# REPORT OF THE COMMISSION TO STUDY AND ADVISE UPON THE DISPOSAL OF SOLID WASTES

TO

THE GOVERNOR

**AND** 

THE GENERAL ASSEMBLY OF VIRGINIA

February, 1975



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COMMONWEALTH OF VIRGINIA Department of Purchases and Supply Richmond 1975

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# REPORT OF THE COMMISSION TO STUDY AND ADVISE UPON THE DISPOSAL OF SOLID WASTES

TO

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## AND THE GENERAL ASSEMBLY OF VIRGINIA

# Richmond, Virginia

# February 1975

TO: Honorable Mills E. Godwin, Jr., Governor of Virginia and

The General Assembly of Virginia

#### INTRODUCTION

At its 1973 Session, the General Assembly of Virginia enacted legislation establishing a permanent Commission to Study and Advise Upon the Disposal of Solid Wastes. Code of Virginia, §§ 9-144 and 9-145.

The Commission was directed to "study all problems incident to the causes, collection and disposal of solid wastes". In addition to its general responsibilities, the Commission also has specific issues directed to it from time to time by the General Assembly.

In carrying out its general and specific charges during the past year, the full Commission met six times. In addition, there were numerous meetings of Commission subcommittees during the year.

This report is a summary of the Commission activities during the year 1974.

#### **DELIBERATIONS OF THE COMMISSION**

## A. Objectives

During 1974 the Commission drafted, reviewed and approved a set of objectives to cover the Commission's activities during 1974 and to provide guidance for long-term Commission goals in ensuing years.

The final list of objectives is as follows:

- 1. Engage consultant to work with Bureau of Solid Waste and Vector Control to determine the status of solid wastes generation, collection, transportation and disposal in Virginia to include summary and conclusions but no recommendations.
  - 2. To establish a mechanism for handling hazardous wastes
  - a. Emergency
  - b. Non-Emergency
- 3. To review specific solid waste problems as they arise from time to time
- a. As directed by the General Assembly (e.g., the beverage container issue report due November, 1975; community recycling centers report made January, 1975, House Document No. 33)
- b. Within the Commonwealth and make recommendations where appropriate.
- 4. To strengthen existing solid waste collection, transportation and disposal programs.
- 5. To set up a climate conducive to promoting the concept of resource recovery.
- 6. To set up a climate conducive to regional solid waste management systems.
- 7. To ensure that guidelines are established to aid local governments in evaluating solid waste management alternatives.
  - 8. To establish programs to control the generation of litter.
- 9. To study the concept of source reduction as a means of controlling solid wastes.
- 10. To work toward coordinating solid waste management problems with other environmental concerns of the Commonwealth and with agencies whose activities relate to the solid waste problem.

11. To encourage the development of an on-going program of research, training and education in solid waste and litter related areas.

Items 1 and 2 were completed during 1974 and are reported on below. Item 3 is also discussed below.

# B. Specific Areas of Study During 1974

1. Independent Consultant's Report on "Solid Waste in Virginia."

The Solid Waste Commission engaged the firm of Hayes, Seay, Mattern and Mattern to review solid waste problems in Virginia and to appraise these problems. The scope of the study includes an examination of solid waste generation, storage, collection, disposal and impact.

This report concludes that "there has been significant improvement in solid waste disposal practices and techniques in Virginia in the past decade."

However, the report also states that "Virginia is still faced with complex solid waste problems."

As a result of this study, the Consultant concluded that the following problems remain to be solved:

- a. There is a lack of long-range comprehensive planning for handling Virginia's increasing volume of domestic solid waste.
- b. The Bureau of Solid Waste and Vector Control is presently understaffed.
- c. Very little is known about the quantities, composition and disposal methods for industrial solid waste.
- d. Virginia has no specific law to regulate hazardous solid wastes.
- e. There are presently no state laws granting the Health Department authority to regulate collection and storage of domestic solid waste.
- f. Decreasing land availabilities will probably create situations where local governments are not able to acquire land for disposal sites.
- g. There is a need to update and combine the hundreds of laws in Virginia concerned with solid waste.
- h. Sewage sludge should be considered part of the solid waste problem and dealt with accordingly.
- i. Existing laws do not regulate collection and transportation of demolition wastes.

- j. There are still some solid waste disposal sites that do not meet minimum state standards. This problem might be alleviated by granting the Health Department enforcement powers to deal with disposal problems.
  - k. There is little information available on agricultural wastes.
- l. Litter in Virginia is a nuisance and an esthetic problem. Litter is a people problem which may be alleviated by increased public awareness.
- m. Discarded autos are, today, being recycled throughout the state.

The Consultant's report was received just prior to completing the Commission's annual report to the Governor and the General Assembly.

The Commission has taken the conclusions of the Consultant's report under advisement to guide the Commission in its future actions. The Commission does not wish, however, to endorse them until it has the opportunity to review them in more detail.

A copy of the Summary of Findings and Conclusions from the Consultant's report is given as Appendix I to this report. A complete copy of the Consultant's report is available by contacting the Commission or the Division of Legislative Services.

2. Report on the Feasibility of Regional Centers for Recycling Paper, Glass and Metals

House Joint Resolution No. 79 required that the Commission study and report on the feasibility of establishing regional centers for recycling paper, glass, metal and other products whose manufacture depletes the natural resources of the Commonwealth.

The Commission studied this request and concluded that:

"Because of substantial citizen interest in collection systems for recycled materials, the Commission encourages the establishment of an information center within the Bureau of Solid Waste and Vector Control on such systems as they exist in the Commonwealth and nationwide. This information, which could be assembled, to a large degree, on the basis of written and telephone solicitations, would serve to inform citizens, companies and municipalities on the techniques and economics of operating a recycling center. The ready availability of this information would encourage private groups to begin recycling centers for scrap materials where it is economically feasible. The handling techniques required for various scrap materials, and the cost and type of equipment necessary to do the job should be included in the information to be accumulated.

It is not, however, recommended at this time that the Commonwealth of Virginia provide direct financial support for the establishment or operation of regional collection centers for scrap materials."

The complete Commission report is included in House Document No. 33, 1975.

## 3. Hazardous Wastes

The problem of hazardous wastes is considered to be one of the most serious of the short-range solid waste problems, since it deals with areas that can directly affect the public health.

Because of the potentially serious nature of this problem area, the Commission established a Subcommittee on Hazardous Wastes under the chairmanship of Mr. Atkins, assisted by Mrs. Jones, Mr. Bagley and Mr. Guiffre, and asked that this Subcommittee report with recommendations in time for inclusion in this annual report. The entire Subcommittee Report on Hazardous Wastes is included as Appendix II.

Summarizing from Appendix II, the Subcommittee on Hazardous Wastes concluded:

"There are significant dangers to the public health and environment of the Commonwealth resulting from the improper handling of emergency hazardous wastes. The purpose of [a current] Bureau of Solid Waste and Vector Control study is to identify sources and types of wastes and methods of handling which are basic criteria in the establishment of adequate safeguards.

Legislation is needed to authorize the State Health Department to:

- (1) enter any establishment suspected of producing hazardous wastes;
  - (2) issue permits for handling and disposing of such wastes;
- (3) establish standards for treatment on- and off-site and transport; and
  - (4) enforce compliance with standards.

The State Department of Health should proceed with the establishment of an information system for the management of emergency hazardous wastes.

This should include a panel of experts and a clearing house to collect and provide information on the health and environmental implications of various types of such wastes and means of prevention. Close coordination with state and national agencies as well as industrial organizations involved should be maintained in the establishment and operation of this system."

The subject of hazardous wastes is of major concern to the Federal Environmental Protection Agency and studies now underway at the Federal level may well shed new light on the problem in Virginia. In the interim, however, it is recommended that steps be

taken to implement the conclusions of the Subcommittee on Hazardous Wastes.

## 4. Beverage Containers

The Commission has established a Subcommittee under its Vice Chairman, Mr. William M. Beck, to investigate all aspects of the questions associated with the imposition of taxes, deposits or otherwise restricting cans and bottles used to package beer and sort drinks.

In the 1974 Session of the General Assembly, several bills that would have required a deposit on beverage containers were considered.

At that time, Mr. Beck made a statement at a public hearing conducted by the Virginia Senate on two bills that would require beverage container deposit.

Mr. Beck received some of the ramifications of such legislation and asked that the matter be referred to the Solid Waste Commission for further study. A complete copy of Mr. Beck's statement is included as Appendix III to this report.

As a result, the Commission was requested by the 1974 General Assembly (Chapter 451 of the 1974 Acts of the Assembly) to study and report on the issues contained in Senate Bills No. 30 and 174 (requiring deposits on beverage containers) and report back to the Governor and the General Assembly, not later than November 1, 1975.

A bill introduced in the 1975 Session of the General Assembly that would tax beverage containers (House Bill No. 1017) was also referred to the Commission with a report date of November 1, 1975.

The Subcommittee on Beverage Container Legislation under Mr. Beck is actively gathering information from the States of Oregon and Vermont which have enacted deposit legislation. Statements from interested parties are being gathered by the Commisson in order to assist it in its report to the General Assembly in November.

It is anticipated that the report to the General Assembly will be comprehensive and will cover all known aspects of beverage container restrictions and related issues.

The Commission has also planned a series of public hearings to begin in early spring, and public testimony on beverage container issues will be part of these hearings. This information will, too, be used in compiling the report on this issue to the Governor and the General Assembly.

#### C. Plans for 1975

During 1975, the Commission will be reviewing the recommendations of the Consultant's Report on the state-of-the-art

of solid waste disposal in Virginia. Recommendations for action, based upon this study, will be made in its 1976 annual report, or sooner if circumstances warrant.

The Commission, working through its Subcommittee on Beverage Containers, will report on the issues contained in Chapter 451 of the 1974 Acts of the Assembly, House Bill No. 1017 and related matters by November 1, 1975.

The Commission will conduct a series of public hearings on issues related to the Commisson's charge to "study all problems incident to the causes, collection, and disposal of solid wastes." These public hearings will be held during the spring of 1975.

Concurrent with and including its evaluation of the recommendations of its Consultant's Report on the state-of-the-art of solid waste in Virginia, the Commission, during 1975, has set, as a major objective, the study of the feasibility and desirability of establishing a statewide solid waste management plan including potential for resource recovery.

It is anticipated that the Commission will review the situation in states such as Connecticut, New York, Wisconsin and Florida, which have enacted such plans, and advise upon the practicality of implementing such programs in Virginia. This area will be included in the 1976 Commission report to the Governor and the General Assembly.

Respectfully submitted,

Dr. Robert F. Testin, Chairman

William M. Beck, Jr. Vice Chairman

Callis H. Atkins

Richard M. Bagley

A. Joe Canada, Jr.

Ernest C. Edwards, Jr.

Joseph M. Guiffre

Julian F. Hirst

Mrs. Joan S. Jones

J. D. Pennewell

James M. Thomson

Stanley C. Walker

Lawrence Douglas Wilder

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#### APPENDIX I

## 1. SUMMARY OF FINDINGS AND CONCLUSIONS

There has been significant improvement in solid waste disposal practices and techniques in Virginia in the past decade. Prior to 1971, open dumping and open burning were prevalent throughout the state. Today, all but five counties in the state have sanitary landfills with permits issued by the State Health Commissioner. A total of 173 permits have been issued in the state for approved solid waste disposal facilities since 1971. Four of the permits were for incinerators and 169 were four sanitary landfills incorporating sound engineering disposal techniques and principles. Some localities in the state are investigating resource recovery techniques in disposal of their solid waste. Recycling is being accomplished on a limited basis at the municipal level in Virginia.

In spite of these advances, Virginia is still faced with complex solid waste problems:

- l. A very serious problem facing the state is the lack of a long range comprehensive program for handling Virginia's increasing volume of domestic solid waste. The combined effect of increasing population and increasing per capita solid waste generation is a future projection of soaring quantities of domestic solid waste. Conservative projections are that the annual domestic solid waste generation will increase in Virginia from an estimated 3,322,000 tons in 1974 to 4,300,000 tons by 1980. A number of long range plans have been developed by the Bureau which have resulted in the construction of landfills throughout the state that provide adequate future capacity for the areas they serve. Continued and increased efforts, however, will be required to develop and administer a solid waste management program for handling the solid waste problem in Virginia's large metropolitan areas. There are a number of factors which complicate the developement of a comprehensive statewide solid waste management plan:
- a. Very little reliable information is available in tabular form on the capacity of existing solid waste disposal facilities in te state. Information supplied by the Bureau of Solid Waste and Vector Control indicates that the life expectancy of many of the major landfills is five years or less:
- b. Solid waste generation is increasing in the state's large metropolitan areas, but vacant land suitable for landfills and convenient to these areas is rapidly diminishing.
- c. While air and water pollution problems have gotten a great deal of attention by the general public and the federal and the state government, solid waste disposal has received comparatively little recognition as major problem. Consequently, little financial assistance is available at federal and state levels for solid waste planning, and none is available for construction of solid waste

disposal facilities. It will be very difficult to continue to find solutions to solid waste problems which affect the entire state's air, water, land, energy and mineral resources as well as the health and economic well-being of all its citizens without major financial assistance from the state. It is felt that with state and federal aid, individual localities may be more inclined to cooperate in solving mutual and statewide problems.

- d. Comprehensive and time consuming studies will be required to accomplish the type of planning that is needed. As a minimum, the following is needed:
  - (1.) Data on existing solid waste disposal facilities.
- (2.) Accurate information on present per capita solid waste generation and accurate projections of the future solid waste volumes.
- (3.) Areawide plans based on cost and environmental evaluation for required solid waste disposal facilities.
  - (4.) Scheduled for providing the facilities.
  - (5.) Institutional arrangement for operating the facilities.
- 2. The Bureau of Solid Waste and Vector Control is presently understaffed.
- a. The Bureau does not have sufficient manpower to establish and administer the type of comprehensive statewide solid waste management program needed for handling Virginia's increasing solid waste. Consideration should be given to enlarging the staff initially by three people for the purpose of establishing guidelines and administering a continuing comprehensive program.
- b. There is a need for an increased frequency of inspection of the existing solid waste disposal sites. Consideration should be given to enlarging the Bureau's staff from a director, one engineer and five regional consultants to a director and a total of twelve engineers and regional consultants.
- 3. Very little is known about the quantities, composition, and methods of disposal of the solid waste generated by industries in Virginia. It is estimated that 1,000 industries in Virginia produce solid waste from maunfacturing processes. There is a strong probability that some of these wastes are hazardous. Consideration should be given to clearly defining the Virginia Department of Health's authority and responsibility to regulate and monitor the disposal of industrial wastes. The Bureau of Solid Waste and Vector Control presently does not inspect industrial solid waste disposal sites. Recently, the state received a federal grant to conduct a survey of industrial and institutional solid waste in the state. The survey will provide information on waste generation, collection, storage, transportation, and disposal. This survey will determine the procedures and regulations needed to properly control the disposal of hazardous, industrial and institutional wastes.

- 4. Virginia has no specific law to regulate the collection, transportation, and disposal of emergency hazardous solid wastes. Consideration should be given to granting an agency of the State authority in this area and delegating responsibility to the agency for developing standard procedures for disposing of emergency hazardous substances.
- 5. There are apparently no state laws granting the Health Department authority to regulate collection and storage of domestic solid waste. Consideration should be given to establishing minimum state standards for collection and storage with the responsibility of enforcement being through local ordinances.
- 6. As land for solid waste disposal sites becomes increasingly scarce, it is probable that situations will arise where local governments are not able to obtain required land. Consideration should be given to granting an agency of the state authority to obtain land for solid waste disposal in these situations.
- 7. There are presently several hundred laws in Virginia governing the storage, collection, and disposal of solid waste. There is a need for a concise, uniform, up-to-date set of laws governing solid waste.
- 8. Sewage sludge is specifically excluded from the Environmental Protection Agency and Health Department definitions of solid waste. As a practical matter, however, the disposal of dewatered sewage sludge is a solid waste problem and the method of disposal is frequently by land disposal. Consideration should be given to recognizing dewatered sewage sludge as a part of the total solid waste problem and developing a program for dealing with the sludge problem.
- 9. Existing laws in Virginia do not regulate the collection and transportation of demolition wastes. These operations can create fire and safety hazards and consideration should be given to establishing minimum state standards. Bureau of Solid Waste and Vector Control permits are required for all demolition waste disposal sites. There are many small sites that are impossible for the Bureau to regulate. Consideration should be given to granting localities the authority to issue permits for demolition disposal sites that meet state standards but are below a specified size. The Bureau would continue to issue permits for all other demolition disposal sites.
- 10. There are still solid waste disposal sites in Virginia that do not meet minimum state standards and for which no permit has been obtained. Existing state laws give the Health Department authority to regulate disposal, but grant it no enforcement powers. Consideration should be given to granting the Health Department through the Bureau of Solid Waste and Vector Control some type of enforcement power to deal with disposal problems.
- 11. There is very little information available on amounts and methods of disposal of agricultural wastes in Virginia. Consideration should be given to investigating the need and method

of regulating the disposal of agricultural waste.

- 12. Litter in Virginia is a nuisance and an aesthetic problem. Roadside cleanup of Virginia highways cost the state 1.2 million dollars in the fiscal year 1973-1974. Litter is a people problem which may be alleviated by increased public awareness of the problem.
- 13. Discarded automobiles are being recycled throughout the state. The Division of Motor Vehicles, according to the Code of Virginia, Section 46.1-555.9, will pay a political subdivision twelve dollars for each abandoned motor vehicle diposed of at the expense of the governing body. The dispoal of discarded automobiles should continue to be handled through local governments and private enterprise.

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#### APPENDIX II

#### SUBCOMMITTEE ON HAZARDOUS WASTES

One of the objectives of the Commission is "To establish a mechanism for handling hazardous wastes: Emergency and Non-Emergency". All solid wastes under certain conditions can be hazardous to humans, animals, plant life or other components of the biosphere. Ordinary household garbage can endanger the public health if allowed to support the propagation of rats, flies and other disease vectors. Non-toxic solid wastes such as discarded construction materials, glass and automobiles can be the cause of accidental injuries to humans and degradation of the environment. These types of wastes are considered "non-emergency" and can be managed adequately by existing techniques and their improved application. Other sections of the Commission's report include discussions and recommendations for improving the application of techniques and management of the "Non-Emergency" category of hazardous solid wastes.

It is the handling of "emergency hazardous solid wastes" which poses direct and immediate hazards to humans, animals, plants and the environment. These wastes include toxic chemicals, pesticides, acids, caustics, flammables, explosives, biological and radiological residuals. 1 The disposal of used containers or excess supplies or pesticides or other toxic materials, flammables or explosives in the ordinary land fill may endanger people during transport and at the disposal site. Used syringes, drug containers and bandages, and other chemical and biological wastes from hospitals, clinics and drug outlets present immediate health hazards in handling from their source until they are disposed of safely. The Bureau of Solid Waste and Vector Control of the Virginia State Department of Health is beginning a study under a Federal Environmental Protection Agency Grant to obtain information on the types, sources and methods of handling emergency hazardous wastes. This is an essential step in assuring proper management of these wastes. In conjunction with that information should be the determination of the components of the wastes, their chemical or biological nature, method of treatment and the extent of hazards to public health and the environment. This base line information is fundamental to the establishment of a management program for those types of wastes. This project will be completed June 30, 1976. (It should, of course, be kept up to date by the Bureau of Solid Waste and Vector Control, since the sources of hazardous wastes are increasing and changing rapidly.)

Much of the information needed may be obtained from the sources through their professional and trade associations. However, on-site sampling by the responsible administrative agency of the Commonwealth will be necessary. In support of this, legislation is needed to authorize representatives of the state agency to enter industrial plants, institutions and other establishments for survey purposes and to require that pertinent information be made available by such establishments. Also, records of wastes produced and their manner of disposal should be furnished initially by the

agency and periodically as necessary. The number of toxic materials being manufactured is great. One estimate by an official of the United States Public Health Service indicated that more than 500 new chemicals and chemical compounds are introduced each year and that little or nothing is known of the deleterious effects of many of these compounds individually or in combination. The cataloguing of these agents and industrial processes is essential to determine those which may endanger the public health and environment and to enable preventive measures. The producing industries are in the best position to provide the information on the type of new chemicals and compounds and methods for the disposal of those reaching the waste stream. The state agency should be authorized to set standards and to license each establishment producing hazardous wastes and to monitor methods of handling to assure compliance with standards of safety. Also, the State Agency should be authorized to set standards, license and monitor waste haulers and disposal operations.

Some of the handling of emergency solid wastes must be done immediately after their production in order to avoid population and environmental insults. For example, accidents in transport of toxic materials can result in damage to packaging. Radioisotopes, toxic chemicals, infectious biologics and other agents capable of endangering health are transported by common carriers and other means. These and other situations require knowledge of the materials which must be properly handled to aviod endangering the biosphere. At such times there is an immediate need for information on the safe handling and disposal of the offending materials.

The Manufacturing Chemists Association maintains the Chemical Transportation Center to provide advice at the scenes of transportation emergencies. A similar information system is maintained by the Chlorine Institute for handling transportation problems involving chlorine. There is a national clearing house to support poison control centers by providing information on the treatment of persons with acute poisoning. Similar arrangements are needed to handle incidents endangering the public which require immediate action upon the disposal of the offending material.

Another pressing need is the collection and dissemination of information on the management of all hazardous wastes. The core of this system would be a panel of experts including a chemist, biologist, physicist, toxicologist, epidemiologist and possibly others to advise the State Health Department on the public health and environmental implications of the various hazardous wastes and methods of handling to safeguard humans and the environment. The Bureau of Solid Wastes of the State Department of Health should serve as a clearing house while cateloguing the various types of wastes and including information as to proper disposal. In the event that the Bureau should need information necessary for handling a special type of waste, it could query the appropriate expert on the panel. This system should expedite the necessary information to the custodian of the problem with on-site enforcement as necessary.

SUMMARY: There are significant dangers to the public health and environment of the Commonwealth resulting from the improper

handling of emergency hazardous wastes. The purpose of the Bureau of Solid Wastes' study is to identify sources and types of wastes and methods of handling, which are basic criteria in the establishment of adequate safeguards.

Legislation is needed to authorize the State Health Department to: (1) enter any establishment suspected of producing hazardous wastes; (2) issue permits for handling and disposing of such wastes; (3) establish standards for treatment on- and off-site and transport; and (4) enforce compliance with standards.

The State Department of Health should proceed with the establishment of an information system for the management of emergency hazardous wastes. This should include a panel of experts and a clearing house to collect and provide information on the health and environmental implications of various types of such wastes and means of prevention. Close coordination with state and national agencies as well as industrial organizations involved should be maintained in the establishment and operation of this system.

## FOOTNOTE:

1. Lehran. "Federal Program for Hazrdous Waste Management", Waste Age, (September 1974).

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## APPENDIX III

#### STATEMENT OF WILLIAM M. BECK

My name is William M. Beck. I am Vice-Chairman of the Virginia Commission for the Disposal of Solid Wastes. I am also chairman of a subcommittee of the Commission charged with the consideration of the proposed legislation which is the subject of this hearing.

Before this hearing concludes you will have heard from those who are in favor of this bill and from those who are in opposition of it. There are points of contention on both sides which are valid. As a spokesman for the Commission, our position is germane but not so forthright as we would otherwise like it to be. We feel that at this point in time, there is not sufficient evidence available based on results in other states or from projections based on known elements existing within the Commonwealth, which would substantiate to the requisite degree that this legislation would accomplish the purpose for which it was intended—that is to reduce litter and perhaps more pointedly, highway litter and debris.

We are aware of the pressing need to police our environment, and this area is at the very top of our agenda as a newly formed Commission. We have capable and imaginative people whose experience and expertise we hope will reap a bountiful harvest for the citizens of the Commonwealth in devising means to dispose of that which is no longer useful and has served its purpose. In the few months since our formation, I have headed a team to investigate what could be determined of the impact of this legislation in other states and to attempt to evaluate the likelihood of success of this type legislation in the Commonwealth. In my opinion and in the opinion of my colleagues, there is simply not enough reliable information upon which to form an opinion. A recommendation at this time would be based solely and regrettably, in my opinion, upon speculation.

At this moment there are studies being made of the benefits derived from this type of bill, the most important being conducted by the U. S. Environmental Protection Agency. Our sister states of Oregon and Vermont are prime examples of states which have enacted similar laws. In my opinion the reports emanating from studies in those states are inconclusive. Other states considered this type bill and passed it by. While we do not choose to lag behind the thrust of progress in this area, we would be remiss in our duties if we did not take the time to evaluate the valuable data that will be forthcoming.

The serious questions that confront us in this matter include the net effect upon the environment, the comparable energy requirements to implement the bill, the evaluation of materials depletion statistics now being compiled and the public health aspects of the bill.

We are aware of the concern of the opponents of this bill particularly with reference to potential damage to employment, the possible detriment to the economy of the Commonwealth and the actual cost weighed against the benefits to be derived. These are areas of concern to which the Legislature must address itself if this bill is to be reported out of your Committee.

We expect that shortly we will be asked to study and report upon the feasibility of resource recovery sites and the benefits of recycling operations within the Commonwealth. Such a study would no doubt parallel some of the areas of industry concern and may well lead to joint action by the Commonwealth and industry to alleviate the problems these bills attempt to solve. We mention this possibility only in passing and do not suggest it as an alternative.

We are mindful of the obligation of the Commission to say yea or nay in such matters and we accept that responsibility. However, we also are aware of the obligation not just to launch the Commonwealth upon a course of environmental safeguards but to do so in a manner that can be coordinated with other programs recommended by other agencies and to consider the immediate problems both in terms of immediate remedies and also correlated with the evolution of sound progressive objectives over a long period of time.

We hasten to assure you that we do not take the position that if these or other bills do not achieve 100% efficiency, that they ought not be considered. We recognize that a small step bringing small returns will no doubt be the manner in which programs that come within our purview will progress; yet, we feel it mandatory that there be some evidence that predictable results can be foreseen by the enactment of legislation before we can wholeheartedly recommend it for your consideration.

We do urge the Committee to give us the opportunity for further study and the time to evaluate the data which will come forward from the studies currently being conducted. I will be happy to answer any questions from the members of the Committee about the position of the Commission.

Thank you.