

**REPORT OF THE JOINT
SUBCOMMITTEE STUDYING**

Alternatives for Improving Waste Volume Reduction and Recycling Efforts

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



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Report of the
Joint Subcommittee Studying Alternatives for
Improving Waste Volume Reduction and Recycling Efforts
To
The Governor and the General Assembly of Virginia
Richmond, Virginia
January, 1989

TO: Honorable Gerald L. Baliles, Governor of Virginia,
and
The General Assembly of Virginia

I. INTRODUCTION

The 1988 General Assembly adopted HJR 80, which continued the subcommittee established by the 1987 General Assembly pursuant to SJR 132, in order to further study alternatives for improving waste volume reduction and recycling efforts in the Commonwealth.

SJR 132 (1987) directed the subcommittee to:

1. review existing public and private waste reduction programs and capabilities in Virginia;
2. review governmental and private sector recycling programs;
3. review waste volume reduction potential in the context of overall Virginia solid waste management initiatives;
4. consider methods of assisting local governments in developing waste reduction programs, as well as methods of acquiring the cooperation of the general public;
5. make recommendations to improve waste volume reduction and recycling in Virginia and to promote coordination between state agencies, private and public organizations, private industries, and local governments in this regard;
6. make recommendations for incentives to promote waste volume reduction; and
7. coordinate with and develop recommendations for the Department of Waste Management.

The subcommittee made a number of recommendations in 1987 which were contained in its year-end report (Senate Document 22, 1988). Included in those recommendations was a recommendation that the subcommittee be continued for another year due to the complexity of the issues involved.

HJR 80 (1988) charged the subcommittee with the task of focusing its efforts upon particular issues, including:

1. incentives to promote waste volume reduction and recycling, including redemption values and recycling rates for beverage containers;
2. the regionalization approaches to solid waste management, including recycling zones and redemption centers for beverage containers; and

3. methods for the disposal of hard to recycle products such as oil, lead batteries, tires and farm chemicals.

The resolution also increased the membership of the subcommittee to fifteen by adding five new members.

The subcommittee met six times during 1988, including a two-day working session. Public hearings and business meetings were held in Newport News, Richmond, Fairfax and Abingdon. Prior to each public hearing, round table discussions were held by the subcommittee at each location and officials from surrounding localities were provided with an opportunity to discuss their jurisdictions' efforts and problems in the area of waste management and were requested to make suggestions as to how the Commonwealth could assist localities in promoting recycling and waste minimization efforts. The subcommittee heard from a wide variety of persons at the public hearings and business meetings it held, including environmental groups, local officials, state officials, and representatives of the glass, paper, plastic, tire, scrap metal, aluminum and automotive industries.

II. SUBCOMMITTEE DELIBERATIONS

For purposes of this report, due to the wide range of issues discussed, the deliberations of the subcommittee will be discussed under the following nine categories: beverage container recycling and deposit methodologies; comprehensive recycling; hard to recycle items; market development for recycling; recycling incentives; incineration; recycling by the state; other states' waste management programs; and concerns and suggestions of local governments.

A. BEVERAGE CONTAINER RECYCLING AND DEPOSIT METHODOLOGIES

Methods for increasing the recycling rates of beverage containers were discussed in detail by the subcommittee. Representatives of the glass and aluminum industry reported on current recycling rates. Testimony indicated that the glass industry in the United States currently recycles twenty-five percent of all the glass bottles it produces, although the industry has established a fifty percent recycling goal. In the last year in Virginia, the number of glass recycling centers has increased from twenty to seventy. Roanoke, Middleburg and Williamsburg include glass in their current curbside collection programs. Glass industry officials indicated that the average price paid for a ton of collected glass is \$40. Therefore, the only way for a firm to profit in glass recycling is to collect large volumes.

The aluminum recycling industry nationally recovers over fifty percent of all aluminum cans sold. Reynolds Aluminum currently recycles a can for every can which it injects into the market place. While Reynolds recycled 12.4 million pounds of aluminum cans in Virginia in 1985, 13.5 million in 1986, and 14.9 million in 1987, the company has undertaken an expansion program and has increased its buy-back locations in Virginia from forty-four to sixty-four in the past year. The expansion was undertaken due to Reynolds' belief that convenience and cash are the keys to

successful recycling. Reynolds is currently paying approximately \$.38 for each pound of aluminum cans returned. Besides Reynolds, other aluminum can recyclers in the Commonwealth include certain beer and soft drink industries, independent recyclers and scrap metal dealers.

Information provided to the subcommittee suggested that approximately seven to ten percent of the average waste stream is composed of beverage containers. Two proposals were presented to the subcommittee as to how these constituents could be prevented from entering the waste stream.

The first proposal, which covered beverage containers made of plastic, glass, aluminum or other materials, called for the establishment of a system whereby:

1. Beverage distributors would pay a regulatory fee for each container sold or transferred to a retailer. The fee would vary according to the size of the container, with larger containers carrying a higher fee. The fee would be paid into the State Recycling Fund.
2. Consumers could return empty containers to recycling centers where they would receive a refund equal to the fee levied upon the distributor. For example, if distributors were required to pay a two cent fee for each 12 ounce container, a consumer would receive two cents for each 12 ounce container that was returned.
3. The recycling center would pay the consumer the full required redemption fee. In turn, the center would be reimbursed from the fees paid into the State Recycling Fund.
4. If a particular type of container (e.g. glass, aluminum, metal or plastic) did not meet the minimum established recycling rate during a specified period, the redemption fees for that container type would be increased.
5. Excess fees in the State Recycling Fund would be used to meet the expenses of the governing agency, to provide loans and grants to recyclers, to fund public education programs on recycling and to provide financial assistance to recycling research projects. The remainder of the excess portion would be distributed back to consumers in the form of a redemption bonus. These redemption bonus funds must represent at least twenty percent of the excess fees.
6. At the end of each fiscal year, the moneys earmarked for redemption bonuses would be distributed to each participating recycling center. Each center would receive a redemption bonus payment according to the number of containers that it had redeemed during the last fiscal year. These funds must be redistributed by the centers to the consumers in the form of a redemption bonus--a cash refund in excess of the refund normally paid to the consumer. An exception would be made, during the first five years of the program, when centers would be allowed to retain the bonus for the purposes of capitalizing their operations.

The second proposal made to the subcommittee would require that all "refundable beverage containers" be labeled with "Virginia" and a statement of the amount of the refund value of the container. According to the proposal, no beverages in containers could be sold in the Commonwealth unless they were sold in these refundable beverage containers. Refund values of these refundable beverage containers would be required to be greater than or equal to ten cents. Retailers would be required to pay the refund value of these containers upon their return by the consumer. Distributors would be required to pay the same refund value plus twenty percent to retailers for each container returned by the retailer to the distributor. The proposal required that returnable beverage containers must be unbroken and relatively clean when returned in order to qualify for the refund. Metal refundable beverage containers could be compressed prior to return. Localities could establish redemption centers for the return of these containers. These centers would take the place of the retailer for refund and return purposes. Violations would be punishable by fines ranging from \$50 to \$2,500.

B. COMPREHENSIVE RECYCLING

In addition to the numerous proposals received by the subcommittee regarding how best to deal with the individual components of the waste stream, the subcommittee was presented with a comprehensive recycling proposal for the Commonwealth which included provisions for funding, financial incentives, state responsibilities, local government responsibilities and special wastes. This proposal was in large part based upon Florida's recently enacted comprehensive recycling legislation, which was reviewed by the subcommittee.

Included under the funding portion of this proposal were fees for the purchase of containers. Fees generated by the purchase of containers would be returned to consumers at registered recycling centers in exchange for the used containers. Fees not refunded would be placed in a special Solid Waste Management Trust Fund for specified uses in promoting recycling activities.

The proposal called for the creation of financial incentives, such as making Virginia Resource Authority funds available for low interest loans for waste management facilities, a sales tax exemption program for the purchase of recycling equipment, extending pollution control tax benefits to recycling equipment, and requesting that Congress redefine "manufacturing" so that recycling facilities would be eligible for industrial revenue bonds.

The proposal assigned certain tasks necessary for the implementation of the comprehensive recycling program to the Departments of Waste Management, Economic Development, Agriculture and Consumer Services, Education, and Transportation, and the Division of Purchases and Supply. The Department of Waste Management would be responsible for the overall coordination of the recycling program.

Local governments were required under the proposal to initiate, within two years, recycling programs which separate newspaper, aluminum, glass and plastic containers and compostable wastes from the waste stream

so that by 1995, and prior to incineration or landfilling, the waste stream is reduced by at least twenty-five percent. The proposal would prohibit a locality from applying for a landfill or incineration permit until its recycling program was shown to have achieved the twenty-five percent reduction in 1995.

With regard to tires, automobile batteries and waste oil, the proposal prohibited their disposal at landfills or by incineration. A disposal fee, paid by the consumer at the time of purchase, would go to the Solid Waste Management Fund and be used to provide grant moneys for recycling activities. Retailers of batteries would be required to accept used batteries as trade-ins. The proposal called for the establishment of a regional collection center for white goods as a pilot project and would create a panel to recommend how best to deal with the disposal of white goods containing PCBs and heavy metals. The use or sale of certain plastic goods was prohibited unless they were degradable within a specified period of time. The sale, distribution or use of materials made of fully halogenated chlorofluorocarbons was also prohibited. Finally, the proposal required that all plastic containers bear labeling identifying the type of plastic from which they are made in order to provide greater convenience in sorting for recycling purposes.

C. HARD TO RECYCLE ITEMS

During its deliberations in 1987, the subcommittee determined that certain materials would be harder to dispose of or recycle than others. As a result, in 1988, the subcommittee took an in-depth look at tires, used motor oil, lead acid batteries and fluff.

1. Tires

present disposal problems for a number of reasons. They cannot be landfilled without being shredded, because air trapped inside a whole tire will cause it to rise to the surface. Tires are also manufactured to be indestructible, which adds to the difficulty encountered in any disposal effort. Finally, the sheer volume of tires requiring disposal in the Commonwealth is staggering. It is estimated that, on the average, every resident of the Commonwealth disposes of one tire each year.

According to testimony received by the subcommittee, forty-seven tire dumps in Virginia are currently slated for clean-up, each dump consisting of over 500,000 used tires. These dumps account for only twenty percent of all the tires currently in dumps in the Commonwealth. Since tires disposed of in this fashion hold rain water, disease-carrying mosquitoes are attracted to these areas. Furthermore, once these large concentrations of tires catch fire, such as occurred in Winchester, Virginia, they burn for excessively long periods of time, creating health and safety concerns for nearby residents.

A number of uses are already being made of used tires. They can be repaired, retreaded, used for highway crash barriers or reefs for fishing, processed into ground or crumb rubber for burning purposes, used to make asphalt, shredded for use as oyster cultches, or reclaimed to recover the rubber. However, only thirty percent of the tires removed from service

each year in the United States are currently used for these purposes. Furthermore, testimony indicated that the use of waste tires for reclamation of their rubber or for the making of asphalt is not a cost-effective use.

Tire recyclers told the subcommittee that in view of the large number of tires which are disposed of annually, a high-volume solution is needed. They suggested that burning would be the best solution. Currently, California has a plant which burns tires to generate steam which is then converted into electricity. Similar plants are being operated successfully in Europe. In order for such plants to be cost efficient and to limit the pollutants emitted as a result of such burning, these plants must be "large scale."

One corporation currently operating in Virginia has already indicated that it would be interested in processing fifty to seventy tons of used tire rubber per day for burning purposes, but the current volume of tires collected prohibits this use. Tire recyclers suggested that in order to spur collection efforts, incentives would be necessary. Tire recyclers supported the idea of creating a one dollar tax on tires sold with revenues being used to pay for disposal costs, but preferred a "registration fee add-on." Tire dealers were concerned about the administrative costs they would incur due to such a tax.

2. Used Motor Oil

Currently, fifty percent of all automobile owners change their car's oil themselves. Consequently, approximately 4.5 million gallons of used motor oil are generated by these individuals in Virginia each year. Unless this used motor oil is disposed of by taking it to a service station for pick-up, it finds its way to the landfill or is poured on the ground or down a storm sewer. The environmental problems caused by this improper disposal of used motor oil are just now becoming apparent, as most of the public during the 1960's had their car's oil changed at service stations which disposed of the waste oil properly.

In Virginia today, approximately eight million gallons of used motor oil are properly disposed of through the used oil disposal network. This total includes used oil collected by service stations, repair garages, business and industry, government, schools, or any organization that uses a large volume of vehicles. Most of these organizations have a used oil storage tank where oil is disposed of properly. The Commonwealth, like most other states, has a thriving used oil recycling business which picks up the oil from the tanks. The problem with the disposal of used motor oil in Virginia is that approximately four million gallons never find their way to these tanks.

Virginia's response to this problem was to create the Used Oil Recycling Program in 1982. By 1984, 1,010 service stations volunteered to be public disposal centers. The Department of Mines, Minerals and Energy (DMME) currently publicizes the program and maintains a list of recycling locations. Similar programs are currently being conducted in nineteen other states.

Several problems have been encountered by the Program. Station owners began losing money when the price of virgin oil dropped. They also face liability for improper disposal and the prior contamination of used oil which they collect. Current EPA regulations regarding used oil affect the oil haulers and processors, but not service station owners unless they accept oil which has been contaminated with some sort of hazardous waste. It currently costs a service station over \$8.00 per gallon to have contaminated motor oil hauled away. Consequently, according to DMME, only 527 service stations are still participating in the program.

Some recent initiatives have been developed by DMME in an attempt to increase the amount of used oil collected through the Program. DMME is providing more funding for publicity, sponsoring studies on used motor oil, and encouraging more local involvement by placing waste oil tanks at various locations in certain communities.

A number of suggestions were made to the subcommittee as to how to improve collection efforts. These suggestions included providing protection from liability for service station owners who collect the used motor oil; providing service station owners with financial incentives to collect used motor oil, including financial assistance for payment of the haulage fees charged to service station operators for transporting contaminated motor oil; providing the public with incentives such as payments and convenience to encourage the recycling of used motor oil changed at home; and increasing public education and publicity efforts on proper methods of used oil disposal. A spokesperson for the Department of Waste Management suggested that all retailers of motor oil, should they not have a used oil collection storage tank on the premises, be required to post a sign adjacent to the motor oil display notifying customers of a toll free number which they could call in order to determine the location of the nearest collection site. It was proposed that DMME be required to maintain an up-to-date list of collection sites and operate the toll free number.

3. Lead acid batteries

Earlier in this decade, batteries had one of the highest recycling rates of any product in the United States. Almost ninety percent of the nation's automobile batteries were reclaimed by secondary lead smelters in 1980. However, by 1985, the battery recycling rate plummeted to approximately fifty-eight percent. It is estimated that in 1985, thirteen to twenty million batteries were not recycled. Since 1980, the amount of battery scraps available for recycling has increased by ten percent, while the amount actually recycled has decreased by twenty-six percent.

Two national studies have attempted to determine the reasons for the reduction in batteries recycled in the United States. Both studies concluded that there were two reasons for this reduction:

1. low market prices resulting from an over-supply of lead; and
2. increasingly stringent environmental regulations resulting in increased recycling costs.

Both studies also concluded that increasing numbers of batteries are being disposed of in municipal landfills and incinerators which are not prepared

to handle hazardous materials. The studies found that no increase in lead prices are predicted for the near future and, therefore, there will be no increase in secondary production.

In regard to the effects of environmental regulations on the battery recycling rate, testimony indicated that compliance with federal regulations adopted under the Resource Conservation and Recovery Act costs each secondary smelter that handles batteries between \$100,000 and \$200,000 per plant. While in 1982 there were sixty operational smelters in the United States, there are currently only twenty-four. The closest currently operating smelter is located in Reading, Pennsylvania.

The shrinkage in numbers of operational smelters does not prevent the continued manufacture of lead acid batteries, as current technology has provided no viable substitute for them. Testimony indicated that currently and in the foreseeable future, no market forces will provide incentives for service stations to save batteries for pick-up and recycling, although certain battery manufacturers doing business in the Commonwealth do pick-up used batteries from retailers of their products. Estimates indicated that in excess of thirty-five percent of all spent batteries generated in the United States are not being collected and returned to the smelters. The subcommittee was told that unless economic incentives are provided, battery recycling rates will continue to decrease as consumers and battery wholesalers will find it easier to dispose of spent batteries illegally rather than trying to recycle them.

The Environmental Protection Agency recently retained the services of a consulting firm to look into the problem of recycling batteries. The firm, following a detailed analysis of the problem, suggested that consideration should be given to the merits of market-based incentives such as deposit mechanisms that generate funds, which could be added to the value of used batteries to encourage recycling.

4. Fluff

"Fluff" is the generic term used to describe the non-metallic residue which is generated during the recycling process. Fluff consists primarily of plastics, insulation and foam rubber which are generated by the recycling of junked automobiles and appliances.

Testimony by spokespersons for the scrap metal industries operating in Virginia indicated that due to recently adopted federal environmental regulations, their industry is having difficulty in finding methods for disposing of fluff. The new regulations currently place liability for the improper disposal of certain materials on the "generator" of such materials. Scrap metal dealers currently fall under the definition of "generator." EPA's regulations prohibit the improper disposal of certain constituents of fluff, which is generated in large amounts by the scrap metal industry.

The scrap metal industry in the Commonwealth currently recycles items such as missile sections from submarines, bridges, automobiles, locomotives and large appliances, as well as smaller objects. Testimony indicated that were these recyclers to be forced out of business due to the liability

imposed upon them by federal regulations, the result would be an acceleration in the decreasing amount of landfill capacity in the Commonwealth.

Although no legislative solution to the liability concerns of the scrap metal industry was proposed to the subcommittee because the liability is imposed by federal regulations, industry spokespersons encouraged the subcommittee to recommend that a legislative study be undertaken to determine the means by which safe, economical and efficient disposal of recycling residues, including fluff, could be accomplished.

D. MARKET DEVELOPMENT FOR RECYCLING

Proponents of recycling testified that in order to recycle successfully, not only must recyclable materials be recovered from the waste stream, but there must be markets for products manufactured from recycled materials. Without such markets, recycled materials recovered from the waste stream would be doomed to disposal in landfills or incinerators. Efforts in recovering these recyclable materials would be wasted.

Testimony indicated that markets already exist for materials such as glass and aluminum. As was noted earlier in this report, the glass and aluminum beverage container industries utilize a large volume of used glass and aluminum in their manufacturing process. Markets also exist for recyclable paper products, particularly waste corrugated cardboard. These markets are currently limited by geographic location, as most mills operate on a delivered cost basis, with transportation comprising a majority of the costs. Consequently, most mills do not look farther than 700 miles away for markets for their product.

With regard to plastics, testimony indicated that it is important to distinguish what type of plastic is being recycled. All types of plastic have different properties which dictate the method of their recovery. Once recovered, these different properties of certain plastics also dictate the products which can be made from them. There is currently a large market for products manufactured from materials recovered from plastic two-liter soft drink bottles and PET containers. The base caps of the soft drink bottles are polyethylene, while the bottle itself is polyester. PET containers are being reprocessed to make brush bristles, distributor caps and other items. Four companies currently recycle PET containers. However, there is currently no centralized plastic recycling system.

To promote the recycling of plastics, the subcommittee was encouraged to endorse legislation requiring the labeling of certain plastic containers to identify the type of plastic from which it was constructed. It was asserted that such labeling would provide greater convenience in sorting materials for recycling purposes.

Suggestions made to the subcommittee on how best to encourage the new or further development of markets for recycled materials included endorsing legislation that would: (i) require localities to include the location of existing or proposed recycling centers in their comprehensive plans;

(ii) require localities to legitimize recycling centers as a community land use for zoning purposes, and (iii) establish a Solid Waste Recovery Authority that would act as a brokerage house for recyclable materials.

E. RECYCLING INCENTIVES

It was suggested by all those who addressed the subcommittee in support of recycling that incentives would be necessary to gain the participation of the public and private industry to establish effective recycling programs. Incentives suggested included the following:

1. provide monetary incentives to motivate small jurisdictions to develop recycling programs;
2. reward citizens with scholarships or prize money, or pay them for waste delivered;
3. reward schools for their participation in recycling programs with computers, scholarships and books for their libraries;
4. reward businesses, government offices and communities for their participation in recycling;
5. provide incentives, such as tax credits, to businesses which develop markets for recycled materials, or which modify their packaging to aid in waste reduction or which produce products that are environmentally manageable; and
6. provide further information and education to the public as to the reasons for recycling.

Due to the wide range of issues considered by the subcommittee and the complexity of the issues involved in providing certain incentives for recycling, it was suggested that the committee endorse a budget amendment for appropriations to be made to the Department of Waste Management, the Department of Economic Development and the Department of Conservation and Historic Resources to financially enable those agencies to conduct an in-depth study of what incentives would be most beneficial in establishing and promoting markets for recycled materials.

F. INCINERATION

During the course of the study, the subcommittee received testimony from a number of experts who indicated that the solution to the solid waste disposal problem facing the Commonwealth and the nation has five components: recycling, reduction, composting, incineration and landfilling. It was emphasized that recycling was the intelligent way in which to reuse materials, but that it was only part of the solution. The United States currently incinerates approximately ten percent of its solid waste and recycles about five percent. Japan, on the other hand, has been recycling about forty-eight percent of its solid waste for decades, and incinerates approximately seventy percent of the remaining amount.

Two issues are always prevalent in any discussion concerning incineration. The first issue concerns the health impacts of air emissions from incinerators, particularly dioxins and heavy metals. Expert testimony indicated that a well-run plant could minimize dioxin/furon emission levels to near zero. Burning at higher temperatures is one method of reducing

amounts of dioxins. Additionally, a good air pollution control system can remove over ninety-nine percent of the dioxins present. While there are 210 compounds of dioxins, four of these compounds are most common. There are no documented cases of cancer in humans caused by exposure to any of these four compounds.

According to one expert, heavy metals are more controversial than dioxins. With the exception of mercury, most of these metals condense on fly ash and are known as particulates. Therefore, regulation regarding particulate removal is important when considering the safety of incineration with regard to heavy metals.

The second issue involves the disposal of ash which results from incineration. Incineration creates bottom ash and fly ash. One expert testified that the data he had examined indicated that this ash can be safely disposed of in properly designed monofills. Research is currently being conducted on the possible uses of this ash.

The Executive Director of the State Air Pollution Control Board expressed concern that the unrestricted inclusion of plastics, metals and other recyclable materials in the waste streams introduced into waste-to-energy facilities will continually present air pollution control challenges which could more effectively be met through recycling or waste reduction. He encouraged the use of composting instead of burning yard wastes, as the latter practice generally increases nitrogen dioxide emissions, which are known to cause acid rain and contribute to the formation of ozone. Currently, no economically feasible technology is available to compensate for the increase in nitrogen dioxide emissions.

Many of those speakers who testified in support of incineration as a waste reduction technique requested that the subcommittee endorse flow control legislation to ensure that enough waste was available to be burned for incinerators to be cost-effective. They also requested that if mandatory recycling rates were prescribed, consideration should be given to localities which had already incurred major bond obligations for financing waste-to-energy facilities.

G. RECYCLING BY THE STATE

As a means of encouraging the public to participate in recycling activities by way of example, the subcommittee was encouraged to endorse legislation requiring state agencies to actively participate in recycling. Specifically, suggestions were made that the state should give a preference in the bidding process for the purchase of recycled paper products and that state agencies should also be required to source-separate the glass, paper, plastic and aluminum wastes which they generate. It was also suggested that a model collection center be established on the grounds of the State Capitol for the collection of these recyclable materials.

H. OTHER STATES' WASTE MANAGEMENT PROGRAMS

During the course of its deliberations, the subcommittee received testimony from officials of neighboring states concerning their state's recent initiatives in the area of waste management. A detailed description of the recent initiatives of Maryland and Tennessee is provided below.

1. Maryland

As a result of recent legislation, Maryland now requires that each county prepare a recycling plan. Counties with populations greater than 150,000 must provide for waste reduction through recycling of at least twenty percent of the county's waste stream by weight; counties with populations of less than 150,000 must provide for waste reduction through recycling of at least fifteen percent of the county's waste stream by weight. Counties are encouraged to cooperate in developing regional plans. Until a county has had its recycling plan approved, no permit to install, materially alter, or materially extend an incinerator which is located or proposed to be located in that county is allowed to be issued. Should a county fail to have an approved recycling plan by January 1, 1992, no new building permits may be issued for construction in that locality. Implementation of these plans is required by 1994. Should a county's population increase to 150,000 or more, that county is given a two-year period in which to implement a recycling plan which reduces its waste stream by at least twenty percent.

The legislation created the Office of Recycling, whose duties include assisting localities with the preparation of their recycling plans. The Office is also required to study and report biannually to the Governor and the General Assembly on topics such as the availability of local, national and international markets for recycling materials; programs necessary to educate the public on the need to participate in recycling efforts; and economically feasible methods for the recycling of scrap automobile tires, batteries, white goods, etc. The Office is required to assist the Governor's Solid Waste Task Force in making recommendations for the financing of a comprehensive system of recycling at the state and local level, including funding for recycling centers, recycling equipment, recycling education, and marketing strategies. Counties are required to submit funding requests for the development and implementation of their respective recycling plans to the Office of Recycling, as well as biannual status reports. An appropriation of \$500,000 was made to be used by the Office in assisting counties with populations under 150,000 in developing their recycling plans.

2. Tennessee's Proposed Legislation

Legislation developed by a task force created by the Tennessee legislature is scheduled to come before the Tennessee legislature for consideration in 1989. This legislation establishes nine regional planning districts. Each of these districts is required to develop a regional municipal solid waste management plan. Counties and cities within each district are required to prepare and submit local solid waste management plans to the district so that the district may develop the regional plan. The legislation provides for a goal of a forty percent reduction in the municipal solid waste going to landfills between 1990 and 1996, and a sixty-five percent reduction by 2003. All landfills would be prohibited from taking mulch materials, and would be required to maintain at least one drop-off center for the collection and sale of selected recyclable materials. In addition, all landfills would be required to develop a program for the removal of lead-acid batteries and tires. Landfill operators would be required to pay a fee of \$.60 for each ton of solid

waste deposited at the landfill. These fees would be placed in a special non-reverting fund for use in informational or educational programs related to waste management or for reimbursement of the developmental districts' administrative and related costs. If these fees are not sufficient to fully fund a region's planning process, general funds would be used to supplement the cost of the planning project. A host district benefit fee of not less than \$1.00 per ton would also be required to be paid by the operator of any municipal solid waste landfill or resource recovery facility to the host county or municipality.

Among the numerous provisions required to be in each regional plan is the mandate that each home, apartment or other building source-separate its waste prior to collection. Curbside recycling would be required unless another method of collection is provided for in the plan.

The legislation also provides that all state agencies and departments, to the greatest extent practicable, procure and use products and materials with recycled content and procure and use materials that are recyclable. The legislation specifically provides a preference for the purchase of recycled products in the state's bidding process. Recycled plastic and paper products also receive special attention in this legislation.

The Department of Health and Environment would be required to establish and maintain the state's comprehensive municipal solid waste management plan which would be based on the regional plans submitted to the Department by the developmental districts. Criminal fines and civil penalties make up the enforcement mechanisms of the legislation.

I. CONCERNS AND SUGGESTIONS OF LOCAL GOVERNMENTS

As described earlier in this report, round table discussions with local governmental representatives took place at the subcommittee meetings in Newport News, Richmond, Fairfax and Abingdon. Representatives of many local governments, including the Cities of Newport News, Norfolk, Suffolk, Portsmouth, Fredericksburg, Richmond, Petersburg, Falls Church, Fairfax, Alexandria, Lawrenceville, Danville, and Gate City and the Counties of Northampton, King George, Caroline, Prince William, Spotsylvania, Stafford, Sussex, King William, King and Queen, Gloucester, Mathews, Middlesex, Chesterfield, Dinwiddie, Loudoun, Fairfax, Wise, Roanoke, Pittsylvania, and Buchanan participated in these discussions. Additionally, representatives of a number of towns and planning district commissions were also present at one or more of the meetings.

Numerous concerns and suggestions were voiced by these local representatives. Most comments were directed toward the following issues: funding, recycling, incineration, and decreasing landfill capacity.

1. Funding

The funding of waste disposal programs appeared to be a major concern of most local jurisdictions. Many representatives encouraged the subcommittee not to mandate that localities implement any form of waste disposal program without providing financial assistance from the state. Without such assistance, local officials indicated that waste disposal fees

would be required of all consumers or that a local tax hike would be necessary. They indicated that the start-up costs for advertising, public education and initial equipment purchases necessary for any mandated recycling program or waste minimization effort would be very high.

2. Recycling

Although almost all representatives agreed that recycling was a desirable means of achieving waste minimization while conserving resources, they stressed that, prior to requiring any particular method of recycling, such as curbside, consideration should be given to the characteristics of each jurisdiction. Rural jurisdictions, according to many representatives, would find it extremely expensive to provide curbside pick-up of recyclable materials, due to distances between households. While representatives of jurisdictions with highly concentrated populations believed that regional recycling centers and curbside pick-up recycling programs, because of their convenience, would work best, rural representatives suggested that separate containers be placed at landfills or other locations in their jurisdictions for recycling purposes. Rural representatives indicated that the current green box system used in many rural areas of the state would not be successful for recycling purposes because residents would not pre-sort their wastes before placing them in source-separated containers. They indicated that before that type of program could be successful, the public would need to be educated on the benefits of recycling. Otherwise, personnel would have to be placed at all container locations to ensure that materials were source-separated prior to disposal.

A number of representatives suggested that the state should act as a brokerage for the marketing of recycled materials. Others suggested that if recycling was to be mandated and successful, an anti-scavenger statute would need to be enacted. Finally, while some representatives encouraged a regionalized approach to recycling, others favored strictly local programs.

3. Incineration

Representatives of local governments which already utilize mass-burn incinerators for waste disposal or which were considering their use encouraged the subcommittee not to endorse legislation which would mandate recycling. They explained that huge financial investments were necessary to establish mass-burn facilities and that mandated recycling would prevent such facilities from being cost effective.

4. Landfill Capacity

Without exception, all representatives indicated that their respective jurisdictions were concerned with dwindling landfill capacity. Although some comments indicated that certain jurisdictions had just begun to realize that such capacity is limited, many localities have been looking at the problem for a long time. Some representatives indicated that the tipping fees of their landfills had doubled in recent years and were expected to continue to rise. They also complained of difficulties in siting new landfills, whether due to the lack of available land or community opposition. One representative indicated that his jurisdiction had capacity left in only one of its three landfills and that, as there was

no garbage collection service in his county, some residents were forced to drive seventy miles in order to dispose of their garbage in the sole remaining landfill.

III. RECOMMENDATIONS

1. That a budget amendment be adopted requiring the appropriation of funds for the Department of Conservation and Historic Resources, the Department of Waste Management and the Department of Economic Development, to be used by such departments to study how best to develop and promote recycling markets in the Commonwealth.

2. That legislation be enacted establishing a joint subcommittee to study the means of providing for the safe, economical and efficient disposal of recycling residues. (See Appendix A for draft legislation implementing this recommendation.)

3. That legislation be enacted to amend § 10.1-1415 of the Code of Virginia to allow the Department of Waste Management to utilize funds generated by the litter control taxes and funds appropriated by the General Assembly to conduct a continuous program to control, prevent and eliminate litter from the Commonwealth and to encourage the recycling of discarded materials to the maximum practical extent. (See Appendix B for draft legislation implementing this recommendation.)

4. That legislation be enacted requiring that all local governments in the Commonwealth include the location of existing or proposed recycling centers in their comprehensive plans. (See Appendix C for draft legislation implementing this recommendation.)

5. That legislation be created amending §§ 62.1-198, 62.1-199, 62.1-201, and 62.1-204 of the Code of Virginia to authorize the Virginia Resources Authority to provide funding to local governments for drainage projects, solid waste treatment, disposal and management projects, recycling projects and resource recovery projects. This legislation should also provide that the Director of the Department of Waste Management will be a member of the Board of Directors of the Virginia Resources Authority and that the maximum total principal amount of bonds outstanding at any one time which were issued by the Authority without the prior approval of the General Assembly should be increased from \$300 million to \$600 million. (See Appendix D for draft legislation implementing this recommendation.)

6. That legislation be enacted which directs the Department of General Services to grant a ten percent preference to bidders offering recycled paper for use by agencies of the Commonwealth. In order to be eligible for this preference, such recycled paper products must be suitable for the purposes intended and must consist of not less than fifty percent secondary waste paper material by weight. (See Appendix E for draft legislation implementing this recommendation.)

7. That legislation be enacted which requests all agencies of the Commonwealth to actively participate in recycling efforts by disposing of the waste products they generate in a manner designed to encourage recycling and by purchasing and using products manufactured from recycled materials. (See Appendix F for draft legislation implementing this recommendation.)

8. That legislation be enacted which establishes a tax of one dollar on each new tire sold by every retailer of tires in the Commonwealth. The revenues generated by this tax should be placed in a special non-reverting fund known as the Waste Tire Trust Fund and used by the Department of Waste Management to develop and implement a plan for the management and transportation of all waste tires in the Commonwealth. As this legislation is envisioned as a pilot program to determine whether this will be an effective method of encouraging the proper disposal of hard-to-recycle materials, the provisions of this legislation should sunset on June 30, 1994. (See Appendix G for draft legislation implementing this recommendation.)

9. That legislation be enacted requiring the posting of specific signs next to motor oil displays at all retail establishments in the Commonwealth. Any retailer who accepts the return of used motor oil should be required to post a sign stating that he does so and indicating that the customer can call a toll free number for further information about the Virginia Used Oil Recycling Program. Any retailer who does not accept used motor oil should be required to post a sign stating that the customer can call a toll free number to determine the location of the nearest collection tank for the disposal of used motor oil. The Department of Mines, Minerals and Energy should be required to provide the appropriate signs to retailers upon request, operate the toll free number for at least forty hours per week and maintain and continually update its list of all used motor oil collection tank locations. Any retailer who fails to properly post such signs should be punished by a fine of not more than \$100. (See Appendix H for draft legislation implementing this recommendation.)

10. That legislation be enacted which requires the governing bodies of counties, cities and towns either individually or together in a region, to develop a comprehensive solid waste management plan. The Board of Waste Management should be authorized to promulgate regulations specifying requirements for such plans. These regulations should include all aspects of solid waste management, including waste reduction, recycling and reuse, storage, treatment and disposal. In promulgating such regulations, the Board should be required to consider urban concentration, geographic conditions, markets, transportation conditions, and other appropriate factors and should provide for reasonable variances and exceptions. The regulations should also require that the local or regional plans identify how the following minimum recycling rates should be achieved: ten percent by 1991, fifteen percent by 1993, and twenty-five percent by 1995. The legislation should also prohibit, after July 1, 1992, the issuance of a permit for a solid waste management facility to a local or regional

applicant until the applicant has a solid waste management plan which has been approved by the Board of Waste Management. (See Appendix I for draft legislation implementing this recommendation.)

Respectfully submitted,

Ford C. Quillen
Watkins M. Abbitt, Jr.
Jay W. DeBoer
W. Henry Maxwell
Kenneth R. Plum
A. Victor Thomas
William E. Fears
Joseph V. Gartlan, Jr.
Stanley C. Walker
Cynthia V. Bailey
R. Lindsay Gordon, III
Michael R. Timpane
Betty B. Ware
Harvey B. Morgan, Ex officio

Dissenting Opinion to the Report of the Joint
Subcommittee Studying Alternatives for Improving Waste
Volume Reduction and Recycling Efforts

I am basically in agreement with the intent and purpose of the subcommittee's recommendations and applaud its efforts in striving to come to grips with the Commonwealth's massive solid waste problems. However, I do have some reservations regarding several of the subcommittee's recommendations.

For instance, I believe it is unrealistic to set waste reduction percentage goals for attainment by local governments while at the state level denying them the tools with which to accomplish this task (i.e. the preemption on bottle bills). Furthermore, the failure of the ABC Board to develop a sound recycling program for the 25 thousand tons of glass produced annually through its sale of wine and spirits leads me to believe that the resolution requesting all state agencies to participate in recycling efforts is just so much "fluff."

Lastly, I believe it is unreasonable and unfair to expect service stations to collect used motor oil from the public for recycling. At present, service stations only sell between ten to fifteen percent of all oil sold, and much of their oil is sold to motorists whose cars burn oil, thereby preventing its recapture through oil changes. I believe that all persons who engage in the sale of motor oil should be required to maintain tanks for the collection of used oil for recycling purposes.

To end on a positive note, I believe the subcommittee made an excellent first step towards resolving the gigantic problems of worn-out tires. I note that the Virginia Tire Dealers Association was in full support of this effort and I wholeheartedly commend its members on their cooperation.

Respectfully submitted,

Madison E. Marye

APPENDICES

1 D 1/17/89 Heard C 1/18/89 df

2 APPENDIX A

3 HOUSE JOINT RESOLUTION NO.....

4 Establishing a joint subcommittee to study the means and methods of
5 providing for safe, economical and efficient disposal of
6 recycling residues.

7

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

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

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

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

24 WHEREAS, there are other forms of recycling that generate
25 residues that are difficult to dispose of; and

1 WHEREAS, these difficulties of disposal discourage and threaten
2 the continued existence of scrap metal and certain other forms of
3 recycling; and

4 WHEREAS, it is important to the Commonwealth that the recycling
5 industry be able to continue its operations; now, therefore, be it

6 RESOLVED, by the House of Delegates, the Senate concurring, That
7 a joint subcommittee be established to study the means and methods of
8 providing for safe, economical and efficient disposal of recycling
9 residues. The joint subcommittee shall consist of twelve members to
10 be appointed as follows: four members of the House of Delegates to be
11 appointed by the Speaker, three members of the Senate to be appointed
12 by the Senate Committee on Privileges and Elections, and five citizen
13 members to be appointed by the Governor, one of whom represents the
14 scrap metal recycling industry, one of whom represents the relevent
15 scientific disciplines, one of whom represents environmental
16 advocates, one of whom represents landfill operators, and one of whom
17 represents defense organizations. The Department of Waste Management
18 and all other agencies of the Commonwealth shall cooperate with the
19 study and provide assistance and technical expertise. The joint
20 subcommittee shall report its findings and recommendations to the
21 General Assembly prior to the 1990 Session as provided in the
22 procedures of the Division of Legislative Automated Systems for
23 processing legislative documents.

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

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APPENDIX B

4 SENATE BILL NO. HOUSE BILL NO.

5 A BILL to amend and reenact § 10.1-1415 of the Code of Virginia,
6 relating to funds which may be used to administer the litter
7 control program.

8

9 Be it enacted by the General Assembly of Virginia:

10 1. That § 10.1-1415 of the Code of Virginia is amended and reenacted
11 as follows:

12 § 10.1-1415. Litter Control Program.--The Director shall
13 establish within the Department a Division of Litter Control and
14 Recycling to conduct a continuous program to control, prevent and
15 eliminate litter from the Commonwealth and to encourage the recycling
16 of discarded materials to the maximum practical extent. He shall
17 appoint a qualified person to direct the work of the Division. ~~The-~~
18 ~~Department shall ensure that the costs of administering such program-~~
19 ~~shall not exceed revenues generated from litter control taxes.--The~~
20 Department shall administer such program with funds generated from
21 litter control taxes and from such other funds as may be appropriated.

22 Litter control taxes shall include the taxes increased by Chapter 616
23 of the 1977 Acts of Assembly and the taxes imposed under §§ 58.1-1700
24 through 58.1-1710. Every department of state government and all
25 governmental units and agencies of the Commonwealth shall cooperate

1 with the Department in the administration and enforcement of this
2 article.

3 This article is intended to add to and coordinate existing litter
4 control removal and recycling efforts, and not to terminate existing
5 efforts nor, except as specifically stated, to repeal or affect any
6 state law governing or prohibiting litter or the control and
7 disposition of waste.

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APPENDIX C

4 SENATE BILL NO. HOUSE BILL NO.

5 A BILL to amend and reenact § 15.1-446.1 of the Code of Virginia,
6 relating to the location of recycling centers.

7

8 Be it enacted by the General Assembly of Virginia:

9 1. That § 15.1-446.1 of the Code of Virginia is amended and reenacted
10 as follows:

11 § 15.1-446.1. Comprehensive plan to be prepared and adopted;
12 scope and purpose.--The local commission shall prepare and recommend a
13 comprehensive plan for the physical development of the territory
14 within its jurisdiction.

15 Every governing body in this Commonwealth shall adopt a
16 comprehensive plan for the territory under its jurisdiction by July 1,
17 1980.

18 In the preparation of a comprehensive plan the commission shall
19 make careful and comprehensive surveys and studies of the existing
20 conditions and trends of growth, and of the probable future
21 requirements of its territory and inhabitants. The comprehensive plan
22 shall be made with the purpose of guiding and accomplishing a
23 coordinated, adjusted and harmonious development of the territory
24 which will, in accordance with present and probable future needs and

1 resources best promote the health, safety, morals, order, convenience,
2 prosperity and general welfare of the inhabitants.

3 The comprehensive plan shall be general in nature, in that it
4 shall designate the general or approximate location, character, and
5 extent of each feature shown on the plan and shall indicate where
6 existing lands or facilities are proposed to be extended, widened,
7 removed, relocated, vacated, narrowed, abandoned, or changed in use as
8 the case may be.

9 Such plan, with the accompanying maps, plats, charts, and
10 descriptive matter, shall show the commission's long-range
11 recommendations for the general development of the territory covered
12 by the plan , including the location of existing or proposed recycling
13 centers. It may include, but need not be limited to:

14 1. The designation of areas for various types of public and
15 private development and use, such as different kinds of residential,
16 business, industrial, agricultural, conservation, recreation, public
17 service, flood plain and drainage, and other areas;

18 2. The designation of a system of transportation facilities such
19 as streets, roads, highways, parkways, railways, bridges, viaducts,
20 waterways, airports, ports, terminals, and other like facilities;

21 3. The designation of a system of community service facilities
22 such as parks, forests, schools, playgrounds, public buildings and
23 institutions, hospitals, community centers, waterworks, sewage
24 disposal or waste disposal areas, and the like;

25 4. The designation of historical areas and areas for urban
26 renewal or other treatment;

27 5. The designation of areas for the implementation of reasonable
28 groundwater protection measures; and

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APPENDIX D

4 SENATE BILL NO. HOUSE BILL NO.

5 A BILL to amend and reenact § § 62.1-198, 62.1-199, 62.1-201 and
6 62.1-204 of the Code of Virginia, relating to projects eligible
7 for funding by the Virginia Resources Authority.

8

9 Be it enacted by the General Assembly of Virginia:

10 1. That § 62.1-198, 62.1-199, 62.1-201 and 62.1-204 of the Code of
11 Virginia are amended and reenacted as follows:

12 § 62.1-198. Legislative findings and purposes.--The General
13 Assembly finds that there exists in the Commonwealth a critical need
14 for additional sources of funding to finance the present and future
15 needs of the Commonwealth for water supply , and-wastewater treatment
16 facilities , drainage facilities, solid waste treatment, disposal and
17 management facilities, recycling facilities and resource recovery
18 facilities . This need can be alleviated in part through the creation
19 of a state resources water-and-sewer-assistance-authority. Its
20 purpose is to encourage the investment of both public and private
21 funds and to make loans and grants available to local governments to
22 finance water and sewer projects , drainage projects, solid waste
23 treatment, disposal and management projects, recycling projects and
24 resource recovery projects . The General Assembly determines that the
25 creation of an authority for this purpose is in the public interest,

1 serves a public purpose and will promote the health, safety, welfare,
2 convenience or prosperity of the people of the Commonwealth.

3 § 62.1-199. Definitions.--As used in this chapter, unless a
4 different meaning clearly appears from the context:

5 "Authority" means the Virginia Resources Authority created by
6 this chapter.

7 "Board of Directors" means the Board of Directors of the
8 Authority.

9 "Bonds" means any bonds, notes, debentures, interim certificates,
10 bond, grant or revenue anticipation notes, lease and sale-leaseback
11 transactions or any other evidences of indebtedness of the Authority.

12 "Capital Reserve Fund" means the reserve fund created and
13 established by the Authority in accordance with § 62.1-215.

14 "Cost," as applied to any project financed under the provisions
15 of this chapter, means the total of all costs incurred by the local
16 government as reasonable and necessary for carrying out all works and
17 undertakings necessary or incident to the accomplishment of any
18 project. It includes, without limitation, all necessary developmental,
19 planning and feasibility studies, surveys, plans and specifications,
20 architectural, engineering, financial, legal or other special
21 services, the cost of acquisition of land and any buildings and
22 improvements thereon, including the discharge of any obligations of
23 the sellers of such land, buildings or improvements, site preparation
24 and development, including demolition or removal of existing
25 structures, construction and reconstruction, labor, materials,
26 machinery and equipment, the reasonable costs of financing incurred by
27 the local government in the course of the development of the project,
28 carrying charges incurred before placing the project in service,

1 interest on local obligations issued to finance the project to a date
2 subsequent to the estimated date the project is to be placed in
3 service, necessary expenses incurred in connection with placing the
4 project in service, the funding of accounts and reserves which the
5 Authority may require and the cost of other items which the Authority
6 determines to be reasonable and necessary. It also includes the amount
7 of any contribution, grant or aid which a local government may make or
8 give to any adjoining state, the District of Columbia or any
9 department, agency or instrumentality thereof to pay the costs
10 incident and necessary to the accomplishment of any project,
11 including, without limitation, the items set forth above.

12 "Local government" means any county, city, town, municipal
13 corporation, authority, district, commission or political subdivision
14 created by the General Assembly or pursuant to the Constitution and
15 laws of the Commonwealth or any combination of any two or more of the
16 foregoing.

17 "Local obligations" means any bonds, notes, debentures, interim
18 certificates, bond, grant or revenue anticipation notes, leases or any
19 other evidences of indebtedness of a local government.

20 "Minimum capital reserve fund requirement" means, as of any
21 particular date of computation, the amount of money designated as the
22 minimum capital reserve fund requirement which may be established in
23 the resolution of the Authority authorizing the issuance of, or the
24 trust indenture securing, any outstanding issue of bonds.

25 "Project" means any water supply or wastewater treatment facility
26 including a facility for receiving and stabilizing septage, or a
27 soil drainage management facility, a solid waste treatment, disposal
28 or management facility, a recycling facility, or a resource recovery

1 facility located or to be located in the Commonwealth, the District of
2 Columbia or any adjoining state, all or part of which facility serves
3 or is to serve any local government. The term includes, without
4 limitation, water supply and intake facilities; water treatment and
5 filtration facilities; water storage facilities; water distribution
6 facilities; sewage and wastewater (including surface and groundwater)
7 collection, treatment and disposal facilities; drainage facilities and
8 projects; solid waste treatment, disposal or management facilities;
9 recycling facilities; resource recovery facilities; related office,
10 administrative, storage, maintenance and laboratory facilities; and
11 interests in land related thereto.

12 § 62.1-201. Board of Directors.--A. All powers, rights and
13 duties conferred by this chapter or other provisions of law upon the
14 Authority shall be exercised by a board of directors consisting of the
15 State Treasurer, the Executive Director of the State Water Control
16 Board, the State Health Commissioner, the Executive Director of the
17 Department of Waste Management, and six members appointed by the
18 Governor, subject to confirmation by the General Assembly. The members
19 of the Board of Directors appointed by the Governor shall serve terms
20 of four years each, except that the original terms of three members
21 appointed by the Governor shall end on June 30, 1985, 1986, and 1987,
22 respectively, as designated by the Governor. Any appointment to fill
23 a vacancy on the Board of Directors shall be made for the unexpired
24 term of the member whose death, resignation or removal created the
25 vacancy. All members of the Board of Directors shall be residents of
26 the Commonwealth. Members may be appointed to successive terms on the
27 Board of Directors. Each member of the Board of Directors shall be
28 reimbursed for his or her reasonable expenses incurred in attendance

1 at meetings or when otherwise engaged in the business of the Authority
2 and shall be compensated at the rate provided in § 2.1-20.3 of the
3 Code of Virginia for each day or portion thereof in which the member
4 is engaged in the business of the Authority.

5 B. The Governor shall designate one member of the Board of
6 Directors as chairman; he shall be the chief executive officer of the
7 Authority. The Board of Directors may elect one member as
8 vice-chairman; he shall exercise the powers of chairman in the absence
9 of the chairman or as directed by the chairman. The State Treasurer,
10 the Executive Director of the State Water Control Board ~~and the~~
11 State Health Commissioner and the Executive Director of the Department
12 of Waste Management shall not be eligible to serve as chairman or
13 vice-chairman.

14 C. Meetings of the Board of Directors shall be held at the call
15 of the chairman or of any four members. Five members of the Board of
16 Directors shall constitute a quorum for the transaction of the
17 business of the Authority. An act of the majority of the members of
18 the Board of Directors present at any regular or special meeting at
19 which a quorum is present shall be an act of the Board of Directors.
20 No vacancy on the Board of Directors shall impair the right of a
21 majority of a quorum of the members of the Board of Directors to
22 exercise all the rights and perform all the duties of the Authority.

23 D. Notwithstanding the provisions of any other law, no officer or
24 employee of the Commonwealth shall be deemed to have forfeited or
25 shall have forfeited his or her office or employment by reason of
26 acceptance of membership on the Board of Directors or by providing
27 service to the Authority.

28 § 62.1-204. Power to borrow money and issue bonds.--The

1 Authority shall have the power to borrow money and issue its bonds in
2 amounts the Authority determines to be necessary or convenient to
3 provide funds to carry out its purposes and powers and to pay all
4 costs and expenses incurred in connection with the issuance of bonds.
5 The total principal amount of bonds outstanding at any one time,
6 issued by the Authority, shall not exceed the sum of ~~\$300~~\$600
7 million without prior approval of the General Assembly.

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APPENDIX E

4 SENATE BILL NO. HOUSE BILL NO.

5 A BILL to amend the Code of Virginia by adding a section numbered
6 11-47.2, relating to a preference for the purchase of recycled
7 paper.

8

9 Be it enacted by the General Assembly of Virginia:

10 1. That the Code of Virginia is amended by adding a section numbered
11 11-47.2 as follows:

12 § 11-47.2. Preference for recycled paper used by state
13 agencies--A. In determining the award of any contract for paper to be
14 purchased for use by agencies of the Commonwealth, the Department of
15 General Services shall procure using competitive sealed bidding and
16 shall award to the lowest responsible bidder offering recycled paper
17 of a quality suitable for the purpose intended, so long as the bid
18 price is not more than ten percent greater than the bid price of the
19 low responsive and responsible bidder.

20 B. For purposes of this section, recycled paper means any paper
21 having a total weight consisting of not less than fifty percent
22 secondary waste paper material.

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APPENDIX F

4

HOUSE JOINT RESOLUTION NO.....

5 Requesting that all agencies of the Commonwealth actively participate
6 in recycling efforts.

7

8 WHEREAS, the General Assembly has established a goal of recycling
9 twenty-five percent of the waste stream in the Commonwealth by 1995;
10 and

11 WHEREAS, the use of products manufactured from recycled materials
12 and the method by which recyclable products are disposed of are
13 critical to the success of any recycling effort; and

14 WHEREAS, agencies of the Commonwealth generate considerable
15 quantities of waste paper and other products which are capable of
16 being recycled; and

17 WHEREAS, many products containing recycled materials are suitable
18 for use by agencies of the Commonwealth; and

19 WHEREAS, by actively participating in recycling efforts, the
20 agencies of the Commonwealth will provide a proper example for the
21 rest of Virginia; now, therefore, be it

22 RESOLVED by the House of Delegates, the Senate concurring, That
23 all agencies of the Commonwealth are requested to actively participate
24 in recycling efforts by disposing of the waste products they generate

1 in a manner designed to encourage their recycling and by purchasing
2 and using products manufactured from recycled materials.

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APPENDIX G

4 SENATE BILL NO. HOUSE BILL NO.

5 A BILL to amend the Code of Virginia by adding a section numbered
6 10.1-1422.1 and a chapter numbered 6.1, consisting of sections
7 numbered 58.1-640 through 58.1-644, relating to the establishment
8 of a tax on the retail sale of tires; penalties.

9

10 Be it enacted by the General Assembly of Virginia:

11 1. That the Code of Virginia is amended by adding a section numbered
12 10.1-1422.1 and a chapter numbered 6.1, consisting of sections
13 numbered 58.1-640 through 58.1-644, as follows:

14 § 10.1-1422.1. Disposal of waste tires.--The Department shall
15 develop and implement a plan for the management and transportation of
16 all waste tires in the Commonwealth. The costs of implementing such a
17 plan, as well as the costs of any programs created by the Department
18 pursuant to such a plan, shall be paid for out of the Waste Tire Trust
19 Fund, pursuant to § 58.1-643.

20 CHAPTER 6.1.

21 VIRGINIA TIRE TAX.

22 § 58.1-640. Definitions.--As used in this chapter, unless the
23 context requires a different meaning:

24 "Fund" means the Waste Tire Trust Fund.

25 "Retailer of tires" means any person engaged in the business of

1 making retail sales of tires, whether new or used, within this
2 Commonwealth. "Retail sales" do not include the sale of tires to a
3 person solely for the purpose of resale, provided the subsequent
4 retail sale in this Commonwealth is subject to the tax levied by the
5 provisions of this chapter.

6 "Tire" means a continuous solid or pneumatic rubber covering
7 encircling the wheel of a vehicle used for transportation purposes.

8 § 58.1-641. Imposition of tire tax.--There is hereby levied and
9 imposed upon every retailer of tires in the Commonwealth, in addition
10 to all other taxes and fees of every kind now imposed by law, a tax of
11 one dollar for each new tire sold by such retailer.

12 § 58.1-642. Collection of tire tax; deductions; exemptions.--A.
13 The tire tax levied under this chapter shall be collected by the Tax
14 Commissioner in the same manner as is the retail sales and use tax,
15 pursuant to Chapter 6 (§§ 58.1-600 et seq.) of this title.

16 B. The tax imposed under § 58.1-641 shall not apply to new tires
17 for:

- 18 1. Any device moved exclusively by human power;
- 19 2. Any device used exclusively upon stationary rails or tracks;
- 20 3. A motorcycle;
- 21 4. An all-terrain vehicle; or
- 22 5. Any device used exclusively for farming purposes, except a
23 farm truck.

24 C. For the purpose of compensating a retailer of tires for
25 accounting for and remitting the tax levied by this chapter such
26 retailer shall be allowed fifteen percent of the amount of tax due and
27 accounted for in the form of a deduction in submitting his return and
28 paying the amount due by him if the amount due was not delinquent at

1 the time of payment.
2 § 58.1-643. Waste Tire Trust Fund established; use of moneys.--A.
3 All moneys collected pursuant to § 58.1-642 shall be paid into the
4 treasury and credited to a special nonreverting fund known as the
5 Waste Tire Trust Fund, which is hereby established.
6 B. Any moneys remaining in the Fund shall not revert to the
7 general fund but shall remain in the Fund. Interest earned on such
8 moneys shall remain in the Fund and be credited to it.
9 C. The Department of Waste Management is hereby authorized and
10 empowered to order the State Comptroller to release moneys from the
11 Fund for any of the purposes enumerated in § 10.1-1422.1, or any
12 regulations adopted thereunder.
13 § 58.1-644. Provisions of Chapter 6 of this title to apply,
14 mutatis mutandis.--The provisions in Chapter 6 (§ 58.1-600 et seq.)
15 of this title shall apply to this chapter, mutatis mutandis, except as
16 herein provided.
17 2. That the provisions of this act shall expire on June 30, 1994.
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APPENDIX H

4 SENATE BILL NO. HOUSE BILL NO.

5 A BILL to amend the Code of Virginia by adding a section numbered
6 45.1-390.1, relating to used motor oil collection; penalty.

7

8 Be it enacted by the General Assembly of Virginia:

9 1. That the Code of Virginia is amended by adding a section numbered
10 45.1-390.1 as follows:

11 § 45.1-390.1. Used motor oil; signs; toll-free number;
12 penalty.--A. Any person who sells motor oil at the retail level and
13 who maintains on the retail site a collection tank for the disposal of
14 used motor oil by the public shall, immediately adjacent to the motor
15 oil display, post a sign provided by the Department, which shall be of
16 dimensions at least eight and one-half inches by eleven inches, and
17 recite the following language: RETURN USED OIL HERE. FOR INFORMATION,
18 CALL 1-800-552-3831. VIRGINIA USED OIL RECYCLING PROGRAM.

19 B. Any person who sells motor oil at the retail level and who
20 does not accept the return of used motor oil shall post a sign
21 provided by the Department, which states the toll-free number which
22 may be called for information regarding the location of collection
23 tanks for used motor oil. The sign shall be placed immediately
24 adjacent to the motor oil display, be of dimensions at least eight and

1 one-half inches by eleven inches, and recite the following language:
2 THE LOCATION OF COLLECTION TANKS FOR THE DISPOSAL OF USED MOTOR OIL
3 MAY BE OBTAINED BY DIALING 1-800-552-3831.

4 C. The Department shall establish, maintain and operate the
5 toll-free number referred to in this section and maintain and
6 continually update a list of all used motor oil collection tank
7 locations so as to be able to provide the most current information
8 possible. The Department shall operate the toll-free number for at
9 least forty hours each week.

10 D. Any person who violates the provisions of subsection A or B
11 of this section shall be guilty of a Class 4 misdemeanor.

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APPENDIX I

4 SENATE BILL NO. HOUSE BILL NO.

5 A BILL to amend and reenact § 10.1-1411 of the Code of Virginia,
6 relating to regional and local solid waste management plans.

7

8 Be it enacted by the General Assembly of Virginia:

9 1. That § 10.1-1411 of the Code of Virginia is amended and reenacted
10 as follows:

11 § 10.1-1411. ~~Designation of regional boundaries; regional solid-~~
12 ~~waste management plans.--The Governor may designate regional-~~
13 ~~boundaries for solid waste management.--In the designation of such-~~
14 ~~boundaries, the Governor shall consider urban concentrations,--~~
15 ~~geographic conditions, markets and other factors as may be appropriate~~
16 ~~for carrying out regional solid waste management.--The governing bodies~~
17 ~~of the counties, cities and towns within any region so designated-~~
18 ~~shall be responsible for the development of a comprehensive regional-~~
19 ~~solid waste management plan in cooperation with any planning district-~~
20 ~~commission or commissions in the region.--Each regional solid waste-~~
21 ~~management plan shall include all aspects of solid waste management.--~~
22 ~~The governing body of each county, city or town shall be responsible-~~
23 ~~for ensuring, within its jurisdictional boundaries, the implementation~~
24 ~~of these portions of the regional solid waste management plan-~~

~~1 applicable to such county, city or town. Until the date a county, city
2 or town becomes subject to a regional solid waste management plan, the
3 county, city or town shall be responsible for implementation of a
4 local solid waste management plan which meets standards prescribed by
5 Board regulation. The implementation plans shall include adequate
6 provisions for the disposal of construction waste and ro-rata cost,
7 based upon population for such solid waste management if the town
8 levies a consumer utility tax land clearing debris generated within
9 the county, city or town and such plans shall be implemented as
10 expeditiously as possible.--~~

~~11 For the purposes of this section, construction waste and
12 land clearing debris shall mean solid waste generated attendant to
13 construction of structures, demolition of structures, or clearing of
14 trees, brush and other vegetation from land as a result of such
15 construction or demolition. This section shall not require a local
16 government to provide facilities for the management of any hazardous
17 waste generated as a result of such activities.-- Furthermore, this
18 section shall not affect the right of private landowners who use their
19 land for agricultural purposes to cut trees, brush, or other
20 vegetation on their land and deposit it on that same property.--~~

21 Regional and local solid waste management plans.--The Board is
22 authorized to promulgate regulations specifying requirements for local
23 and regional solid waste management plans.

24 To implement regional plans, the Governor may designate regional
25 boundaries. The governing bodies of the counties, cities and towns
26 within any region so designated shall be responsible for the
27 development of a comprehensive regional solid waste management plan in
28 cooperation with any planning district commission or commissions in

1 the region. Where a county, city or town is not part of a regional
2 plan, it shall develop a local solid waste management plan in
3 accordance with the Board's regulations.

4 The Board regulations shall include all aspects of solid waste
5 management including waste reduction, recycling and reuse, storage,
6 treatment, and disposal and shall require that consideration be given
7 to the handling of all types of nonhazardous solid waste generated in
8 the region or locality. In promulgating such regulations, the Board
9 shall consider urban concentrations, geographic conditions, markets,
10 transportation conditions, and other appropriate factors and shall
11 provide for reasonable variances and exemptions. The regulations shall
12 require that local or regional plans identify how the following
13 minimum recycling rates shall be achieved: ten percent by 1991,
14 fifteen percent by 1993, and twenty-five percent by 1995.

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

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

24 #

