, and ten percent are expected to come from soft drink tax revenues. Doubling these taxes would therefore provide $3 million in litter control funds, while tripling them would result in litter control funds of $4.5 million.

The Department of Waste Management also submitted the following revenue estimates:

1. For a new solid waste management tax on all businesses similar to the existing soft drink excise tax but based on the number of employees of each business, $23,312,200;

2. For a new tax similar to the litter tax except that the list of business categories currently subject to the litter tax would be expanded, revenues were predicted to be substantially higher;

3. For a new tax of $50 per business establishment on all businesses, $6,315,400; and

4. For a $2 per ton surcharge on all solid waste disposed of in landfills or incinerators, $18.6 million.

A copy of the revenue figures and information provided by DWM to the Joint Subcommittee is attached to this report as Appendix E.

VI. PROPOSALS CONSIDERED BY THE JOINT SUBCOMMITTEE

During the course of its study, the Joint Subcommittee examined a wide variety of proposals. These proposals dealt with recycling residues; tax incentives to encourage recycling; the recycling of plastics, batteries and oil; the procurement and use of recycled paper and other products by state agencies and local governments; means of encouraging recycling businesses to locate in the Commonwealth; and the inclusion of recycling in school curriculums developed by the Department of Education. This section of the report will describe all of the proposals that the Joint Subcommittee considered during its study

A. Recycling Residues.

Representatives of the scrap metal recycling industry submitted a comprehensive proposal to address the problems associated with waste materials (tires, batteries, oil, and fluff) generated by the shredding of automobiles. Under this proposal, the existing purposes for which moneys could be expended from the Waste Tire Trust Fund would be expanded to include programs for disposing or recycling waste batteries, waste oil, and fluff. The Waste Tire Trust Fund would be renamed the "Motor Vehicle Recycling Fund." To increase Fund revenues, an additional one dollar would be charged for the annual registration of every automobile in Virginia. This additional fee could raise approximately $4.8 million annually, all of which would be paid into the Motor Vehicle Recycling Fund. Expenditures from the Fund by DWM would be authorized to:

1. Underwrite the costs of developing and implementing (i) management and recycling plans for waste tires, waste batteries, and waste oil and (ii) plans for the testing of fluff. In addition, if shredder residues were found to be hazardous, expenditures from the Fund could be made to pay the increased costs of transporting such hazardous residues for disposal.

2. Award grants and loans to public and private research centers for the purpose of developing environmentally sound methods and technologies for recycling waste tires, waste batteries, waste oil, and fluff.

3. Underwrite the cost of additional personnel DWM will need in order to expedite the processing of certain permit applications.

4. Reimburse shredder operators for the costs they incurred in testing fluff prior to its disposal in landfills which received a permit under the expedited permit process authorized by this proposal.

5. Reimburse shredder operators for those costs of transporting and properly disposing of contaminated fluff which exceed the cost they would have paid for transportation and disposal of uncontaminated residues.

6. Pay localities for each inoperable vehicle disposed of at the expense of the locality (funds for this purpose currently come from the General Fund).

In order to create an incentive for landfills to accept nonhazardous shredder residues at the same tipping fee charged for the disposal of municipal solid waste, the proposal would require DWM to process a landfill permit application in six months if the applicant agreed to charge the same tipping fee for the disposal of shredder residues and municipal solid waste. To provide incentives for local governments to approve the siting of such landfills, the proposal would allow a jurisdiction to receive credit for each ton of shredder residue disposed of in such a landfill, up to a maximum five percent credit towards the 1995 twenty-five percent recycling requirement. A copy of this proposal is attached as Appendix F

B Tax Incentives to Encourage Recycling.

The Joint Subcommittee was presented with a proposal to double the current litter tax and to use the increased revenues for the development and implementation of a pilot rural recycling program. Proponents of this proposal indicated that while curbside recycling may work in urban areas, it is not feasible in the predominately rural counties of the Commonwealth. They argued that such a program is necessary to assist these counties in complying with the recycling mandates placed on them by the 1988 Session of the General Assembly

C. Recycling of Plastics.

Another proposal required that plastic containers sold in the Commonwealth be labeled to identify the type of plastic resin from which they were constructed. The proposal, based upon model legislation developed by the plastics industry, promotes the recycling of plastic products. Testimony indicated that many other states have already enacted similar legislation.

D Recycling of Batteries.

The Joint Subcommittee examined highly recommended model battery recycling legislation developed by Battery Council International. The proposed legislation would require battery retailers and wholesalers to accept from customers used lead acid batteries of the same type and in a quantity at least equal to the number of new batteries being purchased by the customer In addition, the legislation would prohibit disposal of lead acid batteries except by delivery to battery retailers or wholesalers, secondary lead smelters, or to a collection or recycling facility authorized to accept such batteries by the EPA or the Commonwealth. A copy of this model legislation is attached as Appendix G.

E. Recycling of Oil.

The Joint Subcommittee reviewed a number of proposals designed to encourage the proper disposal and recycling of used motor oil. One of these proposals would require that each automotive service station, marina serving powered watercraft, and retail outlet selling engine oil install and maintain waste oil retention facilities. A recovery fee would be charged for each quart of oil sold, and upon the return of used oil, the customer would be refunded a portion of the fee. The business would retain another portion of the fee to offset administrative and handling costs, while the remaining balance of unreturned fees would be forwarded to the Commonwealth and placed in a special fund which could be used to protect collection facility owners from the financial liability they might incur if they accept contaminated oil. The proposal also called for companies involved in the marketing of oil to contribute to this fund. Recyclers who collect the used oil from these collection facilities would be required to send copies of their records to oil retailers and the State.

A second proposal, based on Maryland's current waste oil disposal and testing program, would require the Commonwealth to maintain storage tanks for used oil. Private oil recyclers working in conjunction with the State would test the oil disposed of in these tanks for contaminants. To encourage participation by "do-it-yourself" oil changers, a state-funded public education program would be conducted to demonstrate the benefits of used oil recycling.

The Joint Subcommittee also considered a proposal which would have exempted businesses which both change and recycle oil from the current law's requirements of posting a sign informing the public where they can recycle their used oil. According to proponents, this requirement currently hurts these businesses because it requires them to advertise their competitor's names.

F. Local Government Procurement Preference for Recycled Paper

Representatives of local governments requested the Joint Subcommittee to recommend legislation which would authorize counties, cities and towns to adopt ordinances granting a price preference for recycled paper products in the bidding process. Proponents of this legislation indicated that enabling local governments to grant this preference, which is already authorized in the state bidding process, would encourage the use of recycled paper products.

G. Other Proposals from Local Government.

Local government representatives also requested that the Joint Subcommittee recommend the following:

1. Legislation which requires the State to provide financial and technical aid to localities for solid waste management programs;

2. Legislation which would require the State to assume an aggressive role in promoting the sale and marketing of recyclable materials;

3. Legislation which would require the State to creatively promote public participation in local recycling programs;

4. Legislation which would enable localities to require that local industries file reports on the volume of solid waste which they make available for recycling;

5. Legislation which would provide localities with the authority to (i) require that solid waste producers within their jurisdiction participate in recycling and (ii) impose civil penalties on recycling ordinance violators;

6. Legislation which would establish a deposit on glass beverage containers;

7 Legislation which would prohibit, or at least provide localities with the authority to prohibit, the use of nonrecyclable containers in take-out restaurants;

8. Legislation which would allow localities to construct landfills with single liners based upon an impact and risk analysis of a specific site;

9 Additional funding for DWM so that the personnel necessary to process permit applications within one year can be hired; and

10. Adoption of state programs which would promote the establishment and growth of recycling industries in the Commonwealth.

H. Encouraging Recycling Businesses to Locate in Virginia.

As previously indicated, many speakers supported the adoption of programs that would encourage the location of recycling businesses in the Commonwealth. However, after receiving testimony from representatives of the Department of Economic Development concerning the efforts currently being made by state and local governments in this area, the Joint Subcommittee determined that such programs are already in place.

I. Promoting the Procurement and Use of Recycled Products by State Agencies.

Environmentalists also encouraged the Joint Subcommittee to recommend that DWM study how the Commonwealth could most effectively promote the procurement and use of recycled products by state agencies. Testimony indicated that the increased use of recycled products by state agencies would (i) set a proper example for businesses and residents of the Commonwealth and (ii) encourage recycling in Virginia. The Joint Subcommittee was informed that such a study could identify current barriers to the use and procurement of recycled products by state agencies and would enable DWM to develop recommendations designed to remove these barriers.

J. Recycling in Schools.

The Joint Subcommittee considered requiring the Department of Education to (i) develop guidelines for recycling programs to be conducted in Virginia's schools and (ii) include recycling instruction in school curriculums. Proponents indicated that public awareness and education are necessary to ensure the success of recycling programs in the Commonwealth.

K. Use of Recycled Materials by the Department of Transportation.

The Joint Subcommittee was urged to recommend legislation which would require the Department of Transportation to utilize recycled materials in its construction and repair projects. Proponents indicated that recycled crumb rubber from tires could be used in paving roads and that recycled plastics could be used for guard rails and sign posts.

VII. FINDINGS AND RECOMMENDATIONS

During its final two meetings, the Joint Subcommittee considered most of the proposals described in the preceding section of this report and endorsed many of these proposals in whole or in part. In doing so, the Joint Subcommittee made the following recommendations:

1 That legislation be enacted which encourages landfills to accept nonhazardous recycling residues at reasonable tipping fees.

The Joint Subcommittee determined that while the economic and environmental benefits which inure to the Commonwealth and its residents as a result of the recycling of automobiles, white goods, and other metallic objects justify the imposition of an additional one dollar charge on automobile registrations, the additional cost of transporting and disposing of contaminated recycling residues should continue to be

borne by industry as a cost of doing business. In order to encourage localities to permit the siting in their jurisdiction of landfills which accept nonhazardous recycling residues, a credit of up to five percent of the mandated recycling percentage should be given to a locality which has a landfill within its jurisdiction which accepts recycling residues. Furthermore, the establishment of an expedited permitting process for landfill permit applicants who agree to accept nonhazardous recycling residues at a tipping fee not to exceed 150 percent of the tipping fee charged for nonhazardous municipal solid waste will (i) encourage landfills to accept such residues and (ii) reduce the cost of disposal of nonhazardous recycling residues. To ease liability concerns and ensure proper disposal, DWM should develop and implement a program for the testing of recycling residues to determine whether or not they contain hazardous substances. The costs incurred by DWM in developing and implementing the aforementioned expedited permit process, the recycling residue testing program, and a plan for the management and transportation of waste petroleum products should be paid for out of a fund consisting of revenues generated by the additional one dollar charged for motor vehicle registrations. This fund should also be used to pay for research projects designed to develop environmentally sound methods and technologies for recycling waste tires, waste petroleum products, and those residues which currently remain after recycling takes place. A copy of legislation implementing this recommendation is attached as Appendix H.

2. That the current annual litter tax levied under subsection A of § 58.1-1707 be doubled in order to allow DWM to develop and implement a model recycling program serving one or more rural counties.

The Joint Subcommittee finds that while a curbside collection recycling program may be successful in urban areas, the establishment of such a program in rural areas would probably be cost prohibitive. Consequently, in order to assist rural counties in developing regional or local solid waste management plans in accordance with Virginia Code § 10.1-1411, DWM should develop and implement a model rural recycling program. Many rural jurisdictions throughout the Commonwealth may not possess the fiscal or technical resources to develop such a plan independently By doubling the current litter tax of ten dollars, sufficient funds would be generated for such a program. A copy of legislation implementing this recommendation is attached as Appendix I.

3. That all plastic container products sold or offered for sale in the Commonwealth should be labeled with information sufficient to determine the plastic resin from which they are made.

The Joint Subcommittee finds that in order to encourage the successful recycling of plastic container products, such products should be labeled to indicate the plastic resin used to produce the product. As the process used to recover plastic varies depending upon the type of plastic resin, it is important that such products are able to be conveniently sorted based upon the type of plastic resin they contain. A copy of the legislation implementing this recommendation is attached as Appendix J

4. That retailers and wholesalers of lead acid batteries in the Commonwealth should be required to accept used lead acid batteries from customers purchasing new lead acid batteries and that environmentally unsafe methods of disposing of such batteries should be declared unlawful.

The Joint Subcommittee finds that although most retailers of lead acid batteries already take used lead acid batteries back from customers who are purchasing new batteries, many used batteries are still finding their way into landfills and open dumps. The Joint Subcommittee believes that by requiring wholesalers and retailers to accept used batteries from customers, battery recycling will be encouraged and fewer batteries will be disposed of illegally A copy of legislation implementing this recommendation is attached as Appendix K.

5 That legislation be enacted to allow localities to grant price preferences for the purchase of recycled paper to be used by any division, department, or agency of the local government.

The Joint Subcommittee finds that by allowing local governments to enact ordinances requiring that a price preference be given to bidders offering recycled paper, the use of products manufactured from recycled paper will be encouraged. Such a price preference conforms to the intent of legislation enacted in 1989 which grants state agencies the authority to purchase recycled paper as long as the bid for recycled paper does not exceed the bid of a supplier of virgin paper by more than ten percent. A copy of legislation implementing this recommendation is attached as Appendix L.

6. That DWM be requested to identify current barriers to the procurement and use of recycled products by state agencies and to develop recommendations as to how these barriers may be removed.

The Joint Subcommittee finds that in order to set an appropriate example for residents and businesses, the Commonwealth should procure and use products manufactured from recycled materials. However, in order to most effectively promote the Commonwealth's use of these products, the Commonwealth must first identify any current barriers to the procurement of recycled products, including any exemptions, subsidies, or other means by which virgin materials are unfairly favored over recycled materials. Once these barriers are identified, recommendations should be developed to eliminate them. A copy of legislation implementing this recommendation is attached as Appendix M.

7 That the Department of Education should develop guidelines for school recycling programs and include recycling instruction in school curriculums.

The Joint Subcommittee finds that in order to promote recycling in Virginia, the Commonwealth's schools should educate students on the benefits of recycling. To this end, school recycling programs should also be encouraged.

8. That the Department of Transportation should use recycled materials in its construction projects.

The Joint Subcommittee finds that recycled materials could be utilized by the Department of Transportation in paving and repairing roads, as well as in other Departmental projects. The use of crumb rubber and recycled plastics in these projects will help create markets for these recycled materials.

Respectfully submitted,

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VIII. APPENDIX GUIDE

Appendix A - House Joint Resolution No. 384

Appendix B - Scrap Metal Recycling and Shredder Residue Disposal

Appendix C - Matrix: Tax Incentives Enacted by Other States

Appendix D - Legislation to Encourage Recycling in the Commonwealth

Appendix E - Tax Incentive Options

Appendix F - Scrap Metal Recycling Industry Proposal

Appendix G - Model Battery Recycling Legislation

Appendix H - Joint Subcommittee Recommendation No. 1

Appendix I - Joint Subcommittee Recommendation No. 2

Appendix J - Joint Subcommittee Recommendation No. 3

Appendix K - Joint Subcommittee Recommendation No. 4

Appendix L - Joint Subcommittee Recommendation No. 5

Appendix M - Joint Subcommittee Recommendation No. 6

Appendix A

GENERAL ASSEMBLY OF VIRGINIA -- 1989 SESSION

HOUSE JOINT RESOLUTION NO. 384

Establishing a joint subcommittee to study the means and methods of providing for safe, economical and efficient disposal of recycling residues and to examine tax incentives to encourage recycling in the Commonwealth.

Agreed to by the House of Delegates, February 24, 1989
Agreed to by the Senate, February 23, 1989

WHEREAS, the recycling of solid wastes advances several important societal interests, including the conservation of natural resources, the conservation of landfill space and the maintenance of a cleaner and healthier environment; and

WHEREAS, the General Assembly of Virginia has established as a goal the recycling of 25 percent of the solid waste stream by 1995; and

WHEREAS, the scrap metal industry contributes significantly to the recycling process by recycling metals from junked automobiles, appliances and other large metallic items which otherwise would be discarded in landfills or across Virginia's countryside; and

WHEREAS, the scrap metal industry is experiencing increasing difficulties in disposing of the nonmetallic residue from the recycling process, the principal residue being commonly referred to as "fluff" and consisting primarily of plastics, insulation and foam rubber; and

WHEREAS, there are other forms of recycling that generate residues that are difficult to dispose of, and the difficulty of disposal discourages and threatens the continued existence of scrap metal and certain other forms of recycling; and

WHEREAS, it is important to the Commonwealth that the recycling industry be able to continue its operations; and

WHEREAS, Virginia, like many other states, needs to discover alternative methods for disposing of the 27,000 tons of solid waste daily generated across the Commonwealth; and

WHEREAS, the disposal of solid waste has become a serious problem because many of the existing landfills in the Commonwealth have reached capacity and new landfills are too expensive to establish; and

WHEREAS, many other states, such as Florida, have recognized the positive benefits of recycling and enacted tax and other financial incentives to encourage such businesses to expand; and

WHEREAS, Virginia should examine alternative tax and other financial incentives which could be enacted to encourage industries to incorporate recycling into their manufacturing process, to assist in resolving the solid waste disposal problem existing in the Commonwealth, and to encourage citizens to develop recycling businesses; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That a joint subcommittee be established to study the means and methods of providing for safe, economical and efficient disposal of recycling residues and to examine tax incentives to encourage recycling in the Commonwealth. The joint subcommittee shall consist of eleven members to be appointed as follows: four members of the House of Delegates to be appointed by the Speaker of the House, three members of the Senate to be appointed by the Senate Committee on Privileges and Elections, and four citizen members to be appointed by the Governor, one of whom represents the scrap metal recycling industry, one of whom represents the relevent scientific disciplines, one of whom represents environmental defense advocates, and one of whom represents landfill operators. The Department of Waste Management and all other agencies of the Commonwealth shall cooperate with the study and provide assistance and technical expertise. The joint subcommittee shall report its findings and recommendations to the General Assembly prior to the 1990 Session as provided in the procedures of the Division of Legislative Automated Systems for processing legislative documents.

The indirect costs of this study are estimated to be $11,490; the direct cost of this study shall not exceed $9,140.

Appendix B

Scrap Metal Recycling Industry Position Statement

I. Overview and Summary

Virginia has mandated recycling of at least 25 percent of all solid waste by 1995. It is important to our environment that Virginia meet and even exceed this obligation.

In the understandable rush to address the problem of solid waste disposal and the need to recycle and recover more of our solid waste, we have overlooked Virginia's oldest and most successful recycling effort -- our scrap metal recycling industry. This industry annually recycles over one million tons of scrap metal in Virginia.[1] Much of this scrap metal comes from familiar consumer goods such as automobiles, appliances, typewriters, cabinets, etc. as well as an untold variety of less familiar commercial and industrial metal objects, many of which would otherwise litter our landscape or occupy scarce landfill capacity if not recycled.

In addition to the significant environmental benefits obtained from scrap metal recycling, this industry plays an important role in Virginia's economy. The industry itself employs in Virginia over a thousand people and thousands more are employed in either supplying raw materials to the industry or in working for mills and foundries which receive the processed scrap. Moreover, the capital costs of participating involve millions of dollars worth of advanced, state-of-the-art equipment needed to process raw scrap into numerous grades of finished

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[1] This does not include the tremendous amount of unused beverage cans recycled in Virginia each year

scrap metal. A single scrap metal processing machine today can cost anywhere from $100,000 for a small baler to between $2 to $5 million for a state-of-the-art shredder.

While recycling and recovery of non-metallic solid waste is important, the massive amount of waste metal recycled by Virginia's scrap metal recycling industry (the "Industry") graphically illustrates the importance of scrap metal recycling to the Commonwealth and its citizens. Virginia cannot begin to achieve its recycling goals without a successful scrap metal recycling industry.

Regretfully, a combination of factors has led to a situation that has begun to affect the Industry, and which, if not addressed, threatens to seriously undermine the scrap metal recycling effort in Virginia.

Although the Industry has always generated a certain amount of non-metallic waste residues, historically the disposal of these residues generally has not presented a serious problem for several reasons. First, the volumes of residues generated in relation to the volumes of scrap metal processed were generally small; second, the nature and variety of most of the substances making up the non-metallic residues were generally known; and finally, there were few regulatory requirements governing the disposal of these residues. However, as manufacturing standards have changed in recent years due to consumer demand, there have been increasing volumes and varieties of non-metallic materials and substances arriving with the raw scrap metal. This, together with the ever-increasing regulation of the disposal of these

non-metallic materials and substances, is beginning to impact the Industry and threatens to disrupt the market forces that make scrap metal recycling work in Virginia.

In effect, the Industry has become a "dumping ground" for much of society's "throw away" wastes, both metallic and non-metallic. Society's demand for lighter weight products and the increasing availability of new manufacturing components have led to the increasing use of non-metallic materials in the manufacture of metallic consumer goods. For example, the average automobile today contains a significantly higher percent of non-metallic material than it did 30 years ago, with the non-metallic components consisting of sophisticated paints, coatings, plastics, and rubber materials that serve both functional and aesthetic purposes. The average kitchen appliance today contains less metal than it did years ago. Household siding that years ago was totally metal today is coated with exotic non-metallic substances designed to improve its appearance and wear. The list could go on and on.

Unfortunately, the total burden of properly managing and disposing of the residual wastes from scrap metal processing has fallen not on the generators or consumers of this material but on the Industry.

In spite of the complexity and sophistication of its operations, however, the Industry is finding it increasingly difficult to deal with the growing volumes and varieties of non-metallic wastes it receives each day. All of Virginia's scrap metal recyclers have begun inspection programs designed to

locate and remove from incoming scrap those objects and materials known to have the potential to contaminate the non-metallic waste residues to the point where they would be deemed to be toxic or hazardous under federal or State law. Nevertheless, given the nature and volumes of materials constantly arriving each day at scrap metal processors around the State, it is impossible to make these programs foolproof, and unwanted substances do find their way into the non-metallic residues.

The Industry is caught in the middle between the need to properly manage and dispose of these growing volumes of non-metallic waste residues and an increasingly aggressive regulatory system that each year is imposing new and more stringent requirements on their management and disposal.

The effects of these developments are beginning to be manifested in a number of ways. Landfill disposal costs are rising at an alarming rate due to the requirements of the Department of Waste Management's new solid waste regulations. Further, in two recent cases, a landfill operator insisted on handling shredder residue separately and charging twice the rate for disposing of this residue that it charged for disposing of municipal solid waste ("MSW"). The operator's position was apparently based on the perception that shredder residue is a special waste that poses some risk greater than the risk posed by MSW. In addition, the Environmental Protection Agency has threatened enforcement action against the Industry based on the presence of PCBs in shredder residue. These threats have led many shredder operators in the Industry to either stop accepting

or cut back on accepting household appliances, which are the principal suspected source of the PCB problem. As a result of this cutback, appliances are being dumped with increasing frequency along our countryside.

Based on the experiences to date and the clear trends that are developing, the Industry believes that, in addition to paying the increasing costs of landfill disposal being experienced generally, Industry members will either be forced (1) to pay fees for scrap metal recycling residue over and above the fees charged for MSW at the same landfills or (2) to transport their residue long distances to avoid such costs.

Two Industry members are currently transporting their shredder residue over one hundred miles because they were first denied access to a nearby debris landfill and then told they would be charged twice the fee for MSW at a second nearby sanitary landfill. Unable to raise the prices for their processed scrap metal to cover these costs, Industry members will have no choice but to either reduce the prices they pay for raw scrap or actually charge to accept it. The result will be disruption of the market forces that make the Industry work.

If these trends continue, at the very least, it can be expected that some portion of the scrap metal that is now recycled will go to landfills or be discarded along our countryside.

In addition to the foregoing direct costs, the potential for massive liability associated with the management and disposal of shredder residues will act as a disincentive to the continued

investment of capital needed to maintain the healthy, growing industry that is essential if the State is to keep pace with the ever-increasing volumes of scrap metal generated each day.

Finally, the trend toward the use of more and more non-metallic materials in metal products will mean that larger and larger volumes of recycling residues will need to be landfilled, taking up valuable landfill space and further burdening the Industry. The importance of the Industry to Virginia's recycling effort requires that the State ensure the Industry that it is able to function and serve the societal interests which have led to that recycling effort.

In the process of developing our proposal, the Industry evaluated a number of alternatives. This evaluation process and the proposal ultimately selected were based upon several fundamental principles. These principles are described in detail later in this presentation; however, they may be briefly summarized as follows:

- Scrap metal recycling serves the public interest;
- The burdens now totally borne by scrap metal recyclers are a function of our societal interests in utilizing the kinds of goods that create the residue disposal problem;
- Society, represented by manufacturers and consumers, should share this burden; and
- It is in the public interest to develop and implement technologies to recycle and recover scrap metal recycling residues.

Most of the alternatives evaluated by the Industry were rejected for a variety of reasons. Fundamental to our evaluation

was the belief that shredder residue should not be exempted from any of the legal requirements governing its management and disposal. The proposal ultimately selected and presented here consists of several practical and workable elements. We believe the combination of these elements will address the short-term need to ensure affordable landfill capacity and reduce the Industry's potential liabilities while establishing a means to provide a long-term solution through the development and implementation of technologies to recycle and/or recover recycling residues.

II. The Scrap Metal Recycling Industry in Virginia

A. Industry Components

In order to fully understand the nature of the recycling residue problem facing the Industry, it is important to first have a basic understanding of the Industry itself.[2] The scrap metal industry consists of three basic components, each of which is critical to the Industry and the scrap metal recycling effort in Virginia. These components are (1) the generators of scrap metal, (2) the scrap metal processors, and (3) the markets for processed scrap metal.

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[2]At the outset, it must be emphasized that there are so many aspects to the Industry and so many variables that affect its day-to-day operations that it is impossible to completely describe the Industry in an undertaking of this nature. Further, while we have attempted to provide a basic understanding of the types of scrap metal processed by the Industry, the sizes, shapes, conditions, sources, and functions of the objects processed in the Industry are virtually limitless and cannot be fully described in this presentation.

1. Generators of Scrap Metal

Although the sources of scrap metal are numerous and varied, they generally fall into one of two categories - industrial accounts and collectors.

a. Industrial Accounts - Industrial accounts consist of both public and private sources that, due to the nature of their operations, generate large volumes of scrap metal. Because of the volume of scrap they generate, these sources generally contract directly with scrap metal processors for the transportation and processing of their scrap metal.

Examples of industrial accounts that are public in nature include the Virginia Department of Highways and Transportation (signs, guardrails, vehicle parts, etc.), the Virginia Department of Corrections (license plates, machine parts, structural steel, etc.), federal military facilities such as Quantico and the Norfolk Naval Shipyard (weapons parts, vehicle parts, structural steel, ship parts, etc.), and local governments (street lights, signs, street poles, metal recovered from landfills, etc.).

Examples of industrial accounts that are private in nature include large manufacturing facilities such as DuPont, Western Electric, Chesapeake Corp. (machine parts, wire, structural steel, etc.), and small businesses such as machine shops, auto repair shops, farms, and sawmills (machine parts, discarded equipment and equipment parts, auto parts, etc.). Industrial accounts also include sources such as utilities (boilers, electrical equipment, structural steel, etc.), railroads (railcars, track, equipment, etc.), the mining industry

(equipment, structural steel, etc.), the maritime industry (ship hulls, ship parts, equipment, etc.), and the demolition industry (structural steel, boilers, siding, sheet metal, etc.).

b. Collectors - Collectors include the thousands of individuals, charitable organizations, and small businesses and entrepreneurs across Virginia that bring into processors their own scrap metal, scrap metal collected from others, or scrap metal that has been abandoned or discarded. Recycling scrap metal usually includes the kinds of objects that typically require sizing as well as shredding or shearing to remove their non-metallic parts. Examples of material shredded would include automobiles and white goods such as refrigerators, ovens, air conditioners, washers and dryers, microwave ovens, etc. In addition, collectors supply miscellaneous objects such as computers, typewriters, cabinets, used beverage cans, wire, sheet metal, etc.

c. Incentive to Recycle - Industrial accounts and collectors are motivated to recycle because they are paid by scrap processors for their scrap metal. The amounts paid to these scrap metal sources on the other hand will vary depending on the volume, type of metal, and the extent to which it has to be processed. These payments are critical to the supply of raw materials for the successful operation of the Industry.One factor that is very important to collectors is their proximity to the scrap processors. Whether or not the collector's scrap will get to the processor depends directly on the cost to the collector of transporting that scrap. If the local market will not adequately

compensate the collector, the scrap, without any other incentive, will not find its way to market.

2. Scrap Metal Processors

After scrap metal processors receive scrap metal from industrial accounts and collectors, they process the raw metal into various sizes and segregate it into numerous grades according to size, density, metal content, and the presence of foreign material such as rust, paint, etc. The processed scrap is then sold to steel mills and foundries based upon strict quality standards set by the steel industry. Scrap processors have very little control over the price they can get from the steel mill for their scrap.

Processors generally fall into one of three categories - those with shredders, those without shredders, and specialists such as Reynolds Metals Co. that process only particular kinds of metals such as aluminum. All operate from fixed locations, and should be distinguished from scrap metal drop-off stations, which do no processing.

Processors without shredders usually have the capability to cut metal objects using shears or propane cutting torches. Although processors without shredders generate non-metallic residues from their operations, these residues have not yet created a disposal problem.

Virginia has two kinds of processors with shredders. The predominant shredder operators are processors whose only business

is scrap metal processing. Second are steel mills that not only buy scrap metal from other processors, but also meet some of their demand by shredding scrap metal on-site. The following are Virginia's scrap metal processors with shredders and the approximate tonnages of scrap metal that they produce each month through shredding:

- Peck Iron & Metal Co., Richmond (10,000-12,000 tons)
- Davis Scrap Industries, Inc., Lorton (8,000-10,000 tons)
- Jacobsen Metal Company, Chesapeake (8,000-10,000 tons)
- Alexandria Scrap, Alexandria (8,000-10,000 tons)
- Roanoke Electric Co., Roanoke (10,000-12,000 tons)
- Birmingham Steel, Norfolk (3,000-4,000 tons)
- Cycle Systems, Lynchburg (2,000-3,000)

It is these processors that are most affected by the scrap metal residue disposal problem.

3. Markets for Processed Scrap Metal

The markets for scrap metal processed in Virginia are steel mills and foundries, several of which are located in the State. Products produced by these steel mills and foundries include castings for the automobile industry, pipe, steel bar products and municipal castings such as man-hole covers. The following are the principal Virginia steel mills and foundries that use raw scrap metal processed in the State:

- Roanoke Electric Co., Roanoke
- Birmingham Steel, Norfolk
- Emporia Foundry, Emporia
- O.K. Foundry, Richmond
- Wheelabrator-Frye, Bedford
- Lynchburg Foundry, Lynchburg
- Griffin Pipe Products, Lynchburg
- Bingham & Taylor, Culpepper

The price that these and other steel mills and foundries pay for processed scrap metal is governed by the adage that "scrap metal is bought not sold." In other words, mills and foundries set the price they will pay for scrap, and processors around the world compete to sell scrap at prices set by these industries. Virginia's scrap metal processors, therefore, cannot adjust the price they charge mills and foundries for furnishing scrap to account for the processor's increased costs and liabilities associated with residue disposal.[3]

B. Industry Size and Volumes

The importance of Virginia's scrap metal processing industry is illustrated both by its contributions to the State's economy and the volumes of scrap metal it processes.

The recycling industry employs literally thousands of individuals who are engaged full-time in the recycling process. The shredder industry alone has approximately 1,000 employees. In 1988, the Industry had total outlays for goods, services and

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[3]The scrap metal industry is different from other industries in this respect. While most other industries have the opportunity to pass the cost of waste disposal on to their customers within the limits of competitive pricing, the scrap metal industry can only address these costs through the prices they pay for scrap metal.

taxes in of about $185 million.

Because the focus of this presentation is scrap metal shredder operators rather than scrap metal processors generally, the statistics presented below are for this segment of the industry only.[4]

In 1988, Industry shredder operators served tens of thousands of industrial accounts and collectors across the State. Scrap metal comes from large corporations as well as individual citizens who clean out their garages. Scrap metal is generated from every neighborhood and every segment of society. In 1988, our best estimates show that Industry operators produced approximately 860,000 tons of scrap metal from the shredding of approximately 588,000 tons of automobiles, approximately 180,000 tons of white goods and miscellaneous metals, and approximately 92,000 tons of non-ferrous metal.[5] Most of this scrap was purchased by Virginia steel mills and foundries.

Assuming the cost of shredder residue disposal or unforeseen circumstances do not significantly effect the sources of or

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[4]This is not meant to suggest that scrap metal processing without shredding does not generate non-metallic waste residues that must be disposed of. As indicated earlier, it does; however, shredder residue presents the larger and more immediate disposal problem.

[5]From taking the average weight of a kitchen appliance, our best estimate shows that this represents approximately 1.5 million appliances.

markets for scrap metal, the current upward trend in the tons of automobiles, white goods, and miscellaneous objects shredded in Virginia is expected to continue as increasing numbers of these goods reach the end of their useful lives. The amount of scrap metal produced from the shredding of these goods, however, will not necessarily correspond to the amount of increased shredding because of the trend toward the use of less and less metal in the manufacture of the goods that are ultimately shredded. Therefore, it is expected that in the future, more shredding will be required to produce the same amount of processed scrap metal. By the same token, the amount of shredder residue generated can be expected to increase at a rate greater than the amount of raw scrap metal shredded.

III. Shredder Residue[6]

A. Its Source

Shredder residue is the non-metallic waste material left after metal objects are shredded and the metal is removed.

Although individual shredder operations differ to some extent, they all involve basically the same process. A crane or conveyor feeds the individual objects to a hammermill-type shredder. Shaft horsepower is provided by electric motors or external combustion engines. Following discharge from the mill, fist-sized pieces of metal are conveyed through a cleaning and

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[6]Also known as "shredder fluff" or "fluff."

sorting system. Ferrous metals are collected by magnetic separation, while the shredder residue is separated and collected by cyclone air separators or fluid washing. Non-ferrous metals remain after the ferrous metals and shredder fluff are separated.

B. Its Properties

1. In General - While the exact composition of shredder residue will vary depending on the kinds and combinations of objects shredded, the most predominant constituents of shredder residue include foam rubber, plastics, fabrics, paper, glass, woodsplinters, wiring, and dirt.

Shredder residue is a light-weight, brown-colored, and generally odorless material, with a spongy characteristic due, in large part, to the significant amount of foam rubber and plastics in the objects that are shredded. Because much of its volume consists of combustible materials such as foam and plastics, shredder residue has a relatively high Btu value. While the exact Btu value will vary depending on the types of objects shredded, testing in recent years indicates that shredder residue averages approximately 5,000-6,000 Btu per pound, which generally is the heat value of wood.

2. Contaminants - Because of the many substances found in and on goods and objects shredded today, shredder residue is known to contain a variety of contaminants. However, to date only a few have been identified as creating the potential for problems. The most significant of these are PCBs, with lead and cadmium of lesser concern.

a. PCBs - PCBs are regulated by the EPA pursuant to the federal Toxic Substances Control Act ("TSCA"), and cannot be disposed of in concentrations of 50 parts per million ("ppm") or greater except in accordance with EPA regulations. While there have been instances where PCBs have been detected in shredder residue in concentrations of 50 ppm or greater, PCBs in these concentrations are believed to be limited to small, isolated pockets. The industry has concluded that the major source of the PCBs are lighting ballasts in florescent lights and capacitors found in appliances manufactured prior to 1979, after which the production and use of PCBs was banned.[7]

Although all shredder operators in Virginia have begun programs to inspect for and remove capacitors that might contain PCBs, these programs are not completely effective because capacitors are often hard to locate. Also, some shredders have either stopped accepting metal objects that might contain PCBs or reduced the volume of such objects they accept in an effort to reduce the potential for PCB contamination of their shredder residue.

b. Lead and Cadmium - The sources of lead in shredder residue are principally automobile parts such as batteries, wheel weights, and exhaust systems. Lead, cadmium and other heavy

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[7]Even though trace quantities of PCBs are known to be present in shredder residue because of appliance shredding, shredding appliances for recycling actually reduces the amount of PCBs reaching landfills because many of the PCB capacitors are removed by recyclers prior to shredding.

metals are present in the paints, body repair fillers and other parts of automobiles and appliances. It is not surprising, therefore, that trace quantities of these metals are also found in shredder residue.

C. Volumes

Exact volumes of shredder residue generated in Virginia each year are not available. However, volumes can be calculated based on estimates of the numbers and volumes of goods and objects shredded.

Our best estimates show that approximately 588,000 automobiles were shredded in Virginia in 1988. The average automobile is estimated to contain approximately 500 pounds of non-metallic material. Based on the foregoing, it is estimated that in 1988 approximately 147,000 tons of shredder residue were generated from the shredding of automobiles in the State.

Approximately 180,000 tons of white goods and miscellaneous metal objects are estimated to have been shredded in Virginia in 1988. Although the figure obviously varies with the size and kinds of metal objects shredded, it is conservatively estimated that about 10 percent by weight of the average white good and miscellaneous object is non-metallic material. Therefore, it is estimated that a total of approximately 18,000 tons of residue were generated in Virginia in 1988 from the shredding of white goods and miscellaneous objects.

Based on the combined totals described above, it is estimated that approximately 165,000 tons of shredder residue were generated in the State in 1988. At an average shredder

residue density when compacted of 55 lbs./cu.ft., the foregoing represents approximately 222,000 cubic yards of residue. This can be compared with approximately 814,000 cubic yards for shredder residue coming right off of the conveyer belt, having a density of 15 lbs./cu.ft.

It is important to note that the volume of residue generated in the future is projected to increase significantly because of two factors. First, the increasing numbers of automobiles, white goods and miscellaneous objects being placed in use, and, as mentioned previously, the trend toward the use of less metal and more non-metallic materials in the manufacture of these goods, particularly automobiles.

D. Shredder Residue Disposal

1. Current Disposal Practices

With one exception, all of the shredder residue generated in Virginia today is disposed of in public and private sanitary landfills. The one exception is Peck Iron & Metal Co., which stockpiles its residue on-site with the expectation that at some point in the future it will be able to recycle this material or use it for energy recovery. While Roanoke Electric Co. bails its residue and ships it out of state, this residue is landfilled at its ultimate destination.

In the past, shredder operators in Virginia have had the option of disposing of their shredder residue in either sanitary landfills or debris landfills. Disposal in debris landfills offered significant cost savings. Recently, however, the Department of Waste Management ("DWM") has ruled that shredder

residue may be disposed of only in sanitary landfills because trace quantities of PCBs are present in most shredder residue.

2. Cost of Disposal

Two factors are driving up the cost of shredder residue disposal. The first is the increasing cost of designing, constructing and operating sanitary landfills as a result of numerous new and more stringent requirements imposed by the DWM's recently adopted solid waste management regulations. The second factor is the perception on the part of some landfill operators that shredder residue poses risks greater than those associated with municipal solid waste. In addition, as previously indicated, it will be virtually impossible for scrap metal processors to pass this increase on to the generators of the source of the product.

In the case of the first factor, while it is true that the increased cost of disposal associated with the DWM's new regulations will impact all who use sanitary landfills and not just shredder operators, given the large volumes of shredder residue that must be disposed of, this increased disposal cost will substantially and directly affect the cost of recycling scrap metal.

The second factor reflects increased costs whose impacts will be felt exclusively by shredder operators. These impacts will be felt in one of two ways - either in the form of increased disposal fees imposed by landfill operators as a condition of accepting and handling shredder residue as a separate waste, or increased transportation costs as shredder operators transport

their shredder residue long distances to find affordable disposal facilities.

The cases of Davis Scrap Industries in Lorton and Alexandria Scrap Corporation are examples of this situation. Historically, Davis and Alexandria Scrap used the Potomac Debris Landfill in Dumfries, Virginia to dispose of their shredder residue. In April of this year, however, the landfill operator notified Davis and Alexandria Scrap that, at the direction of the DWM, it could no longer accept shredder residue because, due to the possible presence of trace quantities of PCBs, the new DWM regulations required that it be disposed of in a sanitary landfill. At the time of this notification, Davis and Alexandria Scrap, were paying approximately $12.35 per ton for shredder residue disposal, and transportation costs were approximately $4.00 per ton. After being denied access to the Potomac Llandfill, Davis and Alexandria Scrap began stockpiling their shredder residue and searching for a sanitary landfill that would accept the material. After extensive discussions between representatives of Davis and Alexandria Scrap, the DWM, and Fairfax County, Fairfax agreed to accept the shredder residue. However, Fairfax insisted in handling the residue separate from other wastes disposed of at the landfill and charging $50.00 per ton, or four times the price charged by the Potomac Llandfill. The Fairfax Llandfill charges $24.00 per ton to dispose of municipal solid waste, or less than half the price it proposed to charge for shredder residue. Davis determined it was more economical to transport its waste over 100

miles to Richmond for disposal. Alexandria Scrap has apparently determined to cease doing business.

While not directly related to the increasing cost of landfill disposal, an additional factor that ultimately will affect the total cost to shredders of managing shredder residue is the trend toward the use of more and more non-metallic material in automobiles, appliances and other metal objects that are shredded. The foregoing will result in the generation of larger volumes of shredder residue to produce the same volumes of scrap metal. Over time, this trend will compound the impact of the increasing costs of landfilling due to the two factors mentioned earlier.

3. The Threat to Shredder-Dependent Scrap Metal Recycling in Virginia

The future of shredder-dependent scrap metal recycling in Virginia is threatened by the increasing costs of shredder residue disposal and the potential liability associated with the disposal of contaminated shredder residue.

Under a worst case scenario, it is possible that the increasing costs of residue disposal and potential liabilities could drive scrap metal processors in Virginia out of the business of shredding. While this would cause a temporary disruption in scrap metal recycling of automobiles, white goods and other metal objects, we would expect that ultimately the automobiles and other large objects would be shipped out of Sstate, assuming the cause of shredding's demise in Virginia has not also shut down shredding in other states. Such an event,

however, could be expected to significantly impact the recycling of smaller metal objects such as appliances whose metal content would not justify the cost of transportation. These objects could be expected to end up in landfills or along our landscape until the State or local governments assumed responsibility for recycling them.

Even without this worst case situation, it is inevitable that, faced with increasing costs of shredder residue disposal and the costs associated with potential liabilities from the disposal of contaminated residue, shredder operators will have no choice but to reduce the amounts they pay to their sources of scrap. Therefore, it can be anticipated that the increased cost of shredder residue disposal and associated liabilities will ultimately have to be made up by reductions in the prices paid for raw scrap. In somes instances, the Industry will likely have to charge to take some objects.

While the extent to which these reductions in payments would reduce the volumes of raw scrap supplied by sources is unknown at this time, there can be no question that it would destroy many small collectors' incentive to recycle. It is anticipated that the impact of the loss of these small collectors would be particularly noticeable because in many cases it is they who collect the abandoned automobiles and discarded appliances that would otherwise litter our countryside or be disposed of in landfills.

Appendix C

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

May, 1989

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
ALABAMA	Deduction in computing net income for all amounts invested during the taxable year in devices, facilities or structures used for the control, reduction or elimination of air, water pollution.		None	Pollution Control Devices: devices, facilities and structures acquired primarily for control reduction or elimination of air or water pollution.	Exemption for pollution control devices: exempt gross proceeds from sale of all devices, facilities or identifiable components acquired primarily for control, reduction, elimination of air, water pollution, and all materials used or intended for use in structures built primarily for the control, elimination of water/air pollution.
ALASKA	NONE	NONE	Pollution Control Facilities.	No exemption	NONE
ARIZONA	X		X	X	X
ARKANSAS	X	X	X	X	
CALIFORNIA*	X	X	X	X	X
COLORADO	Credit for commercial, industrial and agricultural Energy: Credit equals 10% of expenditures for energy property and 30% of expenditures for solar or wind energy property.		X	X	X

* = Imposes maximum $500 fee on operators of solid waste facility
= Authorizes loans and grants to operators of solid waste facilities
= Authorizes convenience incentive payments to current or potential recycling centers
= Encourages each educational agency to purchase recycled paper

TAX INCENTIVES FOR RECYCL ND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
COLORADO (continued)	located in Colorado: Maximum credit allowable is $2,250,000. Unused credits can be carried forward up to 5 years Energy property includes recycling equipment. Credit due to expire after 1986.				
CONNECTICUT	Credit of 5% of the expenditures paid during the taxable year for the amount of expenditures for construction, expansion, rebuilding of treatment for industrial waste credit of 5% of expenditures for construction, etc , of pollution control facilities.	X	Exempts municipal resource recovery authorities from real and tangible personal property taxation.	X	Exemption for sales of property acquired for incorporation into facilities for treatment of industrial waste, also air pollution control facilities.
D C	X	X	X	X	
DELAWARE	X	X	X	X	NONE

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
FLORIDA	Credit to an owner of a state-permitted recycling facility in amount of 5% of the cost of stationary facility equipment placed in service during taxable year used for recycling hazardous waste Credit to owner of a commercial hazardous waste facility that incurs expenses for hydrolic, geologic or soil site evaluations and permit fees required by Dept. of Environmental Regulation. Credit amount is equal to the expenses incurred.		X	X	Exemption for equipment which is integral to recycling and where there has been a 10% increase in the consumption of Florida based recycled materials
GEORGIA	X	X	ALL PROPERTY used in or part of any facility constructed for the primary purpose of eliminating or reducing air or water pollution is exempt, provided the facility is certified by the Dept. of Natural Resources as necessary and adequate for purposes intended.		Exemption for sale of machinery and equipment incorporated into any facility and used primarily for purpose of reducing or eliminating air or water pollution. Exemption for equipment used in recycling industrial materials. Exempts machinery and equipment for use in combating air and water pollution and any industrial material bought for further processing in the manufacture of tangible personal property for sale or any part of the industrial material or by-product thereof which becomes a wasteful product contributing to pollution problems and which is used up on a recycling or burning process.

TAX INCENTIVES FOR RECYC AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
HAWAII	X	X	X	X	NONE
IDAHO	X	X	X		Exempts sales of pollution control equipment required to enact air or water quality standards of a state or federal grant
ILLINOIS	X	X	Exempts pollution control facilities from a portion of the assessed value Assessed at 33 1/3% of the fair cash value of its economic productivity to the owners Reduces tax burden on those required to build such facilities and encourages installation in other places. Pollution Control Facilities: includes any system, method, construction, device or appliance designed, constructed, installed, or operated for the primary purpose,		X

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
ILLINOIS (continued)			of eliminating, preventing or reducing air pollution, or treating, pre-treating, modifying or disposing of any potential solid, liquid or gaseous pollutants that might be harmful or offensive if released without treatment or (3) any portion of any building or equipment designed, constructed, installed or operated for such purpose	Garbage tax authorized for the collection, treatment or recycling of garbage. Tax rate limited to 10% of the assessed value on all taxable property in the locality for the current year.	
INDIANA	X	X	X	Assessment deduction of 95% of assessed value of systems for owners of resource recovery system that processes solid waste.	Exemption for pollution control equipment: the property is incorporated into or is consumed in the operation of a device, facility, or structure predominantly used and acquired for the purpose of complying with any state, local or federal environmental quality statutes, regulations or standards, and the person acquiring the property is engaged in the business of manufacturing, processing, mining or agriculture.
IOWA	X	X		Exemption for pollution control equipment.	

TAX INCENTIVES FOR RECYCL[illegible]ND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
KANSAS	X	X	X	X	X
KENTUCKY	X	X	X		X -- Exemption for pollution control facilities, broadly defined to include: any disposal system or appliance equipment, machinery or installation constructed, used or placed in operation primarily for purpose of reducing or controlling pollution caused by industrial waste, and any disposal system or any appliance, equipment, machinery, installation constructed, used or placed in operation primarily for disposing of solid waste or converting solid waste into an item of real economic value
LOUISIANA	X	X	X	X	NO SALES TAX
MAINE	X	X	X	X	Exemption for sales of or any accessories, or materials for the construction, repair or maintenance of facilities for the control of waste
MARYLAND	X	X	X	X	X
MASSACHUSETTS	Credit to bottlers ag/corp. income tax liability equal to 1/10 of 1¢ for each reusable beverage container containing a beverage sold by them for consumption within Massachusetts.				

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
MASSACHUSETTS (continued)		SAME AS CORPORATE		Exemption for tangible personal property the primary function of which is the recycling, reuse or recovery of materials from the treatment of hazardous wastes.	
	Corporate may deduct the expenditures paid during the taxable year for construction, reconstruction, erection or improvement of industrial waste treatment facilities or industrial air pollution control facilities Only expenditures paid prior to January 1, 1980, are deductible.				
MICHIGAN	X	X	X	X	Sales of tangible personal property purchased and installed as a component part of a water pollution control facility, or air pollution control facility.
MINNESOTA	X	X	X	X	Exempts gross receipts from the sale of equipment used for processing solid or hazardous waste at a resource recovery facility A resource recovery facility is a waste facility established and used primarily for resource recovery, including related and appurtenant facilities such as transmission facilities and transfer stations primarily serving the resource recovery facility.

TAX INCENTIVES FOR RECYCL ID ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
MISSISSIPPI	Corporate deduction for pollution or environmental control facilities.	X	Recycling plants-local option to exempt from real estate tax.		
MISSOURI	X	X	X	X	Exemption for air and water pollution control equipment
MONTANA	X	X			X
NEBRASKA	X	X	X	X	X
NEW HAMPSHIRE	X	X	X	X	NONE
NEW JERSEY	Credit ag /corp income tax for purchase of recycling equipment in an amount equal to 50% of cost of equipment. Credit allowed if recycling equipment is certified by Commissioner of Dept of Environmental Protection Copy of certification must be submitted by taxpayer for purposes of the credit. Recycling equipment includes new vehicles used exclusively for the transportation of post-consumer waste material or new machines or new apparatus.		X	X	Tax on gross receipts of operator of a hazardous waste disposal facility 5% of gross receipts of hazardous waste facility. Solid waste services tax imposed on all solid waste accepted for disposal at a solid waste facility The rate is 50¢ per ton of solids and 0 2¢ per gallon on liquids Recycling tax is imposed at $1 50 per ton on solid waste accepted for disposal or transfer Owners of every sanitary landfill subject to a resource recovery investment tax at rate of $1 per ton on solids accepted for disposal at a sanitary landfill facility No tax levied on waste disposal accepted from a resource recovery facility Exempts sales of recycling equipment from sales tax Recycling equipment means any equipment used exclusively to sort and prepare solid waste for recycling or in the recycling of solid waste

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
NEW JERSEY (continued)	used exclusively to process post-consumer waste material and manufacturing machinery used exclusively to produce finished products, the composition of which is at least 50% post-consumer waste materials.				
NEW MEXICO	X	X	Real estate tax exemption for property acquired by revenue bonds under the Pollution Control Revenue Bond Act, which authorizes municipalities to issue revenue bonds for reducing, abating or preventing pollution		X
NEW YORK	X	X	Exemption from real estate taxation for waste treatment facilities		X
NORTH CAROLINA	Corporate income tax deduction or amortization authorizes amortization deduction based on the cost of any air cleaning device, sewage or waste treatment plant, including waste lagoons, and pollution abatement equipment over a period of 60 months				

TAX INCENTIVES FOR RECYCL ND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
NORTH CAROLINA (continued)	Provides amortization deduction, based on 60 month period for cost of purchasing, installing or constructing equipment or facilities to recycle or recover resources from solid waste or to reduce the volume of hazardous waste generated Must supply certificate from Dept of Human Resources, deduction allowed only if the primary purpose of equipment is recycling or resource recovery				
	TAX CREDIT: Credit ag/corporate income tax of up to 20% of installation and equipment costs for the construction of a PEAT facility which uses peat as feed-stock for a commercially manufactured energy source to replace petroleum, natural gas, or other non-renewable energy source				
	Partial tax credit can claimed over for 5 years. To qualify for credit, the taxpayer must own or control the facility at time of construction	Individual income tax credit for 20% of installation and equipment costs (same as corporate).	X	X	X

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
NORTH CAROLINA (continued)		Also individual deduction or amortization for cost of recycling equipment over 60 month period.			
NORTH DAKOTA	Corporate tax credit for new industry to any domestic corporation incorporated for first time after January, 1969 Tax credit equals a deduction of 1% of the annual gross amount expended by the corporation for salaries and wages within North Dakota for each of first three taxable years No deduction after 5 years	X	Authorizes localities to exempt tangible personal property of new industries from tangible personal property taxation for 5-year period		X
OHIO	Corporate income tax credit equal to the lesser of 50% of cash donations made to Ohio Corp organized prior to January, 1987, whose sole purpose is to promote and encourage recycling, or donations to municipal corporations, counties, townships, park districts. Tax Commissioner may require tangible property to furnish information as necessary to support claim for credit	X	Exempt pollution control facilities, energy conversion facilities, solid waste conversion facilities, or thermal efficiency facilities.		Exempts tangible personal property used in air, noise or water pollution control facilities Exempts tangible personal property incorporated into an energy conversion facility, solid waste energy conversion facility, or thermal efficiency improvement facility

TAX INCENTIVES FOR RECYCL... AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
OREGON	Corporate tax credit for pollution control facility Tax credit for Plastics Recycling Investments: Credit for each year for 5 years beginning in year the capital investment receives final certification Maximum credit in any one taxable year shall be the lesser of the tax liability of the taxpayer or 10% of the certified cost of the taxpayer's investment Taxpayer to claim credit must be (a) owner of the business that manufactures a reclaimed plastic product, or (b) a person, who as lessee conducts the business that manufactures a reclaimed plastic product.	Credit for pollution control facility Credit for plastics recycling investments Maximum credit is the tax liability of taxpayer or 10% of certified cost of taxpayer's investment	Real and tangible personal property exempt from real estate tax Agricultural waste storage facility Pollution control facility is exempt		NONE
OKLAHOMA	Corporate credit for air pollution control facilities--20% of net investment cost of installation for each taxable year following installation until the entire net investment cost is recovered	X			Exempts from sales tax machinery, equipment, fuels and chemicals used in Industrial Waste.

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
OKLAHOMA (continued)	Credit for investment in facilities for disposal of industrial waste--any person, firm, or corporation engaged in the recycling, reuse or ultimate destruction of any controlled industrial waste: credit is one time credit, NOT to exceed 20% of net investment cost of installation.				
PENNSYLVANIA	X	X	X	X	X
RHODE ISLAND	Corporate income tax deduction from net income based on amortization of adjusted basis over period of 60 months of any real or tangible personal property used in hazardous waste treatment facilities Tangible personal property--the primary function is to recycle, reuse or recover materials from treatment of hazardous waste.	X	Exempt real and tangible personal property acquired and used for Industrial Pollution Control. Exempts tangible personal property, the primary function of which is the recycling, reuse or recovery of materials from treatment of hazardous waste		Levies a Beverage Container tax on each case of beverage containers sold to a beverage retailer: 4¢ on each case Exempts from sales tax tangible personal property or supplies used or consumed in the operation of equipment, the exclusive function of which is the recycling, reuse or recovery of materials from the treatment of hazardous waste Taxpayer must obtain certification from director of department of environmental management that such equipment qualified for the exemption

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
SOUTH DAKOTA	X	X	X	X	X
SOUTH CAROLINA	X	X	X	X	X
TENNESSEE	Credit of 1% of purchase price of industrial machinery, which includes equipment to control pollution		Exempts property owned by a non-profit corporation operated for purpose of recycling or disposing of waste products.	Pollution control equipment is subject to tax at reduced valuation	
			REAL AND TANGIBLE PERSONAL PROPERTY owned by a nonprofit corporation and operated for the purpose of recycling or disposing of waste products and converting such products to heat or cooling public buildings is exempt		
TEXAS	X	X	X	X	X
UTAH	X	X	X	X	Exemption for sale or use of property materials incorporated into pollution control facilities
VERMONT	X	X	X	X	X
WASHINGTON	NONE	NONE	X	X	Exempts original acquisition of air and water pollution control facilities
WEST VIRGINIA	Business Investment and Jobs Expansion Credit--small business' qualified investment in a new or expanded business in the state that results in the creation of at least 10 new jobs		X	X	X

TAX INCENTIVES FOR RECYCLING AND ENVIRONMENTAL PROTECTION

STATE	INCOME TAX		PROPERTY TAX		SALES TAX
	Corporate	Individual	Real	Personal	Sales Tax
WISCONSIN	X	X	REAL AND TANGIBLE PERSONAL PROPERTY exemption for industrial waste treatment facility.		Exempt the gross receipts from sale of tangible personal property which becomes a part of a waste treatment facility Exempt the waste reduction and recycling machinery, equipment and vehicles
WYOMING	NONE	NONE	X	X	X

X = No tax incentive for recycling even though tax is levied by the state
NONE = State does not levy the tax

SOURCE: CCH State Tax Reporter

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Appendix D

Legislation to Encourage Recycling in the Commonwealth

Bill	Summary
1987 - House Bill 1000 (Chapter 234, Acts of Assembly	Established a Division of Litter Control and Recycling to control, prevent and eliminate litter from the Commonwealth, and to encourage the recycling of discarded materials. Funding would be from litter control taxes and soft drink excise taxes
1988 - House Joint Resolution No 81	Requested the Department of Waste Management to establish a comprehensive statewide program for solid waste management and established a statewide objective of recycling 25% of the solid waste stream by 1995
1989 - House Bill 1743 (Chapter 440, Acts of Assembly)	Established that the Board must implement regulations specifying requirements for local and regional solid waste management plans Local or regional plans must identify how localities will achieve minimum recycling rates 10% in 1991, 15% by 1993 and 25% by 1995
House Bill 1746 (Chapter 284, Acts of Assembly)	Provided that the costs of administering a continuous program to control, prevent and eliminate litter from the Commonwealth and to encourage recycling shall be paid for with funds from litter control taxes and such other funds as may be appropriated

Chapter 668, Item 505 of the Appropriations Act -	Appropriated $100,000 for studies of markets for recyclable materials and strategies for increasing use of recyclable materials. Final report to be submitted by December 1, 1989
House Bill 1747 (Chapter 442, Acts of Assembly)	Required a preference in the state's procurement process for the purchase of recycled paper by state agencies.
House Bill 1745 (Chapter 630, Acts of Assembly)	Levies a 50¢ tax on the sale of new tires Effective January 1, 1990 and sunsets December 31, 1994 Revenues used to eliminate tire disposal problems in Virginia.

Appendix E

Joint Subcommittee Studying
the Means and Methods of Providing
for the Safe, Economical and
Efficient Disposal of Recycling
Residues and to Examine
Tax Incentives to
Encourage Recycling in the Commonwealth
HJR 384

Cynthia V. Bailey, Director
Department of Waste Management
December 15, 1989

SUMMARY OF PRESENT LITTER CONTROL FUNDS

Department of Taxation Estimates - FY 1988-89 (July '89 Figures)

Litter Tax -	$ 570,000 - 590,000	(39%)
Soft Drink Tax -	$ 140,000 - 150,000	(10%)
Beer & Beverage Tax -	$ 730,000 - 750,000	(51%)
TOTAL	$1,440,000 - 1,490,000	(100%)

Total Funding Estimate (Rounding Upward) - $1.5 million

DOUBLING THE FUNDS

Total Funds Available - $3,000,000

Funds for Administrative Costs -	$ 750,000
Funds For Litter -	$1,250,000
Funds For Recycling -	$1,000,000

* Minimum of $1.5 million must be available to localities.

How we would spend the money ...

Litter Program

Total Funds Available - $1,250,000

Grants to Localities - (Percentage Increase = 60% Over Present)	$1,200,000
Administrative Cost (1 FTE - Grant Administrator & Additional Clerical Support)	$ 50,000

Recycling Program

Total Funds Available - $1,000,000

Basic Grants to Localities - $ 300,000

Option #1. Fixed Amount to Each Qualifying Litter Program (For Recycling Education/Promotion)

Option #2. Fixed Amount For Each County, Region, PDC, or Approved Plan (For implementation of Recycling Programs)

Competitive Grants to Localities - (This replaces old DMME Grants, we require approved plans)	$ 500,000
Administrative Cost - (Use for Education/Promotion Activities)	$ 200,000

* Litter & Basic Recycling Grants - $1.2 million + $300,000 = $1.5 million. We would achieve the 50% required by the law.

TRIPLING THE FUNDS

Total Funds Available -		$4,500,000
Funds for Administrative Costs -	$ 750,000	
Funds for Litter -	$1,750,000	
Funds for Recycling -	$2,000,000	

* Minimum of $2.25 million must be available to localities.

How we would spend the money ...

Litter Program

Total Funds Available -		$1,750,000
Grants to Localities - (Percentage Increase = 100% Over Present)	$1,500,000	
Administrative Cost - (Research and Surveys, 2 FTE's, Additional Clerical Support)	$ 250,000	

Recycling Program

Total Funds Available -		$2,000,000
Basic Grants to Localities - (Same Criteria as Above)	$ 750,000	
Competitive Grants to Localities - (Based on Demonstrated Need, Possibility of Matching Fund Requirement, Demonstration Projects)	$1,000,000	
Administrative Cost - (1 FTE, Education/Promotion Activities)	$ 250,000	

* Litter & Basic Recycling Grants - $1.5 million + $750,000 = $2.25 million. We would achieve the 50% required by law.

SOLID WASTE MANAGEMENT TAX (OPTIONS)

OPTION 1. ALL BUSINESSES BASED ON NUMBER OF EMPLOYEES

This tax structure is patterned after the existing soft drink excise tax. The estimated revenues generated by this tax would be used to fund several of the Department's efforts to aid localities in their solid waste programs. (i.e. grants to localities, research, public education, planning support, technical assistance training, revolving loan fund, etc.)

The estimates are based on data from the 1985 Department of Commerce, County Business Patterns Census. The estimates do not include government employees, railroad employees, or self employed persons.

Establishments by Number of Employees		Tax Rate	Funds Generated
1 to 4 Employees -	68,284	$ 50	$ 3,414,200
5 to 9 Employees -	25,978	$ 100	$ 2,597,800
10 to 19 Employees -	15,973	$ 200	$ 3,194,600
20 to 49 Employees -	9,964	$ 400	$ 3,985,600
50 to 99 Employees -	3,353	$ 1,000	$ 3,353,000
100 to 249 Employees -	1,907	$ 2,000	$ 3,814,000
250 to 499 Employees -	544	$ 3,000	$ 1,632,000
500 to 999 Employees -	204	$ 4,000	$ 816,000
1,000 or More Employees -	101	$ 5,000	$ 505,000
Total Establishments -	126,308	Total Funds -	$ 23,312,200

Proposal

The Litter Control Taxes would remain unchanged and would be designated solely for the purposes of the litter program.

A breakdown of how we would use the funds generated by the new tax is listed below. For the purposes of discussion, we have rounded the estimated total to $23 million.

Expenditure Breakdown

1. Litter Control Program - $ 1,500,000

   Funds would be used to increase present grants by up to 100%.

2. Basic Recycling Grants - $10,000,000

   Funds would be used to assist localities in implementing the approved recycling program plans. Purchase scales - 1st year.

3. Solid Waste Program - $ 3,000,000

   Funds would be used to enhance present program and provide additional training to localities.*

4. Virginia Resources Authority (VRA) - $ 5,000,000

   Funds would be transferred to the VRA to increase a revolving loan and grant program fund for all solid waste management facilities.

5. Administration - $ 1,200,000

   Funds would be used to off-set anticipated increased expenditures for public education program, technical assistance to localities, and training of personnel.

6. Research & Demonstration Grant Program - $ 2,300,000

   Funds would be used for educational institution and private sector research of alternative solid waste management practices and recyclable material market development. Funding would also be available for demonstration projects. Funds may also be used for special research studies as requested.

Total Expenditure $23,000,000

* Presently an appropriation from general funds.

OPTION 2. ALL BUSINESSES BASED ON GROSS REVENUE (RECEIPTS)

This option uses the same logic as the soft drink tax. A business with higher gross revenues will pay a higher tax rate.

The breakdown of Virginia businesses by gross revenues is not readily available from any one source. Therefore, it was not feasible to develop any estimates of tax revenue, except for an across-the-board, minimum rate. If a minimum rate of $50 per business establishment were adopted, a total fund of $6,315,400 could be generated.

OPTION 3. EXPAND THE LITTER CONTROL TAX CATEGORIES AND RENAME THE TAX

Rename the litter tax (Section 58.1-1708) as the Waste Management Tax and expand the list of business categories that must pay the tax. Also, there may be some businesses which are supposed to be paying the tax, but are not doing so. The Department of Waste Management would be willing to assist the Department of Taxation in an effort to maximize compliance.

The category list could be expanded to include all large (by weight percentage) waste generators. For example, the construction industry, financial institutions, service industries etc.

The tax fund would be substantially higher and would be more equitable.

OPTION 4 SURCHARGE ON SOLID WASTE

This fee would be placed on each ton of waste arriving at a disposal facility (landfills and incinerators). The fee would become an add-on to tipping fees.

Using the Department's estimate of 9.3 million tons of solid waste per year, at $2 per ton, this surcharge will generate $18.6 million. The funds will be used by the Department for all of it's solid waste programs, except litter control.

DEPARTMENT OF WASTE MANAGEMENT

BUSINESS TAXES THAT FUND THE VIRGINIA LITTER CONTROL AND RECYCLING PROGRAM

The Litter Control & Recycling Program is financed by direct appropriation from the general fund of the State Treasury. However, the funds appropriated are raised by three taxes placed on business, the revenues of which go directly into the general fund. The taxes consist of the following levies:

1) The Virginia Litter Tax (58.1-1706 to 1709) - a $10 per business establishment tax on all businesses which deal in those items most littered and $15 additional tax ($25 total) for each establishment which sells beer, malt beverages, soft drinks, or groceries.

2) The Virginia Beer and Beverage Excise Tax (Chapter 616 of the 1977 Acts of Assembly) - a tax levied on the brewery, bottler, or wholesaler who sells to the retailer, only a portion of which is available for litter and recycling programs. The rates for these activities are 15 cents per barrel, .05 cents (five hundredths cents) per bottle up to twelve ounces, and .02 mils (two one hundredths mils) per ounce for bottles over twelve ounces.

3) The Virginia Soft Drink Excise Tax (58.1-1700 to 1704) - a tax on every wholesaler and distributor of carbonated soft drinks. The rates are:

   $50 per year if gross receipts for the year do not exceed $100,000;

   $100 if gross receipts exceed $100,000 but do not exceed $250,000;

   $250 if gross receipts exceed $250,000 but do not exceed $500,000;

   $750 if gross receipts exceed $500,000 but do not exceed $1,000,000;

   $1,500 if gross receipts exceed $1,000,000 but do not exceed $3,000,000;

   $3,000 if gross receipts exceed $3,000,000 but do not exceed $5,000,000;

   $4,500 if gross receipts exceed $5,000,000 but do not exceed $10,000,000;

   $6,000 if gross receipts exceed $10,000,000.

Tax Collections by Fiscal Year

1980 - 1989

Fiscal Year	Litter Tax	Soft Drink	Beer & Beverage	Total
80-81	98,854	134,567	613,363	851,784
81-82	373,458	150,767	623,766	1,147,991
82-83	437,138	128,347	635,123	1,200,607
83-84	423,725	126,665	657,871	1,208,261
84-85	437,263	125,868	666,763	1,229,894
85-86	492,602	165,238	676,865	1,334,705
86-87	505,305	152,597	713,746	1,371,648
87-88	561,699	143,274	728,467	1,433,400
88-89	570,402	139,527	728,560	1,438,489
89-90 Projected	580,000*	135,000*	727,000*	1,442,000*

*Estimated by the Virginia Department of Taxation - July 13, 1989

Appendix F

PROPOSAL BY THE SCRAP METAL RECYCLING INDUSTRY

JANUARY 15, 1990

I. Introduction

The following is a brief explanation of the attached proposed legislation offered by Virginia's Scrap Metal Recycling Industry. This proposal is a modification of our November 20, 1989 proposal. The modification is designed to address concerns on the part of some subcommittee members over our proposal to require landfill operators to take shredder residue at the same rate charged for all other solid waste.

There are four principal waste materials generated from the operation and recycling of automobiles--tires, batteries, oil, and shredder residue ("fluff"). All of these materials are difficult to dispose of, and, if not managed properly, can pollute the environment and litter our landscape. With some minor exceptions, these materials are not currently recycled in Virginia, and they will become an increasingly more serious disposal problem as their volumes continue to grow.

Our proposal is designed to address these automobile-related waste materials by creating a fund managed by the Virginia Department of Waste Management that would be used to promote their proper management and ultimate recycling. There are five basic components to this proposal--the Fund, the Department, Revenues, Expenditures, and Related Legislation. Each of these components is discussed in more detail below.

II. The Fund

There are already in existence two funds designed to address the problem of automobile-related waste materials. The 1974 Session of the General Assembly created the Abandoned Vehicle Fund. Section 46.2-1207 of the Code directs the Commonwealth to reimburse localities in the amount of fifty dollars for each inoperable vehicle disposed of at the expense of the locality. Section 46.2-1207 indicates that there is no specific source of revenue for the Abandoned Vehicle Fund and that it consists solely of monies appropriated from the General Fund.

The Waste Tire Trust Fund was created by the 1989 Session of the General Assembly. See, Va. Code Ann. § 58.1-643. The Fund's revenue source is a fifty-cent tax imposed on every retailer of tires in the Commonwealth for each tire sold by the retailer. The Fund is to be used to underwrite the cost of plans and programs for the management and transportation of waste tires that must be developed and implemented by the Department of Waste Management pursuant to Section 10.1-1422.1 of the Code. This statute did not take effect until January 1, 1990, and we are not aware of any immediate plans proposed by the Department.

We propose that the Waste Tire Trust Fund be expanded to include waste batteries, waste oil, and shredder residue and that it be re-named the "Motor Vehicle Recycling Fund." Revenues for the Fund would be generated as described below, expenditures from the Fund would be authorized as described below, and the Fund

would be managed by the Virginia Department of Waste Management, also as described below.

III. The Department

The Department of Waste Management ("Department") exists pursuant the Virginia Waste Management Act. Chapter 14, Title 10.1 of the Code. The Department's current purposes are to supervise and control waste management activities in the Commonwealth, including responsibility for promoting resource conservation and resource recovery systems.

Under our proposal, Section 10.1-1422.1 would be amended to give the Department the responsibility for developing and implementing plans for the management and recycling of waste tires, waste batteries, waste oil and for testing shredder residue and paying certain costs for disposal of hazardous shredder residue, if any. The new Motor Vehicle Recycling Fund would, among other things, underwrite the cost of implementing waste tire, waste battery, waste oil and shredder residue management and recycling plans developed by the Department.

In order to create an incentive for landfills to take shredder fluff at non-discriminatory rates, the Department is directed to give priority processing to applications which agree to so accept fluff.

In order to create an incentive for local governments to approve the siting of such landfills, they will be given a credit toward the 25% recycling requirement because having available

landfill space for shredder residue is a key to achieving the 25% requirement.

IV. Revenues

To generate revenues for the new Motor Vehicle Recycling Fund, we propose an additional one dollar fee on the annual registration of every automobile in the State.

The proposed registration fee could be expected to raise approximately $4.8 million per year based on the Division of Motor Vehicles' latest figures which show that in 1988 there were 4,752,331 motor vehicles registered in Virginia.

The fee would be collected by the Division of Motor Vehicles and then transferred to the Department. The Division would be authorized to retain a small percent of the fee collected annually to cover its costs of administration in collecting and transferring the fee to the Department.

V. Expenditures

The Department would be authorized to make expenditures from the Motor Vehicle Waste Fund for the following purposes:

1. Underwriting the costs of developing and implementing management and recycling plans for waste tires, waste batteries, waste oil and testing shredder residue and paying the increased costs of transporting and disposing of any hazardous residues, if any, pursuant to the legislation described below.
2. Awarding grants and loans to the Center for Innovative Technology (CIT), Virginia colleges and

universities and other public and private research centers to develop environmentally sound methods and technologies for recycling waste tires, waste batteries, waste oil, and shredder residue.

3. Underwriting the cost of additional personnel positions, estimated at three, in the Department dedicated to expediting the processing of permit applications for selected sanitary landfills pursuant to the legislation described below.

4. Payments to shredder operators as reimbursement for the costs of testing their shredder residue where such testing is required by landfill operators prior to accepting the material pursuant to the legislation described below.

5. Payments to shredder operators as reimbursement for the costs of transporting and properly disposing of contaminated shredder residue that could not be lawfully disposed of in a sanitary landfill pursuant to the legislation described below.

6. Funding payments to localities for each inoperable vehicle disposed of at the expense of the locality, which costs are apparently now taken from the General Fund.

VI. Related Legislation

As pointed out earlier, this proposal involves related legislation that would operate in combination with the Motor Vehicle Recycling Fund and serve the purposes described below.

1. Section 10.1-1422.1 of the Code would be amended to give the Department responsibility for developing and implementing management and recycling plans for waste tires, waste batteries, waste oil, and shredder residue.

2. To encourage landfill operators to voluntarily accept shredder residue and charge it the same tipping fees charged other solid waste, the Code would be amended to provide that applicants for sanitary landfill permits would be given priority in the processing of applications and must have their applications acted on within six months after the application is deemed complete where they have agreed in their applications to accept, at the same disposal rate charged for all other wastes, any shredder residue[1] delivered to the landfill, provided there was no evidence that the residue could not be legally landfilled in a sanitary landfill. As indicated above, the Department would be authorized to reimburse scrap metal recyclers for the costs of any testing required

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[1]The attached legislation defines "recycling residue" to include any shredder residue.

by the landfill operator prior to accepting the residue. To avoid excessive analytical costs, the legislation would provide that the landfill operator must accept sampling data representative of the characteristics of the residue rather than requiring sampling of every load or shipment.

3. To encourage localities to agree to the location of landfills within their jurisdictions that would accept recycling residues at the same disposal rate charged for municipal solid waste, Section 10.1-1411 of the Code relating to regional and local solid waste management plans would be amended to provide that any locality agreeing to the location of such a landfill within its jurisdiction would receive credit for each ton of shredder residue disposed in the landfill up to a maximum of five percent credit toward the twenty-five percent 1995 recycling rate.

4. The Code would be amended to provide that scrap metal recyclers would be reimbursed for their reasonable costs of transporting and properly disposing of contaminated shredder residues that could not be lawfully disposed of in a sanitary landfill provided the recyclers were certified by the Department as operating an approved inspection and monitoring program designed to identify and remove materials known to potentially contaminate shredder residue.

An Act to amend sections 10.1-1400, 10.1-1408.1, 10.1-1411, 10.1-1422.1, 46.2-694, 58.1-640 and 58.1-643 of the Code of Virginia pertaining to landfills, the disposal of recyling residues, the registration fee of certain motor vehicles and the Waste Tire Trust Fund.

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia be amended by amending § 10.1-1400, 10.1-1408.1, 10.1-1411, 10.1-1422.1, 46.2-694, 58.1-640 and 58.1-643 as follows:

§ 10.1-1400. Definitions. Add:

"Recycling residue" means the non-metallic substances, including but not limited to plastic, rubber and insulation, which remain after a shredder has separated for purposes of recycling the ferrous and non-ferrous metal from a motor vehicle, appliance or other discarded metallic item.

§ 10.1-1408.1. Permit required; open dumping prohibited; priority review for landfills committed to receiving recyling residues.

A-H same; no amendment; add:

I. In receiving and processing applications for permits required by this section, the Director shall assign top priority to applications which (1) agree to accept non-hazardous recycling residues and (2) pledge to charge the same tipping fees for disposal of non-hazardous recycling residues as charged for non-

hazardous municipal solid waste. Applications meeting these requirements shall be acted upon no later than six months after they are deemed complete. The Director may hire employees and charge the Motor Vehicle Recycling Fund for their costs and dedicate their duties to the fulfillment of processing qualifying applications. In addition to the remedies specified elsewhere in this Title, the Department and generators of recycling residues shall have standing to seek enforcement by injunction of conditions specified by applicants in order to gain priority processing and, if the Director or generator prevails, he shall be entitled to an award of attorneys fees.

§ 10.1-1411. Regional and local solid waste management plans.

add following sentence at end of 3rd paragraph which imposes the 25% recycling requirement by 1995:

The regulations shall permit a credit of one ton for each one ton of recycling residue generated in Virginia and deposited in a landfill permitted under § 10.1-1408.1 (I) up to one-fifth of the twenty-five percent requirement.

§ 10.1-1422.1. Disposal of waste tires, batteries, petroleum products and recycling residues.

A. The Department shall develop and implement a plan for the management and transportation and disposal of waste petroleum products and batteries discarded from motor vehicles and **all**

waste tires in the Commonwealth. The costs of implementing such a plan, as well as the costs of any programs created by the Department pursuant to such a plan, shall be paid for out of the Waste Tire Trust Motor Vehicle Recycling Fund pursuant to § 58.1-64.3.

B. The Department shall develop and implement a plan for the testing of recycling residues generated in Virginia to determine whether they are non-hazardous and, if any are found to be hazardous, for transporting and disposing of such residues in appropriate landfills. The costs of implementing such testing as well as the costs of any programs created by the Department pursuant to such a plan, shall be paid for out of the Motor Vehicle Recycling Fund, provided that the portion of transportation and disposal costs so paid shall only be that amount in excess of the transportation and disposal which the generator of the residue would have paid for disposal in a sanitary landfill.

C. The Department shall have the authority to contract with colleges, universities and The Center for Innovative Technology for research to develop environmentally sound methods and technologies for recycling waste tires, waste petroleum products, batteries and recycling residues, such contracts to be funded through the Motor Vehicle Recycling Fund..

§ 46.2-694. Fees. Increase motor vehicle fees for subsections (1) smaller-cars, (2) larger cars by $1 to fund the Motor Vehicle Recycling Fund.

§ 58.1-640 and 58.1-643. Change reference to "Waste Tire Trust Fund" to "Motor Vehicle Recycling Trust Fund."

Battery Council International Proposed Model Battery Recycling Legislation

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF _____

Section 1. LEAD ACID BATTERIES; LAND DISPOSAL PROHIBITED.

(a) No person may place a used lead acid battery in mixed municipal solid waste, discard or otherwise dispose of a lead acid battery except by delivery to a battery retailer or wholesaler, or to a secondary lead smelter, or to a collection or recycling facility authorized under the law of (state) or by the U.S. Environmental Protection Agency.

(b) No battery retailer shall dispose of a used lead acid battery except by delivery to the agent of a battery wholesaler or a secondary lead smelter, to a battery manufacturer for delivery to a secondary lead smelter, or to a collection or recycling facility authorized under the law of (state) or by the U.S. Environmental Protection Agency.

(c) Each battery improperly disposed of shall constitute a separate violation.

(d) For each violation of this section a violator shall be subject to a fine not to exceed $_____ and/or a prison term not to exceed _____ days (as appropriate under state code).

Section 2. LEAD ACID BATTERIES, COLLECTION FOR RECYCLING.

(a) A person selling lead acid batteries at retail or offering lead acid batteries for retail sale in the state shall:

(1) accept from customers, at the point of transfer, used lead acid batteries of the type and in a quantity at least equal to the number of new batteries purchased, if offered by customers; and

(2) post written notice which must be at least 8½ inches by 11 inches in size and must contain the universal recycling symbol and the following language:

(i) "It is illegal to discard a motor vehicle battery or other lead acid battery"

(ii) "Recycle your used batteries.", and

(iii) "State law requires us to accept used motor vehicle batteries or other lead acid batteries for recycling, in exchange for new batteries purchased."

Section 3. INSPECTION OF BATTERY RETAILERS.

The (appropriate state agency) shall produce, print, and distribute the notices required by Section 2 to all places where lead acid batteries are offered for sale at retail. In performing its duties under this section the division may inspect any place, building, or premise governed by Section 2. Authorized employees of the agency may issue warnings and citations to persons who fail to comply with the requirement of those sections. Failure to post the required notice following warning shall subject the establishment to a fine of $_____ per day (as appropriate under state code).

Section 4. LEAD ACID BATTERY WHOLESALERS.

Any person selling new lead acid batteries at wholesale shall accept from customers at the point of transfer, used lead acid batteries of the type and in a quantity at least equal to the number of new batteries purchased, if offered by customers. A person accepting batteries in transfer from a battery retailer shall be allowed a period not to exceed 90 days to remove batteries from the retail point of collection.

Section 5. ENFORCEMENT.

The (appropriate state agency) shall enforce Section 2 and 4. Violations shall be a misdemeanor under (applicable state code).

Section 6. SEVERABILITY.

If any clause, sentence, paragraph or part of this chapter or the application thereof to any person or circumstance shall, for any reason, be adjudged by a court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder of this chapter or its application to other persons or circumstances.

Battery Council International • 111 E. Wacker Drive • Suite 600 • Chicago, IL 60601 • 312/644-6610

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SENATE BILL NO. ..... HOUSE BILL NO. .....

A BILL to amend and reenact §§ 10.1-1400, 10.1-1408.1, 10.1-1411, 10.1-1455, and 46.2-694 of the Code of Virginia, to amend the Code of Virginia by adding sections numbered 10.1-1422.2 and 10.1-1422.3, and to repeal § 45.1-390.1 of the Code of Virginia, the amended, added, and repealed sections relating to recycling.

Be it enacted by the General Assembly of Virginia:

1. That §§ 10.1-1400, 10.1-1408.1, 10.1-1411, 10.1-1455, and 46.2-694 of the Code of Virginia are amended and reenacted and that the Code of Virginia is amended by adding sections numbered 10.1-1422.2 and 10.1-1422.3 as follows:

§ 10.1-1400. Definitions.--As used in this chapter unless the context requires a different meaning:

"Board" means the Virginia Waste Management Board.

"Department" means the Department of Waste Management.

"Director" means the Director of the Department of Waste Management.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

"Federal acts" means any act of Congress providing for waste management and regulations promulgated thereunder.

"Hazardous material" means a substance or material in a form or

quantity which may pose an unreasonable risk to health, safety or property when transported, and which the Secretary of Transportation of the United States has so designated by regulation or order.

"Hazardous substance" means a substance listed under United States Public Law 96-510, entitled the Comprehensive Environmental Response Compensation and Liability Act.

"Hazardous waste" means a solid waste or combination of solid waste which, because of its quantity, concentration or physical, chemical or infectious characteristics, may:

1. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating illness; or

2. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

"Hazardous waste generation" means the act or process of producing hazardous waste.

"Manifest" means the form used for identifying the quantity, composition, origin, routing and destination of hazardous waste during its transportation from the point of generation to the point of disposal, treatment or storage of such hazardous waste.

"Mixed low-level radioactive waste" means low-level radioactive waste that contains a substance which renders the mixture a hazardous waste.

"Open dump" means a site on which any solid waste is placed, discharged, deposited, injected, dumped or spilled so as to create a nuisance or present a threat of a release of harmful substances into the environment or present a hazard to human health.

"Person" includes an individual, corporation, partnership,

association, a governmental body, a municipal corporation or any other legal entity.

"Radioactive waste" or "nuclear waste" includes:

1. "Low-level radioactive waste" material that:

a. Is not high-level radioactive waste, spent nuclear fuel, transuranic waste, or by-product material as defined in section 11e (2) of the Atomic Energy Act of 1954 (42 U.S.C. § 2014 (e) (2)); and

b. The Nuclear Regulatory Commission, consistent with existing law, classifies as low-level radioactive waste; or

2. "High-level radioactive waste" which means:

a. The highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and

b. Other highly radioactive material that the Nuclear Regulatory Commission, consistent with existing law, determines by rule requires permanent isolation.

"Recycling residue" means the nonmetallic substances, including but not limited to plastic, rubber, and insulation, which remain after a shredder has separated for purposes of recycling the ferrous and nonferrous metal from a motor vehicle, appliance, or other discarded metallic item.

"Resource conservation" means reduction of the amounts of solid waste that are generated, reduction of overall resource consumption and utilization of recovered resources.

"Resource recovery" means the recovery of material or energy from solid waste.

"Resource recovery system" means a solid waste management system which provides for collection, separation, recycling and recovery of solid wastes, including disposal of nonrecoverable waste residues.

"Sanitary landfill" means a disposal facility for solid waste so located, designed and operated that it does not pose a substantial present or potential hazard to human health or the environment, including pollution of air, land, surface water or groundwater.

"Sludge" means any solid, semisolid or liquid wastes with similar characteristics and effects generated from a public, municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, air pollution control facility or any other waste producing facility.

"Solid waste" means any garbage, refuse, sludge and other discarded material, including solid, liquid, semisolid or contained gaseous material, resulting from industrial, commercial, mining and agricultural operations, or community activities but does not include (i) solid or dissolved material in domestic sewage, (ii) solid or dissolved material in irrigation return flows or in industrial discharges which are sources subject to a permit from the State Water Control Board, or (iii) source, special nuclear, or byproduct material as defined by the Federal Atomic Energy Act of 1954, as amended

"Transport" or "transportation" means any movement of property, and any packing, loading, unloading or storage incidental thereto.

"Treatment" means any method, technique or process, including incineration or neutralization, designed to change the physical, chemical or biological character or composition of any waste to neutralize it or to render it less hazardous or nonhazardous, safer for transport, amenable to recovery, or storage or reduced in volume.

"Waste" means any solid, hazardous or radioactive waste as defined in this section.

"Waste management" means the collection, source separation, storage, transportation, transfer, processing, treatment and disposal of waste or resource recovery.

§ 10.1-1408.1. Permit required; open dumps prohibited; priority review of certain applications.--A. No person shall operate any sanitary landfill or other facility for the disposal, treatment or storage of nonhazardous solid waste without a permit from the Director.

B. No application for a permit for a solid waste management facility shall be considered complete unless the applicant has provided the Director with certification from the governing body of the county, city or town in which the facility is to be located that the location and operation of the facility are consistent with all applicable ordinances. The governing body shall inform the applicant and the Department of the facility's compliance or noncompliance not more than 120 days from receipt of a request from the applicant.

C. No such permit shall be issued until the Director has determined, after investigation and evaluation of comments by the local government, that the proposed facility poses no substantial present or potential danger to human health or the environment. At the request of the local governing body, the Department shall hold a public hearing within the said county, city or town prior to the issuance of any permit for the management of nonhazardous solid waste.

D. The permit shall contain such conditions or requirements as are necessary to comply with the requirements of this Code and the regulations of the Board and to prevent a substantial present or

potential hazard to human health and the environment.

E. No person shall dispose of solid waste in open dumps.

F. No person shall own, operate or allow to be operated on his property an open dump.

G. No person shall allow waste to be disposed of on his property without a permit. Any person who removes trees, brush, or other vegetation from land used for agricultural or forestal purposes shall not be required to obtain a permit if such material is deposited or placed on the same or other property of the same landowner from which such materials were cleared. The Board shall by regulation provide for other reasonable exemptions from permitting requirements for the disposal of trees, brush and other vegetation when such materials are removed for agricultural or forestal purposes.

When promulgating any regulation pursuant to this section, the Board shall consider the character of the land affected, the density of population, the volume of waste to be disposed, as well as other relevant factors.

H. No permit shall be required pursuant to this section for recycling or for temporary storage incidental to recycling. As used in this subsection "recycling" means any process whereby material which would otherwise be solid waste is used or reused, or prepared for use or reuse, as an ingredient in an industrial process to make a product, or as an effective substitute for a commercial product.

I. In receiving and processing applications for permits required by this section, the Director shall assign top priority to applications which (i) agree to accept nonhazardous recycling residues and (ii) pledge to charge tipping fees for disposal of nonhazardous recycling residues which do not exceed 150 percent of those charged

for nonhazardous municipal solid waste. Applications meeting these requirements shall be acted upon no later than six months after they are deemed complete. The Director may hire employees, charge the Waste Management Fund for their costs, and dedicate their duties to the fulfillment of processing qualifying applications.

§ 10.1-1411. Regional and local solid waste management plans.--The Board is authorized to promulgate regulations specifying requirements for local and regional solid waste management plans.

To implement regional plans, the Governor may designate regional boundaries. The governing bodies of the counties, cities and towns within any region so designated shall be responsible for the development and implementation of a comprehensive regional solid waste management plan in cooperation with any planning district commission or commissions in the region. Where a county, city or town is not part of a regional plan, it shall develop and implement a local solid waste management plan in accordance with the Board's regulations.

The Board's regulations shall include all aspects of solid waste management including waste reduction, recycling and reuse, storage, treatment, and disposal and shall require that consideration be given to the handling of all types of nonhazardous solid waste generated in the region or locality. In promulgating such regulations, the Board shall consider urban concentrations, geographic conditions, markets, transportation conditions, and other appropriate factors and shall provide for reasonable variances and exemptions. The regulations shall require that local or regional plans identify how the following minimum recycling rates shall be achieved: ten percent by 1991, fifteen percent by 1993, and twenty-five percent by 1995. The regulations shall permit a credit of one ton for each one ton of

recycling residue generated in Virginia and deposited in a landfill permitted under subsection I of § 10.1-1408.1. The total annual credits shall not exceed one-fifth of the twenty-five percent requirement.

After July 1, 1992, no permit for a solid waste management facility shall be issued until the local or regional applicant has a plan approved by the Board in accordance with the regulations.

If a county levies a consumer utility tax and the ordinance provides that revenues derived from such source, to the extent necessary, be used for solid waste disposal, the county may charge a town or its residents, establishments and institutions an amount not to exceed their pro rata cost, based upon population for such solid waste management if the town levies a consumer utility tax.

§ 10.1-1422.2. Disposal of waste petroleum products; recycling residues; testing.--A. The Department shall develop and implement a plan for the management and transportation of waste petroleum products in the Commonwealth. The costs of implementing such a plan, as well as the costs of any programs created by the Department pursuant to such a plan, shall be paid for out of the Waste Management Fund, pursuant to § 10.1-1422.3.

B. The Department shall develop and implement a plan for the testing of recycling residues generated in the Commonwealth to determine whether they are nonhazardous. The costs of conducting such testing shall be paid for out of the Waste Management Fund.

C. The Department shall have the authority to contract with colleges, universities, and the Center for Innovative Technology for research to develop environmentally sound methods and technologies for recycling waste tires, waste petroleum products, and recycling

residues, such contracts to be funded through the Waste Management Fund.

§ 10.1-1422.3. Waste Management Fund established.--A. There hereby created in the state treasury a special nonreverting fund to be known as the Waste Management Fund. The Waste Management Fund shall be administered by the Department of Waste Management and shall consist of any appropriations made thereto and all moneys credited to it pursuant to § 46.2-694. Any moneys remaining in the Waste Management Fund shall not revert to the general fund but shall remain in the Waste Management Fund. Interest earned on such moneys shall remain in the Waste Management Fund and be credited to it.

B. The Department of Waste Management is authorized and empowered to release moneys from the Waste Management Fund, on warrants issued by the State Comptroller, for the following:

1. Costs incurred by the Department of Waste Management in administering the provisions of subsection I of § 10.1-1408.1;

2. Costs incurred in developing and implementing a plan for the testing of recycling residues pursuant to the provisions of § 10.1-1422.2, and

3. Costs incurred in developing and implementing a plan for the management and transportation of waste petroleum products pursuant to the provisions of § 10.1-1422.2.

§ 10.1-1455. Penalties and enforcement.--A. Any person who violates any provision of this chapter, any condition of a permit or certification, or any regulation or order of the Board shall, upon such finding by an appropriate circuit court, be assessed a civil penalty of not more than $10,000 for each day of such violation. All civil penalties under this section shall be recovered in a civil

action brought by the Attorney General in the name of the Commonwealth

B. In addition to the penalties provided above, any person who knowingly transports any hazardous waste to an unpermitted facility, who knowingly transports, treats, stores, or disposes of hazardous waste without a permit or in violation of a permit, or who knowingly makes any false statement or representation in any application, label, manifest, record, report, permit, or other document filed, maintained, or used for purposes of hazardous waste program compliance shall be guilty of a felony and shall be punished by confinement in the state correctional facility for one year or, confinement in jail for not more than twelve months and a fine of not more than $10,000 for each day of violation, either or both

C. The Board is authorized to issue orders to require any person to comply with the provisions of any law administered by the Board, the Director or the Department, any condition of a permit or certification, or any regulations promulgated by the Board or to comply with any case decision, as defined in § 9-6 14:4, of the Board or Director. Any such order shall be issued only after a hearing with at least thirty days' notice to the affected person of the time, place and purpose thereof. Such order shall become effective not less than fifteen days after mailing a copy thereof by certified mail to the last known address of such person. The provisions of this section shall not affect the authority of the Board to issue separate orders and regulations to meet any emergency as provided in § 10 1-1402

D. Any person willfully violating or refusing, failing or neglecting to comply with any regulation or order of the Board or the Director, any condition of a permit or certification or any provision

of this chapter shall be guilty of a Class 1 misdemeanor unless a different penalty is specified.

Any person violating or failing, neglecting, or refusing to obey any lawful regulation or order of the Board or the Director, any condition of a permit or certification or any provision of this chapter may be compelled in a proceeding instituted in an appropriate court by the Board or the Director to obey such regulation, permit, certification, order or provision of this chapter and to comply therewith by injunction, mandamus, or other appropriate remedy.

E. Without limiting the remedies which may be obtained in this section, any person violating or failing, neglecting or refusing to obey any injunction, mandamus or other remedy obtained pursuant to this section shall be subject, in the discretion of the court, to a civil penalty not to exceed $10,000 for each violation. Each day of violation shall constitute a separate offense. Such civil penalties may, in the discretion of the court assessing them, be directed to be paid into the treasury of the county, city or town in which the violation occurred, to be used to abate environmental pollution in such manner as the court may, by order, direct, except that where the owner in violation is the county, city or town itself, or its agent, the court shall direct the penalty to be paid into the state treasury

F. With the consent of any person who has violated or failed, neglected or refused to obey any regulation or order of the Board or the Director, any condition of a permit or any provision of this chapter, the Board may provide, in an order issued by the Board against such person, for the payment of civil charges for past violations in specific sums, not to exceed the limit specified in subsection E of this section. Such civil charges shall be instead of

any appropriate civil penalty which could be imposed under subsection E.

G. In addition to all other available remedies, the Department and generators of recycling residues shall have standing to seek enforcement by injunction of conditions which are specified by applicants in order to receive the priority treatment of their permit applications pursuant to § 10.1-1408.1.

§ 46.2-694. Fees for vehicles designed and used for transportation of passengers; weights used for computing fees; burden of proof.--A. The annual registration fees for motor vehicles, trailers, and semitrailers designed and used for the transportation of passengers on the highways in the Commonwealth are:

1. Twenty-three dollars for each private passenger car or motor home if the passenger car or motor home weighs 4,000 pounds or less, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur.

2. Twenty-eight dollars for each passenger car or motor home which weighs more than 4,000 pounds, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur.

3. Thirty cents per 100 pounds or major fraction thereof for a private motor vehicle other than a motorcycle with a normal seating capacity of more than ten adults including the driver if the private motor vehicle is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire or is not operated under a lease without chauffeur. In no case shall the fee be

less than twenty-three dollars if the vehicle weighs 4,000 pounds or less or twenty-eight dollars if the vehicle weighs more than 4,000 pounds.

4. Thirty cents per 100 pounds or major fraction thereof for a school bus. In no case shall the fee be less than twenty-three dollars if the vehicle weighs 4,000 pounds or less or twenty-eight dollars if the vehicle weighs more than 4,000 pounds.

5. Twenty-three dollars for each trailer or semitrailer designed for use as living quarters for human beings.

6. Thirteen dollars plus thirty cents per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of passengers, operating either intrastate or interstate. Interstate common carriers of interstate passengers may elect to be licensed and pay the fees prescribed in subdivision 7 of this subsection on submission to the Commissioner of a declaration operations and equipment as he may prescribe. An additional five dollars shall be charged if the motor vehicle weighs more than 4,000 pounds.

7. Thirteen dollars plus seventy cents per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of interstate passengers if election is made to be licensed under this subsection. An additional five dollars shall be charged if the motor vehicle weighs more than 4,000 pounds. In lieu of the foregoing fee of seventy cents per 100 pounds, a motor carrier of passengers, operating two or more vehicles both within and outside the Commonwealth under authority of the Interstate Commerce Commission, may apply to the Commissioner for prorated registration. Upon the filing of such application, in such form as the Commissic

may prescribe, the Commissioner shall apportion the registration fees provided in this subsection so that the total registration fees to be paid for such vehicles of such carrier shall be that proportion of the total fees, if there were no apportionment, that the total number of miles traveled by such vehicles of such carrier within the Commonwealth bears to the total number of miles traveled by such vehicles within and outside the Commonwealth. Such total mileage in each instance is the estimated total mileage to be traveled by such vehicles during the license year for which such fees are paid, subject to the adjustment in accordance with an audit to be made by representatives of the Commissioner at the end of such license year, the expense of such audit to be borne by the carrier being audited. Each vehicle passing into or through Virginia shall be registered and licensed in Virginia and the annual registration fee to be paid for each such vehicle shall not be less than thirty-three dollars. For the purpose of determining such apportioned registration fees, only those motor vehicles, trailers, or semitrailers operated both within and outside the Commonwealth shall be subject to inclusion in determining the apportionment provided for herein.

8. Thirteen dollars plus eighty cents per 100 pounds or major fraction thereof for each motor vehicle, trailer or semitrailer kept or used for rent or for hire or operated under a lease without chauffeur for the transportation of passengers. An additional fee of five dollars shall be charged if the vehicle weighs more than 4,000 pounds. This subsection does not apply to vehicles used as common carriers.

9. Twenty-three dollars for a taxicab or other vehicle which is kept for rent or hire operated with a chauffeur for the transportation

of passengers, and which operates or should operate under permits issued by the State Corporation Commission as required by law. An additional fee of five dollars shall be charged if the vehicle weigh more than 4,000 pounds. This subsection does not apply to vehicles used as common carriers.

10 Eighteen dollars for a motorcycle, with or without a sidecar. To this fee shall be added a surcharge of three dollars which shall be distributed as provided in § 46.2-1191.

11. Twenty-three dollars for a bus used exclusively for transportation to and from Sunday school or church, for the purpose of divine worship. If the empty weight of the vehicle exceeds 4,000 pounds, the fee shall be twenty-eight dollars.

12. Thirteen dollars plus seventy cents per 100 pounds or major fraction thereof for other passenger-carrying vehicles.

13. An additional fee of one dollar per year shall be charged collected at the time of registration of each pickup or panel truck and each motor vehicle under subdivisions 1 through 12 of this subsection. All funds collected pursuant to this subdivision shall be paid into the state ~~treassury~~ treasury and shall be set aside as a special fund to be used only for emergency medical service purposes. Seventy-five percent of the funds so collected shall be available to the State Department of Health for use in emergency medical services. The remaining twenty-five percent of the funds shall be returned by the Department of Health to the locality wherein such vehicle is registered, to provide funding for training of volunteer or salaried emergency medical service personnel of licensed, nonprofit emergency medical services agencies and for the purchase of necessary equipment and supplies for use in such locality for licensed, nonprofit

emergency medical and rescue services.

14. An additional fee of one dollar per year shall be charged and collected at the time of registration of each pickup or panel truck and each motor vehicle under subdivisions 1 through 12 of this subsection. All funds collected pursuant to this subdivision shall be paid into the state treasury and credited to the Waste Management Fund established pursuant to § 10.1-1422.3.

B. All motor vehicles, trailers, and semitrailers registered as provided in subsection B of § 46.2-646 shall pay a registration fee equal to one-twelfth of all fees required by subsection A of this section or § 46.2-697 for such motor vehicle, trailer, or semitrailer, computed to the nearest cent, multiplied by the number of months in the registration period for such motor vehicles, trailers, and semitrailers.

C. The manufacturer's shipping weight or scale weight shall be used for computing all fees required by this section to be based upon the weight of the vehicle.

D. The applicant for registration bears the burden of proof that the vehicle for which registration is sought is entitled by weight, design, and use to be registered at the fee tendered by the applicant to the Commissioner or to his authorized agent.

2. That § 45.1-390.1 of the Code of Virginia is repealed.

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D 1/18/90 Heard C 1/19/90 tmg

SENATE BILL NO. ..... HOUSE BILL NO. .....

A BILL to amend and reenact §§ 10.1-1422 and 58.1-1707 of the Code of Virginia, relating to the litter tax.

Be it enacted by the General Assembly of Virginia:

1. That §§ 10.1-1422 and 58.1-1707 of the Code of Virginia are amended and reenacted as follows:

§ 10.1-1422. Further duties of Department.--In addition to the foregoing duties the Department shall:

1. Serve as the coordinating agency between the various industry and business organizations seeking to aid in the recycling and anti-litter effort;

2. Recommend to local governing bodies that they adopt ordinances similar to the provisions of this article;

3. Cooperate with all local governments to accomplish coordination of local recycling and anti-litter efforts;

4. Encourage, organize, and coordinate all voluntary local recycling and anti-litter campaigns seeking to focus the attention of the public on the programs of the Commonwealth to control and remove litter and encourage recycling;

5. Investigate the availability of, and apply for, funds available from any private or public source to be used in the program provided for in this article;

6. Allocate funds annually for the study of available research

and development in recycling and litter control, removal, and disposal, as well as study methods for implementation in the Commonwealth of such research and development. In addition, such funds may be used for the development of public educational programs concerning the litter problem and recycling. Grants shall be made available for these purposes to those persons deemed appropriate and qualified by the Board or the Department;

7. Investigate the methods and success of other techniques in recycling and the control of litter, and develop, encourage and coordinate programs in the Commonwealth to utilize successful techniques in recycling and the control and elimination of litter;

8. Promulgate regulations for making either direct or matching grants to localities to promote enforcement of anti-litter statutes and ordinances and to enhance local recycling and litter control programs; and

9. Expend at least fifty percent of the funds allocated annually to the Litter Control and Recycling Program pursuant to contracts with localities. The Department may enter into contracts with planning district commissions for the receipt and expenditure of funds attributable to localities which designate in writing to the Department a planning district commission as the agency to receive and expend funds hereunder.

10. Develop and implement a model recycling program serving one or more rural counties with funds generated by the litter tax pursuant to § 58.1-1707.

§ 58.1-1707. Tax levied.--A. There is hereby levied and imposed upon every person in the Commonwealth engaged in business as a manufacturer, wholesaler, distributor or retailer of products

enumerated in § 58.1-1708 an annual litter tax of ~~ten~~ twenty dollars for each establishment from which such business is conducted.

B. In addition to the tax levied in subsection A, each person engaged in business as a manufacturer, wholesaler, distributor or retailer of products enumerated in category 2, 4 or 5 of § 58.1-1708 shall pay an additional annual litter tax of fifteen dollars for each establishment from which such business is conducted.

C. For purposes of the tax levied in this section, a vending machine shall not be deemed a separate establishment. Any person engaged in the business of selling goods, wares and merchandise through the use of coin-operated vending machines shall pay an annual litter tax only with respect to each establishment from which goods, wares or merchandise are stored, kept or assembled for purposes of supplying such vending machines.

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D 12/6/89 Heard C 1/12/90 smw

SENATE BILL NO. ..... HOUSE BILL NO. .....

A BILL to amend the Code of Virginia by adding a section numbered 10.1-1415.1, relating to the labeling of plastic container products; penalty.

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 10.1-1415.1 as follows:

§ 10.1-1415.1. Labeling of plastic container products required; penalty.--A. It shall be unlawful for any person to sell, expose for sale, or distribute any plastic container product unless the product has a molded label indicating the plastic resin used to produce the plastic container product. Such label shall appear on the bottom of the plastic container product, be clearly visible, and consist of a number placed inside a triangle and letters placed below the triangle. The numbers and letters shall be as follows:

1. For polyethylene terephthalate, the letters "PETE" and the number 1.

2. For high density polyethylene, the letters "HDPE" and the number 2.

3. For vinyl, the letter "V" and the number 3.

4. For low density polyethylene, the letters "LDPE" and the number 4.

5. For polypropylene, the letters "PP" and the number 5.

6. For polystyrene, the letters "PS" and the number 6

7. For any other plastic resin, including multilayer, the letters "OTHER" and the number 7.

B. All plastic beverage containers and all nonsolid food liquid containers of less than sixteen ounces, and all rigid plastic containers of less than eight ounces shall be exempt from the labeling requirements of subsection A of this section.

C. Any person convicted of a violation of the provisions of subsection A of this section shall be punished by a fine of not more than fifty dollars. Each day of violation shall constitute a separate offense.

2. That the provisions of this section shall become effective July 1, 1992.

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D 1/11/90 Heard C 1/11/90 skv

SENATE BILL NO. ..... HOUSE BILL NO. .. ..

A BILL to amend the Code of Virginia by adding in Chapter 14 of Title 10.1 an article numbered 3.1, consisting of sections numbered 10.1-1425.1 through 10.1-1425.5, relating to the disposal of lead acid batteries; penalties.

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding in Chapter 14 of Title 10.1 an article numbered 3.1, consisting of sections numbered 10.1-1425.1 through 10.1-1425.5, as follows:

Article 3.1.

Lead Acid Batteries.

§ 10.1-1425.1. Lead acid batteries; land disposal prohibited; penalty.--A. It shall be unlawful for any person to place a used lead acid battery in mixed municipal solid waste or to discard or otherwise dispose of a lead acid battery except by delivery to a battery retailer or wholesaler, or to a secondary lead smelter, or to a collection or recycling facility authorized under the laws of this Commonwealth or by the United States Environmental Protection Agency.

B. It shall be unlawful for any battery retailer to dispose of a used lead acid battery except by delivery to (i) the agent of a battery wholesaler or a secondary lead smelter, (ii) a battery manufacturer for delivery to a secondary lead smelter, or (iii) a collection or recycling facility authorized under the laws of this Commonwealth or by the United States Environmental Protection Agency.

C. Any person found guilty of a violation of this section shall be punished by a fine of not more than fifty dollars. Each battery improperly disposed of shall constitute a separate violation.

§ 10.1-1425.2. Collection of lead acid batteries for recycling.--Any person selling lead acid batteries at retail or offering lead acid batteries for retail sale in the Commonwealth shall:

1. Accept from customers, at the point of transfer, used lead acid batteries of the type and in a quantity at least equal to the number of new batteries purchased, if offered by customers, and

2. Post written notice which shall be at least 8 1/2 inches by 11 inches in size and which shall include the universal recycling symbol and the following language: (i) "It is illegal to discard a motor vehicle battery or other lead acid battery," (ii) "Recycle your used batteries," and (iii) "State law requires us to accept used m vehicle batteries or other lead acid batteries for recycling, in exchange for new batteries purchased."

§ 10.1-1425.3. Inspection of battery retailers; penalty.--A. The Department shall produce, print, and distribute the notices required by § 10.1-1425.2 to all places in the Commonwealth where lead acid batteries are offered for sale at retail. In performing its duties under this section, the Department may inspect any place, building, or premise subject to the provisions of § 10.1-1425.2. Authorized employees of the Department may issue warnings to persons who fail to comply with the provisions of this article. Any person found guilty of failing to post the notice required under § 10.1-1425.2 after receiving a warning to do so pursuant to this section shall be punished by a fine of not more than fifty dollars.

§ 10.1-1425.4. Lead acid battery wholesalers; penalty.--A. It shall be unlawful for any person selling new lead acid batteries at wholesale to not accept from customers at the point of transfer, used lead acid batteries of the type and in a quantity at least equal to the number of new batteries purchased, if offered by customers. A person accepting batteries in transfer from a battery retailer shall be allowed a period not to exceed ninety days to remove batteries from the retail point of collection.

B. Any person found guilty of a violation of this section shall be punished by a fine of not more than fifty dollars. Each battery unlawfully refused by a wholesaler or not removed from the retail point of collection within ninety days shall constitute a separate violation.

§ 10.1-1425.5. Construction of article.--The provisions of this article shall not be construed to prohibit any person who does not sell new lead acid batteries from collecting and recycling such batteries.

D 12/6/89 Heard C 12/7/89 ljl

SENATE BILL NO. ..... HOUSE BILL NO. .....

A BILL to amend and reenact § 11-47.2 of the Code of Virginia and to amend the Code of Virginia by adding a section numbered 15.1-11.5:01, relating to the procurement of recycled paper.

Be it enacted by the General Assembly of Virginia:

1. That § 11-47.2 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding a section numbered 15.1-11.5:01 as follows:

§ 11-47.2. Preference for recycled paper used by state agencies.--A. In determining the award of any contract for paper to be purchased for use by agencies of the Commonwealth, the Department of General Services shall procure using competitive sealed bidding and shall award to the lowest responsible bidder offering recycled paper of a quality suitable for the purpose intended, so long as the bid price is not more than ten percent greater than the bid price of the low responsive and responsible bidder offering a product that does not qualify under subsection B of this section.

B. For purposes of this section, recycled paper means any paper having a total weight consisting of not less than fifty percent ~~secondary~~ waste paper ~~material~~ , as that term is defined in 40 C.F.R. § 250.4 (ss) .

§ 15.1-11.5:01. Preference for purchase of recycled paper.--A The governing body of any county, city, or town may by ordinance require that in determining the award of any contract for paper to be

purchased for use by any division, department, or agency of such county, city, or town, the purchasing agent for such county, city, or town shall procure using competitive sealed bidding and shall award to the lowest responsible bidder offering recycled paper of a quality suitable for the purpose intended, so long as the bid price is not more than ten percent greater than the bid price of the low responsive and responsible bidder offering a product that does not qualify under subsection B of this section.

B. For purposes of this section, recycled paper means any paper having a total weight consisting of not less than fifty percent waste paper, as that term is defined in 40 C.F.R. § 250.4 (ss).

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D 1/11/90 Heard T 1/11/90 skv

SENATE JOINT RESOLUTION NO.....

Requesting the Department of Waste Management to study how to most effectively promote the procurement and use of recycled products by state agencies.

WHEREAS, the 1988 Session of the General Assembly established a goal of recycling twenty-five percent of the Commonwealth's solid waste stream by 1995; and

WHEREAS, the 1989 Session of the General Assembly mandated that local governments within the Commonwealth develop and implement solid waste management plans which identify how they will achieve recycling rates of ten percent by 1991, fifteen percent by 1993, and twenty-five percent by 1995; and

WHEREAS, in an attempt to set a proper example for the residents and businesses of Virginia, the 1989 Session of the General Assembly also requested all agencies of the Commonwealth to purchase and use products manufactured from recycled materials and authorized a preference for the purchase of recycled paper in the competitive bidding process; and

WHEREAS, agencies of the Commonwealth currently utilize a large volume of products which are manufactured from virgin materials, although suitable products are available which are manufactured from recycled materials; and

WHEREAS, the Commonwealth's resources and valuable landfill space could be further conserved were products manufactured from recycled

materials to be procured for and used by the agencies of the Commonwealth; and

WHEREAS, in order to most effectively promote the Commonwealth's use of products manufactured from recycled materials, it will first be necessary to identify any current barriers to the procurement of recycled products, including any exemptions, subsidies, or other means by which virgin materials are unfairly favored over recycled materials; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Department of Waste Management is requested to conduct a study of how the Commonwealth can most effectively promote the procurement and use of recycled products by state agencies. During the course of the study, the Department shall (i) identify current barriers to the procurement and use of recycled products by state agencies and (ii) develop recommendations for removing such barriers. All agencies of the Commonwealth shall assist the Department of Waste Management in this study.

The Department of Waste Management shall complete this study in time to report its findings and recommendations to the Governor and the 1991 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for processing legislative documents.

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