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PUBLIC HEARING

before

SENATE ENERGY AND ENVIRONMENT COMMITTEE

on

SENATE BILL 2820

(Expands and extends existing "Recycling Act")

May 22, 1985
Room 114
State House Annex
Trenton, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Senator Catherine A. Costa, Acting Chairwoman
Senator Paul Contillo
Senator Lee B. Laskin

ALSO PRESENT:

Mark T. Connelly
Office of Legislative Services
Aide, Senate Energy and Environment Committee

New Jersey State Library

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SENATE, No. 2820

STATE OF NEW JERSEY

INTRODUCED MARCH 7, 1985

By Senators CONTILLO, RUSSO, ZANE, LESNIAK and DALTON

Referred to Committee on Energy and Environment

AN ACT concerning mandatory Statewide recycling, and amending
and supplementing various parts of the statutory law.

1 BE IT ENACTED *by the Senate and General Assembly of the State*
2 *of New Jersey:*

1 1. (New section) The Legislature finds that decreasing waste
2 flow to landfill sites, recovering valuable resources, conserving
3 energy in the manufacturing process, and increasing the supply
4 of reusable raw materials for the State's industries will be en-
5 hanced by removing certain materials from the solid waste stream
6 at the source of generation, and that the recycling or reusable
7 waste materials substantially reduces the required capacity of
8 proposed waste to energy facilities while contributing to their
9 overall combustion efficiency, thereby resulting in significant costs
10 savings in the planning, construction, and operation of such re-
11 source recovery facilities. The Legislature further finds that the
12 State may most appropriately demonstrate its long-term commit-
13 ment to proper solid waste management and resource recovery
14 by establishing a mandatory Statewide recycling program, and by
15 increasing the purchase of recycled products by the Division of
16 Purchase and Property for use by the Legislature and the various
17 agencies and instrumentalities of the State government.

18 The Legislature therefore declares that it serves the public interest
19 to mandate the recycling of reusable waste materials on a Statewide
20 basis so that reusable materials may be returned to the economic
21 mainstream in the form of raw materials or products rather than
22 disposed at the State's overburdened landfills, and that the re-

EXPLANATION—Matter enclosed in bold-faced brackets [thus] in the above bill
is not enacted and is intended to be omitted in the law.

Matter printed in italics thus is new matter.

23 cycling of recoverable materials by every municipality in this State
24 and the development of public and private sector recycling activ-
25 ities on an orderly and incremental basis shall further demonstrate
26 the State's long-term commitment to solving its solid waste
27 problems.

1 2. (New section) As used in this amendatory and supplementary
2 act:

3 "Beverage" means alcoholic beverages, including beer or other
4 malt beverages, liquor, wine, vermouth and sparkling wine, and
5 nonalcoholic beverages, including fruit juice, mineral water and
6 soda water and similar nonalcoholic carbonated drinks intended
7 for human consumption;

8 "Beverage container" means an individual, separate, sealed bottle
9 or can composed of glass, metal, plastic or any combination thereof,
10 containing a beverage;

11 "County" means any county of this State of whatever class;

12 "Department" means the Department of Environmental Pro-
13 tection;

14 "Designated recyclable materials" means those recyclable ma-
15 terials, including but not limited to, metal, glass, or paper, plastic
16 containers, food waste, corrugated and other cardboard, newspaper,
17 magazines, or high-grade office paper designated in a district re-
18 cycling plan to be source separated in a municipality as required
19 by section 3 of this amendatory and supplementary act;

20 "District" means a solid waste management district as desig-
21 nated by section 10 of P. L. 1975, c. 326 (C. 13:1E-19), except that,
22 as used in the provisions of this amendatory and supplementary
23 act, "district" shall not include the Hackensack Meadowlands
24 District;

25 "District recycling plan" means the plan prepared and adopted
26 by the governing body of a county and approved by the department
27 to implement the State Recycling Plan goals as required by sec-
28 tion 3 of this amendatory and supplementary act;

29 "Municipality" means any city, borough, town, township or vil-
30 lage situated within the boundaries of this State;

31 "Municipal solid waste stream" means all residential, commercial
32 and institutional solid waste generated within the boundaries of
33 any municipality, except that, as used in the provisions of this
34 amendatory and supplementary act, "municipal solid waste stream"
35 shall not include asphalt or leaves;

36 "Paper product" means any paper items or commodities, includ-
37 ing but not limited to, paper napkins, towels, corrugated and other
38 cardboard, construction material, toilet tissue, highgrade office

39 paper, fine paper, bond paper, offset paper, xerographic paper,
40 mimeo paper, and duplicator paper;

41 "Plastic container" means any plastic beverage container, or
42 any container having a capacity of 12 ounces or more composed of
43 plastic, containing a food or nonfood product;

44 "Post-consumer waste material" means any product generated
45 by a business or consumer which has served its intended end use,
46 and which has been separated from solid waste for the purposes
47 of collection, recycling and disposition and which does not include
48 secondary waste material or demolition waste;

49 "Recyclable material" means those materials which would other-
50 wise become municipal solid waste, which may be collected, sepa-
51 rated or processed and returned to the economic mainstream in
52 the form of raw materials or products;

53 "Recycled paper product" means any product having a total
54 weight consisting of not less than 50% secondary waste paper
55 material and not less than 10% post-consumer waste material for
56 high-grade office paper, fine, bond and offset paper products and
57 not less than 25% post-consumer waste material and for all other
58 paper products;

59 "Recycling" means any process by which materials which would
60 otherwise become solid waste are collected, separated or processed
61 and returned to the economic mainstream in the form of raw ma-
62 terials or products;

63 "Recycling center" means any facility designed and operated
64 solely for receiving, storing, processing and transferring source
65 separated or source separated comingled nonputrescible metal,
66 glass, paper, plastic containers, plastic beverage containers, and
67 corrugated and other cardboard, newspaper, magazines, and high-
68 grade office paper;

69 "Recycling services" means the services provided by persons
70 engaging in the business of recycling, including the collection,
71 processing, storage, and disposition of recyclable materials;

72 "Secondary waste material" means waste material generated
73 after the completion of a manufacturing process;

74 "Secondary waste paper material" means paper waste generated
75 after the completion of a paper making process, including but not
76 limited to, envelope cuttings, bindery trimmings, printing waste,
77 cutting and other converting waste, butt rolls and mill wrappers;
78 except that secondary waste paper material shall not include fibrous
79 waste generated during the manufacturing process, such as fibers
80 recovered from waste water or trimmings of paper machine rolls,
81 fibrous byproducts of harvesting, extractive or woodcutting
82 processes, or forest residue such as bark;

83 "Source separated recyclable materials" means recyclable ma-
 84 terials, including but not limited to, paper, metal, glass, food waste,
 85 office paper and plastic which are kept separate and apart from
 86 residential, commercial and institutional solid waste by the gen-
 87 erator thereof for the purposes of collection, disposition and re-
 88 cycling.

1 3. (New section) a. Each county shall, within six months of the
 2 effective date of this amendatory and supplementary act and after
 3 consultation with each municipality within the county, prepare a
 4 district recycling plan to implement the State Recycling Plan goals.
 5 Each plan shall be adopted as an amendment to the district solid
 6 waste management plan required pursuant to the provisions of the
 7 "Solid Waste Management Act," P. L. 1970, c. 39 (C. 13:1E-1
 8 et seq.).

9 b. Each district recycling plan required pursuant to this section
 10 shall include, but need not be limited to:

11 (1) Designation of a district recycling coordinator;

12 (2) Designation of the recyclable materials to be source separated
 13 in each municipality which shall include, at a minimum, aluminum
 14 beverage containers, and at least two other recyclable materials
 15 separated from the municipal solid waste stream;

16 (3) Designation of the strategy for the collection and disposition
 17 of source separated recyclable materials in each municipality; and

18 (4) Designation of recovery targets in each municipality to
 19 achieve the maximum feasible recovery of recyclable materials
 20 from the municipal solid waste stream which shall include, at a
 21 minimum, the following schedule:

22 (a) The recycling of at least 15% of the municipal solid
 23 waste stream by the end of the first full year succeeding the
 24 adoption of the district recycling plan; and

25 (b) The recycling of at least 25% of the municipal solid
 26 waste stream by the end of the second full year succeeding the
 27 adoption of the district recycling plan.

28 c. Each district recycling plan, in designating the strategy for
 29 the collection and disposition of recyclable materials in each mu-
 30 nicipality, shall first give due consideration to any person engaging
 31 in the business of recycling or otherwise lawfully providing re-
 32 cycling services on behalf of the municipality on January 1, 1985,
 33 if that person continues to provide recycling services prior to the
 34 adoption of the plan and that person has not discontinued these
 35 services for a period of 90 days or more between January 1, 1985,
 36 and the date the plan is adopted.

37 d. To be eligible for a recycling grant pursuant to section 5
 38 of P. L. 1981, c. 278 (C. 13:1E-96), a municipality shall demon-

39 strate to the department's satisfaction that the municipality has
40 recycled at least 15% of its municipal solid waste stream by the
41 end of the first full calendar year succeeding the adoption of the
42 district recycling plan required pursuant to this section, and
43 annually thereafter.

44 e. Notwithstanding the provisions of the "Solid Waste Manage-
45 ment Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.), each district
46 recycling plan may be modified after adoption pursuant to a pro-
47 cedure set forth in the adopted plan as approved by the department.

1 4. (New section) a. Each county shall, within six months of the
2 adoption of the district recycling plan required pursuant to section
3 3 of this amendatory and supplementary act, solicit proposals from,
4 review the qualifications of, and enter into contracts on behalf of
5 municipalities with persons providing recycling services or operat-
6 ing recycling centers for the collection, storage, processing, and
7 disposition of recyclable materials designated in the district re-
8 cycling plan in those instances where these services are not other-
9 wise provided by the municipality, interlocal service agreement or
10 joint service program, or other private or public recycling program
11 operator. Each county shall continue to solicit recycling services
12 as may be necessary to achieve the maximum feasible recovery
13 targets in each municipality as set forth in the district recycling
14 plan.

15 b. In the event that a county is unable to enter into contracts or
16 otherwise execute agreements with persons providing recycling
17 services so as to achieve the designated recovery targets set forth
18 in the district recycling plan, the county may petition the depart-
19 ment for a temporary exemption from the provisions of subsection
20 a. of this section. The department is authorized to grant, deny or
21 conditionally grant the exemption, and shall advise the county as to
22 the steps that may be taken to identify and secure markets for the
23 recyclable materials designated in the district recycling plan. Any
24 exemption granted by the department shall not exceed one year in
25 duration, and shall only be granted upon a finding that the county
26 has made a good faith effort toward identifying and securing
27 markets for its recyclable materials.

1 5. (New section) Each municipality in this State shall, within 30
2 days of the effective date of this amendatory and supplementary
3 act, designate one or more persons as the municipal recycling
4 coordinator. Each municipality shall establish and implement a
5 municipal recycling program in accordance with the following
6 requirements and schedule:

7 a. Within six months of the adoption of the district recycling
8 plan required pursuant to section 3 of this amendatory and supple-
9 mentary act, each municipality shall provide for a collection system
10 for the recycling of the recyclable materials designated in the
11 district recycling plan as may be necessary to achieve the designated
12 recovery targets set forth in the plan in those instances where a
13 recycling collection system is not otherwise provided for by the
14 generator or by the county, interlocal service agreement or joint
15 service program, or other private or public recycling program
16 operator.

17 b. The governing body of each municipality shall, if it has not
18 already done so, within 30 days of the effective date of any contracts
19 or agreements entered into between the county or other local
20 government unit and persons providing recycling services pursuant
21 to section 4 of this amendatory and supplementary act, adopt an
22 ordinance which requires that persons generating municipal solid
23 waste within its municipal boundaries shall source separate
24 aluminum beverage containers and at least two other recyclable
25 materials from the municipal solid waste stream and, unless re-
26 cycling is otherwise provided for by the generator, place the
27 recyclable materials for collection in the manner provided by the
28 ordinance.

29 c. The governing body of each municipality shall, within 30 days
30 of the effective date of the ordinance adopted pursuant to subsection
31 b. of this section and at least once every 36 months thereafter,
32 conduct a review and make necessary revisions to the master plan
33 and development regulations adopted pursuant to P. L. 1975, c. 291
34 (C. 40:55D-1 et seq.), which revisions shall reflect changes in State,
35 county and municipal policies and objectives concerning the collec-
36 tion, disposition and recycling of designated recyclable materials.

37 The revised master plan shall include provisions for the collec-
38 tion, disposition and recycling of recyclable materials designated in
39 the municipal recycling ordinance adopted pursuant to subsection b.
40 of this section, and for the collection, disposition and recycling of
41 designated recyclable materials within any development proposal
42 for the construction of 50 or more units of residential housing and
43 any commercial or industrial development proposal for the utiliza-
44 tion of 1,000 square feet or more of land.

45 d. The governing body of a municipality may exempt persons
46 occupying commercial and institutional premises within its municipi-
47 pal boundaries from the source separation requirements of the
48 ordinance adopted pursuant to subsection b. of this section if those
49 persons have otherwise provided for the recycling of the recyclable

50 materials designated in the district recycling plan from solid waste
 51 generated at those premises. To be eligible for an exemption pur-
 52 suant to this subsection, a commercial or institutional solid waste
 53 generator annually shall provide written documentation to the
 54 municipality of the total number of tons recycled.

55 e. The governing body of each municipality shall, on July 1, 1987
 56 and on July 1 of each year thereafter, submit a recycling tonnage
 57 report to the New Jersey Office of Recycling in accordance with
 58 rules and regulations adopted by the department therefor.

59 f. The governing body of each municipality shall, within six
 60 months of the effective date of the ordinance adopted pursuant to
 61 subsection b. of this section and at least once every six months
 62 thereafter, notify all persons occupying residential, commercial,
 63 and institutional premises within its municipal boundaries of local
 64 recycling opportunities, and the source separation requirements of
 65 the ordinance.

1 6. (New section) Any additional expenditures for the collection,
 2 storage, processing or disposition of recyclable materials, or the
 3 procurement of recycling services made by any county as a result
 4 of the provisions of P. L., c. . . . (C.) (now pend-
 5 ing before the Legislature as Senate Bill No. 2820 of 1985) shall,
 6 for the purposes of P. L. 1976, c. 68 (C. 40A:4-45.1 et seq.), be con-
 7 sidered an expenditure mandated by State law.

1 7. (New section) Any additional expenditures for the collection,
 2 storage, processing or disposition of recyclable materials, or the
 3 procurement of recycling services made by any municipality as a
 4 result of the provisions of P. L., c. . . . (C.)
 5 (now pending before the Legislature as Senate Bill No. 2820 of
 6 1985) shall, for the purposes of P. L. 1976, c. 68 (C. 40A:4-45.1
 7 et seq.), be considered an expenditure mandated by State law.

1 8. (New section) Every solid waste collector or solid waste trans-
 2 porter registered pursuant to sections 4 and 5 of P. L. 1970, c. 39
 3 (C. 13:1E-4 and 13:1E-5) or the provisions of P. L. 1983, c. 392
 4 (C. 13:1E-126 et seq.), as appropriate, and holding a certificate of
 5 public convenience and necessity pursuant to sections 7 and 10 of
 6 P. L. 1970, c. 40 (C. 48:13A-6 and 48:13A-9) shall provide for the
 7 collection or disposition of recyclable materials, or otherwise
 8 provide recycling services, if required to do so by the district re-
 9 cycling plan of the county in which the collector or transporter
 10 engages in solid waste collection or transportation services.

1 9. (New section) Every solid waste collector or solid waste trans-
 2 porter bidding on contracts for the provision of solid waste collec-
 3 tion or transportation services pursuant to the "Local Public

4 **Contracts Law," P. L. 1971, c. 198 (C. 40A:11-1 et seq.) shall also**
5 **bid on contracts for the collection or disposition of recyclable ma-**
6 **terials, or for the provision of recycling services, if requested to do**
7 **so by the governing body of the municipality or contracting unit**
8 **advertising for bids or bidding therefor.**

1 10. (New section) a. **The provisions of P. L. 1970, c. 39 (C.**
2 **13:1E-1 et seq.) or P. L. 1970, c. 40 (C. 48:13A-1 et seq.) or any**
3 **rules and regulations adopted pursuant thereto to the contrary not-**
4 **withstanding, the governing body of any county with an adopted**
5 **district recycling plan may, after notifying the department and the**
6 **Board of Public Utilities, prohibit the acceptance for final disposal**
7 **as solid waste at any solid waste disposal facility located within the**
8 **county which accepts out-of-district solid waste any recyclable**
9 **materials designated in the district recycling plan of the sending**
10 **district in the event that the department determines, pursuant to**
11 **subsection b. of this section, that the sending district has failed to**
12 **fulfill its district recycling plan responsibilities.**

13 b. **The department may determine that a county has failed to**
14 **fulfill its district recycling plan responsibilities as required by**
15 **sections 3 and 4 of this amendatory and supplementary act. A**
16 **determination by the department that a county has failed to fulfill**
17 **its district recycling plan responsibilities may be based upon a**
18 **finding that the county has not made a good faith effort toward**
19 **entering into contracts or executing agreements with persons pro-**
20 **viding recycling services, or otherwise providing for the collection**
21 **and disposition of designated recyclable materials as may be**
22 **necessary to achieve the designated recovery targets set forth in**
23 **its district recycling plan.**

1 11. (New section) **Any additional expenditures for the collection**
2 **or disposition of recyclable materials made by any solid waste**
3 **collector or solid waste transporter as a result of the provisions of**
4 **section 10 of P. L. , c. (C.) (now pending**
5 **before the Legislature as Senate Bill No. 2820 of 1985) shall be**
6 **deemed to be tariffs for solid waste collection, and shall be subject**
7 **to adjustment by the Board of Public Utilities pursuant to the**
8 **provisions of P. L. 1970, c. 40 (C. 48:13A-1 et seq.).**

1 12. (New section) a. **Within 12 months of the effective date of**
2 **this amendatory and supplementary act, every plastic and metal**
3 **beverage container and plastic container sold or offered for sale**
4 **in this State shall be clearly marked with a code on each container**
5 **indicating its composition and identification as a nonrecyclable**
6 **or recyclable material.**

7 **b. Within 12 months of the effective date of this amendatory**
8 **and supplementary act, no beverage container shall be sold or**
9 **offered for sale in this State in a metal container designed and**
10 **constructed so that part of the container is detachable, or in con-**
11 **tainers connected to each other by plastic rings or similar devices**
12 **which are nondegradable. For the purposes of this subsection,**
13 **“nondegradable” means not capable of disintegrating by naturally**
14 **occurring biological or physical processes in the outdoors, within**
15 **a period of three years after manufacture, into fragments that are**
16 **small relative to the original size, or into particles of a molecular**
17 **weight that is low when compared to that of the original material.**

18 **c. The department shall adopt, upon consultation with the ap-**
19 **propriate industries and pursuant to the provisions of the “Ad-**
20 **ministrative Procedure Act,” P. L. 1968, c. 410 (C. 52:14B-1 et**
21 **seq.), any rules and regulations necessary to implement the pro-**
22 **visions of this section.**

1 **13. (New section) a. Within 18 months of the effective date of**
2 **this amendatory and supplementary act, the department shall make**
3 **a written determination as to whether a convenient and economi-**
4 **cally feasible method for the collection, recycling and marketing**
5 **of at least 55% of the plastic beverage containers and plastic con-**
6 **tainers annually sold in this State is available to counties and**
7 **municipalities in this State. In the event that the department de-**
8 **termines that this method is not available, the department shall**
9 **hold a public hearing thereon within 30 days of making the de-**
10 **termination. At the public hearing, the manufacturers of plastic**
11 **beverage containers and plastic containers, or their designated**
12 **representatives, shall have the burden of proof to show that such**
13 **a method is available and that the department’s determination is**
14 **unwarranted. Within 45 days of the conclusion of the hearing, the**
15 **department shall make a final determination, which action shall**
16 **be considered to be final agency action thereon for the purposes**
17 **of the “Administrative Procedure Act,” P. L. 1968, c. 410 (C.**
18 **52:14B-1 et seq.), and shall be subject only to judicial review as**
19 **provided in the Rules of Court.**

20 **b. In the event that the department makes a final determination**
21 **after the public hearing that a convenient and economically feasible**
22 **method for the collection, recycling and marketing of at least 55%**
23 **of the plastic beverage containers and plastic containers annually**
24 **sold in this State is not available, there is imposed on these items**
25 **a deposit, not less than \$0.10 nor more than \$0.25 per container,**
26 **and a refund value, not less than \$0.05 nor more than \$0.15 per**
27 **container, when empty, depending on size.**

28 c. The "Plastics Recycling Fund," hereinafter referred to as the
29 "fund," is established in the department as a nonlapsing, revolving
30 fund. The fund shall be administered by the New Jersey Office of
31 Recycling, and shall be credited with a sum equal to not more than
32 \$0.10 per plastic container sold within this State during the pre-
33 vious calendar year. The monies in the fund shall be used solely
34 for the development of systems for the proper disposition and
35 recycling of plastic containers.

36 d. The department shall adopt, pursuant to the provisions of
37 the "Administrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1
38 et seq.), any rules and regulations conditioning and controlling the
39 sale of plastic beverage containers and plastic containers which
40 shall be designed to implement the purpose and provisions of sub-
41 section b. of this section.

1 14. (New section) a. Within 18 months of the effective date of
2 this amendatory and supplementary act, the department shall make
3 a written determination as to whether a convenient and economi-
4 cally feasible method for the collection, recycling and marketing
5 of at least 55% of the metal beverage containers composed of more
6 than one alloy and commonly referred to as "bimetal containers"
7 annually sold in this State is available to counties and municipali-
8 ties in this State. In the event that the department determines
9 that this method is not available, the department shall hold a public
10 hearing thereon within 30 days of making the determination. At
11 the public hearing, the manufacturers of bimetal beverage con-
12 tainers, or their designated representatives, shall have the burden
13 of proof to show that such a method is available and that the de-
14 partment's determination is unwarranted. Within 45 days of the
15 conclusion of the hearing, the department shall make a final de-
16 termination, which action shall be considered to be final agency
17 action thereon for the purposes of the "Administrative Procedure
18 Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.), and shall be subject
19 only to judicial review as provided in the Rules of Court.

20 b. In the event that the department makes a final determination
21 after the public hearing that a convenient and economically feasi-
22 ble method for the collection, recycling and marketing of at least
23 55% of the bimetal beverage containers annually sold in this State
24 is not available, there is imposed on these items a deposit, not less
25 than \$0.10 nor more than \$0.25 per container, and a refund value,
26 not less than \$0.05 nor more than \$0.15 per container, when empty,
27 depending on size.

28 c. The "Bimetal Beverage Container Recycling Fund," herein-
29 after referred to as the "fund," is established in the department

30 as a nonlapsing, revolving fund. The fund shall be administered
 31 by the New Jersey Office of Recycling, and shall be credited with
 32 a sum equal to not more than \$0.10 per bimetal beverage container
 33 sold within this State during the previous calendar year. The
 34 monies in the fund shall be used solely for the development of
 35 systems for the proper disposition and recycling of bimetal beverage
 36 containers.

37 d. The department shall adopt, pursuant to the provisions of
 38 the "Administrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1
 39 et seq.), any rules and regulations conditioning and controlling
 40 the sale of bimetal beverage containers which shall be designed to
 41 implement the purpose and provisions of subsection b. of this section.
 42

1 15. (New section) a. On or after July 1, 1986, no waste-to-energy
 2 resource recovery facility located in this State shall accept or receive
 3 for processing or incineration any plastic containers composed
 4 of polyvinyl chloride or polyvinylethene chloride and commonly
 5 referred to as "PVC" or "PVC packaging."

6 b. The department shall adopt, pursuant to the provisions of the
 7 "Administrative Procedure Act," P. L. 1968, c. 140 (C. 52:14B-1
 8 et seq.), rules and regulations for the operation of waste-to-energy
 9 resource recovery facilities designed to implement the purpose and
 10 provisions of this section.

1 16. (New section) a. Within 18 months of the effective date of
 2 this amendatory and supplementary act, the department shall make
 3 a written determination as to whether a convenient and economically
 4 feasible method for the collection, recycling and marketing
 5 of at least 55% of the plastic containers composed of polyvinyl
 6 chloride or polyvinylethene chloride and commonly referred to as
 7 "PVC" or "PVC packaging" annually sold in this State is available
 8 to counties and municipalities in this State. In the event that the
 9 department determines that such a method is not available, the
 10 department shall hold a public hearing thereon within 30 days of
 11 making the determination. At the public hearing, the manufacturers
 12 of plastic containers composed of PVC or PVC packaging, or their
 13 designated representatives, shall have the burden of proof
 14 to show that this method is available and that the department's
 15 determination is unwarranted. Within 45 days of the conclusion
 16 of the hearing, the department shall make a final determination,
 17 which action shall be considered to be final agency action thereon
 18 for the purposes of the "Administrative Procedure Act," P. L.
 19 1968, c. 410 (C. 52:14B-1 et seq.), and shall be subject only to
 20 judicial review as provided in the Rules of Court.

21 **b. In the event that the department makes a final determination**
 22 **after the public hearing that a convenient and economically feasi-**
 23 **ble method for the collection, recycling and marketing of at least**
 24 **55% of the plastic containers composed of polyvinyl chloride or**
 25 **polyvinylethane chloride and commonly referred to as "PVC" or**
 26 **"PVC packaging" annually sold in this State is not available, six**
 27 **months after final determination, no person shall sell, or offer for**
 28 **sale, at retail or at wholesale for direct retail sale in this State**
 29 **any beverage or product packaged in a plastic beverage container**
 30 **or plastic container composed of polyvinyl chloride or polyvinyle-**
 31 **dene chloride and commonly referred to as "PVC" or "PVC pack-**
 32 **aging."**

33 **c. The department shall adopt, pursuant to the provisions of the**
 34 **"Administrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1**
 35 **et seq.), any rules and regulations prohibiting, conditioning and**
 36 **controlling the sale of beverages or products packaged in PVC**
 37 **containers or PVC packaging which shall be designed to implement**
 38 **the purpose and provisions of subsection b. of this section.**

1 **17. (New section) On or after July 1, 1987, no person shall sell,**
 2 **or offer for sale, at retail or at wholesale for direct retail sale in**
 3 **this State any beverage packaged in nonrecyclable, aseptic packag-**
 4 **ing composed of aluminum, paper and plastic, in combination**
 5 **thereof, and commonly referred to as a "brick-pack."**

1 **18. (New section) On or after September 1, 1986, and annually**
 2 **thereafter, no sanitary landfill facility in this State shall accept for**
 3 **final disposal any leaves generated from residential premises which**
 4 **are suitable for composting, between the months of September and**
 5 **December.**

1 **19. (New section) On or after September 1, 1986, each municipi-**
 2 **ality in this State shall, by a duly adopted ordinance of its govern-**
 3 **ing body, provide for a collection system for leaves generated from**
 4 **residential premises, and require that persons occupying residential**
 5 **premises within its municipal boundaries shall source separate**
 6 **leaves from solid waste generated at those premises and, unless**
 7 **leaves are recycled for composting by the generator, place the leaves**
 8 **for collection in the manner provided by the ordinance.**

1 **20. (New section) All State and local agencies responsible for the**
 2 **maintenance of public lands in this State shall, to the maximum**
 3 **extent practicable and feasible, give due consideration and pre-**
 4 **ference to the use of compost materials in all land maintenance**
 5 **activities which are to be paid with or out of public funds.**

1 **21. (New section) a. Within 24 months of the effective date of**
 2 **this amendatory and supplementary act, the department shall make**

3 a written determination as to whether a convenient and econom-
4 ically feasible method for the collection, recycling and marketing
5 of at least 55% of the automobile tires annually sold in this State
6 is available to counties and municipalities in this State. In the
7 event that the department determines that this method is not avail-
8 able, the department shall hold a public hearing thereon within 30
9 days of making the determination. At the public hearing, the manu-
10 facturers of automobile tires, or their designated representatives,
11 shall have the burden of proof to show that such a method is avail-
12 able and that the department's determination is unwarranted.
13 Within 45 days of the conclusion of the hearing, the department
14 shall make a final determination, which action shall be considered
15 to be final agency action thereon for the purposes of the "Admin-
16 istrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.),
17 and shall be subject only to judicial review as provided in the Rules
18 of Court.

19 b. In the event that the department makes a final determination
20 after the public hearing that a convenient and economically feasible
21 method for the collection, recycling and marketing of at least 55%
22 of the automobile tires annually sold in this State is not available,
23 there is imposed on every automobile tire sold or offered for sale
24 in this State a deposit, not to exceed \$3.00 per tire, and each tire
25 shall have a minimum refund value of \$1.50 per tire when returned
26 to the place of purchase or any retailer, distributor or wholesaler
27 who sells or offers for sale tires of the same kind, size and brand.
28 Every automobile tire shall be clearly identified by a stamp, label,
29 or other mark securely affixed to the tire, bearing the inscription
30 "New Jersey Recycling Deposit" and indicating the refund value.

31 c. The "Automobile Tire Recycling Fund." hereinafter referred
32 to as the "fund," is established in the department as a nonlapsing,
33 revolving fund. The fund shall be administered by the New Jersey
34 Office of Recycling, and shall be credited with a sum equal to not
35 more than \$1.50 per automobile tire sold within this State during
36 the previous calendar year. The monies in the fund shall be used
37 solely for the development of systems for the proper disposition
38 and recycling of tires.

39 d. The department shall adopt, pursuant to the provisions of
40 the "Administrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1
41 et seq.), any rules and regulations conditioning and controlling the
42 sale of automobile tires which shall be designed to implement the
43 purpose and provisions of this section.

1 22. (New section) The provisions of P. L. 1971, c. 257 (C. 52:34-21
2 et seq.) or any rules and regulations adopted pursuant thereto to

3 the contrary notwithstanding, the Director of the Division of Pur-
4 chase and Property in the Department of Treasury shall, upon con-
5 sultation with the department, review and modify all bid and pro-
6 duct specifications relating to the purchase of recycled paper
7 products and products utilizing not less than 50% post consumer
8 waste material so that the specifications do not discriminate against
9 but encourage the maximum purchase of products made from re-
10 cycled materials and recycled paper products. For the purposes of
11 this section, "recycled materials" includes, but is not limited to,
12 retreaded automobile tires, re-refined lubricating oil, and compost
13 materials.

1 23. (New section) In purchasing any products or paper products
2 as materials, supplies or equipment for any county, municipality or
3 school district pursuant to P. L. 1969, c. 104 (C. 52:25-16.1 et seq.),
4 the Director of the Division of Purchase and Property, whenever
5 the price is competitive for the purpose intended, shall purchase
6 those items which are manufactured or produced from recycled
7 materials or recycled paper products. For the purposes of this
8 section, "recycled materials" includes, but is not limited to, re-
9 treaded automobile tires, re-refined lubricating oil, and compost
10 materials.

1 24. (New section) In any contract or contracts on behalf of the
2 State in excess of \$10,000.00, the relevant county, municipality or
3 school district shall prepare and submit to the Director of the
4 Division of Purchase and Property a recycled products impact
5 statement, which statement shall address the potential for the pur-
6 chase of products made from recycled materials and recycled paper
7 products, and the recycling of materials during the duration of the
8 contract period. In the event that the price is competitive for the
9 purpose intended, the contracting agent shall purchase those items
10 which are manufactured or produced from recycled materials or
11 recycled paper products. For the purposes of this section, "re-
12 cycled materials" includes, but is not limited to, retreaded auto-
13 mobile tires, re-refined lubricating oil, and compost materials.

1 25. ((New section) The Director of the Division of Purchase and
2 Property shall, pursuant to the "Local Public Contracts Law,"
3 P. L. 1971, c. 198 (C. 40A:11-1 et seq.), permit counties, munic-
4 ipalities, school districts and authorities to cooperatively purchase
5 products made from recycled materials and recycled paper products
6 procured by the Division of Purchase and Property. For the
7 purposes of this section, "recycled materials" includes, but is not
8 limited to, retreaded automobile tires, re-refined lubricating oil, and
9 compost materials.

1 26. (New section) The total volume of products made from re-
 2 cycled materials and recycled paper products purchased by the
 3 State shall be as follows:

4 (1) Not less than 5% of the nonpaper items purchased on or
 5 after January 1, 1986 shall be manufactured or produced from
 6 recycled materials, not less than 10% by January 1, 1987, and not
 7 less than 25% by January 1, 1988; and

8 (2) Not less than 10% of the paper products purchased on or
 9 after January 1, 1986 shall be made from recycled paper products,
 10 not less than 30% by January 1, 1987, and not less than 60% by
 11 January 1, 1988.

12 Priority procurement consideration shall be given to recycled
 13 paper products with a total gross content of greater than 50%
 14 secondary waste paper materials. For the purposes of this section,
 15 "recycled materials" includes, but is not limited to, retreaded auto-
 16 mobile tires, re-refined lubricating oil, and compost materials.

1 27. (New section) a. The provisions of P. L. 1970, c. 39 (C.
 2 13:1E-1 et seq.) or any rules and regulations adopted pursuant
 3 thereto to the contrary notwithstanding, on or after January 1,
 4 1987, the department shall not approve a registration statement or
 5 engineering design for any new or expanded solid waste facility in
 6 any county unless the person or party proposing to construct or
 7 operate the facility submits written documentation and any other
 8 evidence the department may require demonstrating to the depart-
 9 ment's satisfaction that the goals of the relevant district recycling
 10 plan required by section 3 of this amendatory and supplementary
 11 act have been incorporated into the plans for the proposed facility.

12 b. The department may adopt, pursuant to the provisions of the
 13 "Administrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1
 14 et seq.), any rules and regulations necessary to implement the pro-
 15 visions of this section.

1 28. (New section) a. The provisions of section 6 of P. L. 1970,
 2 c. 40 (C. 48:13A-5) to the contrary notwithstanding, on or after
 3 January 1, 1987 the Board of Public Utilities shall not award a
 4 franchise to any person or party proposing to construct or operate
 5 a resource recovery facility unless the person or party proposing to
 6 construct or operate the facility submits written documentation and
 7 any other evidence the board may require demonstrating to the
 8 board's satisfaction that the goals of the relevant district recycling
 9 plan required by section 3 of this amendatory and supplementary
 10 act have been incorporated into the plans for the proposed facility.

11 b. The board may adopt, pursuant to the provisions of the
 12 "Administrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1

13 et seq.), any rules and regulations necessary to implement the pro-
14 visions of this section.

1 29. Section 2 of P. L. 1975, c. 291 (C. 40:55D-2) is amended to
2 read as follows:

3 2. Purpose of the act. It is the intent and purpose of this act:

4 a. Encourage municipal action to guide the appropriate use
5 or development of all lands in this State, in a manner which will
6 promote the public health, safety, morals, and general welfare;

7 b. To secure safety from fire, flood, panic and other natural and
8 man-made disasters;

9 c. To provide adequate light, air and open space;

10 d. To ensure that the development of individual municipalities
11 does not conflict with the development and general welfare of
12 neighboring municipalities, the county and the State as a whole;

13 e. To promote the establishment of appropriate population densi-
14 ties and concentrations that will contribute to the well-being of
15 persons, neighborhoods, communities and regions and preservation
16 of the environment;

17 f. To encourage the appropriate and efficient expenditure of
18 public funds by the coordination of public development with land
19 use policies;

20 g. To provide sufficient space in appropriate locations for a
21 variety of agricultural, residential, recreational, commercial and
22 industrial uses and open space, both public and private, according
23 to their respective environmental requirements in order to meet
24 the needs of all New Jersey citizens;

25 h. To encourage the location and design of transportation routes
26 which will promote the free flow of traffic while discouraging loca-
27 tion of such facilities and routes which result in congestion or
28 blight;

29 i. To promote a desirable visual environment through creative
30 development techniques and good civic design and arrangements;

31 j. To promote the conservation of open space and valuable na-
32 tural resources and to prevent urban sprawl and degradation of
33 the environment through improper use of land;

34 k. To encourage planned unit developments which incorporate
35 the best features of design and relate the type, design and layout
36 of residential, commercial, industrial and recreational development
37 to the particular site;

38 l. To encourage senior citizen community housing construction;

39 m. To encourage coordination of the various public and private
40 procedures and activities shaping land development with a view

41 of lessening the cost of such development and to the more efficient
42 use of land; and

43 n. To promote the conservation of energy through the use of
44 planning practices designed to reduce energy consumption and to
45 provide for maximum utilization of renewable energy sources; and

46 o. To promote the maximum practicable recovery and recycling
47 of recyclable materials from municipal solid waste through the use
48 of planning practices designed to incorporate the State Recycling
49 Plan goals and to complement municipal recycling programs.

1 30. Section 19 of P. L. 1975, c. 291 (C. 40:55D-28) is amended
2 to read as follows:

3 19. Preparation; contents; modification. a. The planning board
4 may prepare and, after public hearing, adopt or amend a master
5 plan or component parts thereof, to guide the use of lands within
6 the municipality in a manner which protects public health and
7 safety and promotes the general welfare.

8 b. The master plan shall generally comprise a report or state-
9 ment and land use and development proposals, with maps, dia-
10 grams and text, presenting, where appropriate, the following
11 elements:

12 (1) A statement of objectives, principles, assumptions, policies
13 and standards upon which the constituent proposals for the physi-
14 cal, economic and social development of the municipality are based;

15 (2) A land use plan element (a) taking into account the other
16 master plan elements and natural conditions, including, but not
17 necessarily limited to, topography, soil conditions, water supply,
18 drainage, flood plain areas, marshes, and woodlands; (b) showing
19 the existing and proposed location, extent and intensity of devel-
20 opment of land to be used in the future for varying types of resi-
21 dential, commercial, industrial, agricultural, recreational, educa-
22 tional and other public and private purposes or combination of
23 purposes; (c) showing the existing and proposed location of any
24 airports and the boundaries of any airport hazard areas delineated
25 pursuant to the "Air Safety and Hazardous Zoning Act of 1983,"
26 P. L. 1983, c. 260 (C. 6:1-80 et seq.); and (d) including a statement
27 of the standards of population density and development intensity
28 recommended for the municipality:

29 (3) A housing plan element, including, but not limited to, resi-
30 dential standards and proposals for the construction and improve-
31 ment of housing:

32 (4) A circulation plan element showing the location and types
33 of facilities for all modes of transportation required for the efficient

34 movement of people and goods into, about, and through the
35 municipality;

36 (5) A utility service plan element analyzing the need for and
37 showing the future general location of water supply and distribu-
38 tion facilities, drainage and flood control facilities, sewerage and
39 waste treatment, solid waste disposal and provision for other
40 related utilities;

41 (6) A community facilities plan element showing the location
42 and type of educational or cultural facilities, historic sites, libraries,
43 hospitals, firehouses, police stations and other related facilities,
44 including their relation to the surrounding areas;

45 (7) A recreation plan element showing a comprehensive system
46 of areas and public sites for recreation;

47 (8) A conservation plan element providing for the preservation,
48 conservation, and utilization of natural resources, including, to
49 the extent appropriate, open space, water, forests, soil, marshes,
50 wetlands, harbors, rivers and other waters, fisheries, wildlife and
51 other natural resources;

52 (9) An energy conservation plan element which systematically
53 analyzes the impact of each other component and element of the
54 master plan on the present and future use of energy in the mu-
55 nicipality, details specific measures contained in the other plan
56 elements designed to reduce energy consumption, and proposes
57 other measures that the municipality may take to reduce energy
58 consumption and to provide for the maximum utilization of renew-
59 able energy sources; **[and]**

60 *(10) A recycling plan element which incorporates the State Re-*
61 *cycling Plan goals, including provisions for the collection, disposi-*
62 *tion and recycling of recyclable materials designated in the munici-*
63 *pal recycling ordinance, and for the collection, disposition and re-*
64 *cycling of recyclable materials within any development proposal*
65 *for the construction of 50 or more units of residential housing and*
66 *any commercial or industrial development proposal for the utili-*
67 *zation of 1,000 square feet or more of land; and*

68 **[(10)]** (11) Appendices or separate reports containing the tech-
69 nical foundation for the master plan and its constituent elements.

70 c. The master plan and its plan elements may be divided into
71 subplans and subplan elements projected according to periods of
72 time or staging sequences.

73 d. The master plan shall include a specific policy statement indi-
74 cating the relationship of the proposed development of the munici-
75 pality, as developed in the master plan to (1) the master plans of
76 contiguous municipalities, (2) the master plan of the county in

77 which the municipality is located, (3) the district solid waste man-
 78 agement plan required pursuant to the provisions of the "Solid
 79 Waste Management Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.) of
 80 the county in which the municipality is located and [(3)] (4) any
 81 comprehensive guide plan pursuant to section 15 of P. L. 1961,
 82 c. 47 (C. 13:1B-15.52).

1 31. Section 29 of P. L. 1975, c. 291 (C. 40:55D-38) is amended
 2 to read as follows:

3 29. Contents of ordinance. An ordinance requiring approval by
 4 the planning board of either subdivisions or site plans, or both,
 5 shall include the following:

6 a. Provisions, not inconsistent with other provisions of this act,
 7 for submission and processing of applications for development,
 8 including standards for preliminary and final approval and pro-
 9 visions for processing of final approval by stages or sections of
 10 development;

11 b. Provisions ensuring:

12 (1) Consistency of the layout or arrangement of the subdivision
 13 or land development with the requirements of the zoning ordinance;

14 (2) Streets in the subdivision or land development of sufficient
 15 width and suitable grade and suitably located to accommodate
 16 prospective traffic and to provide access for firefighting and emer-
 17 gency equipment to buildings and coordinated so as to compose
 18 a convenient system consistent with the official map, if any, and
 19 the circulation element of the master plan, if any, and so oriented
 20 as to permit, within the limits of practicability and feasibility, the
 21 buildings constructed thereon to maximize solar gain; provided
 22 that no street of a width greater than 50 feet within the right-of-way
 23 lines shall be required unless said street constitutes an extension
 24 of an existing street of the greater width, or already has been
 25 shown on the master plan at the greater width, or already has
 26 been shown in greater width on the official map;

27 (3) Adequate water supply, drainage, shade trees, sewerage
 28 facilities and other utilities necessary for essential services to
 29 residents and occupants;

30 (4) Suitable size, shape and location for any area reserved for
 31 public use pursuant to section 32 of this act;

32 (5) Reservation pursuant to section 31 of this act of any open
 33 space to be set aside for use and benefit of the residents of
 34 planned development, resulting from the application of standards
 35 of density or intensity of land use contained in the zoning ordi-
 36 nance, pursuant to subsection 52 e. of this act;

37 (6) Regulation of land designated as subject to flooding, pur-
 38 suant to subsection 52 e., to avoid danger to life or property;

39 (7) Protection and conservation of soils from erosion by wind
40 or water or from excavation or grading; **[and]**

41 (8) Conformity with standards promulgated by the Commis-
42 sioner of Transportation, pursuant to the "Air Safety and Hazard-
43 ous Zoning Act of 1983," P. L. 1983, c. 260 (C. 6:1-80 et seq.), for
44 any airport hazard areas delineated under that act; *and*

45 (9) *Conformity with a municipal recycling ordinance required*
46 *pursuant to section 5 of P. L., c. (C.) (now*
47 *pending before the Legislature as Senate Bill No. 2820 of 1985).*

48 c. Provisions governing the standards for grading, improvement
49 and construction of streets or drives and for any required walk-
50 ways, curbs, gutters, streetlights, shade trees, fire hydrants and
51 water, and drainage and sewerage facilities and other improve-
52 ments as shall be found necessary, and provisions ensuring that
53 such facilities shall be completed either prior to or subsequent to
54 final approval of the subdivision or site plan;

55 d. Provisions ensuring that when a municipal zoning ordinance
56 is in effect, a subdivision or site plan shall conform to the applicable
57 provisions of the zoning ordinance, and where there is no zoning
58 ordinance, appropriate standards shall be specified in an ordinance,
59 pursuant to this article; and

60 e. Provisions ensuring performance in substantial accordance
61 with the final development plan; provided that the planning board
62 may permit a deviation from the final plan, if caused by change of
63 conditions beyond the control of the developer since the date of
64 final approval, and the deviation would not substantially alter the
65 character of the development or substantially impair the intent
66 and purpose of the master plan and zoning ordinance.

1 32. Section 29.3 of P. L. 1975, c. 291 (C. 40:55D-41) is amended
2 to read as follows:

3 29.3. Contents of site plan ordinance. An ordinance requiring
4 site plan review and approval pursuant to this article shall include
5 and shall be limited to, except as provided in sections 29 and 29.1
6 of this act standards and requirements relating to:

7 a. Preservation of existing natural resources on the site;

8 b. Safe and efficient vehicular and pedestrian circulation, park-
9 ing and loading;

10 c. Screening, landscaping and location of structures;

11 d. Exterior lighting needed for safety reasons in addition to any
12 requirements for street lighting; **[and]**

13 e. Conservation of energy and use of renewable energy sources;
14 *and*

15 *f. Recycling of designated recyclable materials.*

1 33. Section 76 of P. L. 1975, c. 291 (C. 40:55D-89) is amended
2 to read as follows:

3 76. **Periodic reexamination.** The governing body shall, at least
4 every six years, provide for a general reexamination of its master
5 plan and development regulations by the planning board which
6 shall prepare a report on the findings of such reexamination, a
7 copy of which shall be sent to the county planning board and the
8 municipal clerks of each adjoining municipality. The six-year
9 period shall commence with the adoption or termination of the last
10 general reexamination of such plan and regulations. The first
11 such reexamination shall be completed within six years after the
12 effective date of this act.

13 Such report shall state:

14 a. The major problems and objectives relating to land develop-
15 ment in the municipality at the time of such adoption, last revision
16 or reexamination, if any.

17 b. The extent to which such problems and objectives have been
18 reduced or have increased subsequent to such date.

19 c. The extent to which there have been significant changes in
20 the assumptions, policies and objectives forming the basis for such
21 plan or regulations as last revised, with particular regard to the
22 density and distribution of population and land uses, housing con-
23 ditions, circulation, conservation of natural resources, energy con-
24 servation, collection, disposition and recycling of designated re-
25 cyclable materials, and changes in State, county and municipal
26 policies and objectives.

27 d. The specific changes recommended for such plan or regula-
28 tions, if any, including underlying objectives, policies and standards,
29 or whether a new plan or regulations should be prepared.

1 34. Section 2 of P. L. 1971, c. 198 (C. 40A:11-2) is amended to
2 read as follows:

3 2. **Definitions.** As used herein the following words have the
4 following definitions, unless the context otherwise indicates:

5 (1) "Contracting unit" means:

6 (a) Any county; or

7 (b) Any municipality; or

8 (c) Any board, commission, committee, authority or agency,
9 which is not a State board, commission, committee, authority
10 or agency, and which has administrative jurisdiction over any
11 district other than a school district, project, or facility, in-
12 cluded or operating in whole or in part, within the territorial
13 boundaries of any county or municipality which exercises

14 functions which are appropriate for the exercise by one or
15 more units of local government, and which has statutory power
16 to make purchases and enter into contracts or agreements for
17 the performance of any work or the furnishing or hiring of any
18 materials or supplies usually required, the cost or contract
19 price of which is to be paid with or out of public funds.

20 (2) "Governing body" means:

21 (a) The governing body of the county, when the purchase
22 is to be made or the contract or agreement is to be entered
23 into by, or in behalf of, a county; or

24 (b) The governing body of the municipality, when the pur-
25 chase is to be made or the contract or agreement is to be entered
26 into by, or on behalf of, a municipality; or

27 (c) Any board, commission, committee, authority or agency
28 of the character described in subsection (1) (c) of this section.

29 (3) "Contracting agent" means the governing body of a con-
30 tracting unit, or any board, commission, committee, officer, depart-
31 ment, branch or agency which has the power to prepare the
32 advertisements, to advertise for and receive bids and, as permitted
33 by this act, to make awards for the contracting unit in connection
34 with purchases, contracts or agreements.

35 (4) "Purchase" is a transaction, for a valuable consideration,
36 creating or acquiring an interest in goods, services and property,
37 except real property or any interest therein.

38 (5) "Materials" includes goods and property subject to chapter
39 2 of Title 12A of the New Jersey Statutes, apparatus, or any other
40 tangible thing, except real property or any interest therein.

41 (6) "Professional services" means services rendered or per-
42 formed by a person authorized by law to practice a recognized
43 profession, whose practice is regulated by law, and the performance
44 of which services requires knowledge of an advanced type in a field
45 of learning acquired by a prolonged formal course of specialized
46 instruction and study as distinguished from general academic in-
47 struction or apprenticeship and training. Professional services may
48 also mean services rendered in the performance of work that is
49 original and creative in character in a recognized field of artistic
50 endeavor.

51 (7) "Extraordinary unspecifiable services" means services
52 which are specialized and qualitative in nature requiring expertise,
53 extensive training and proven reputation in the field of endeavor.

54 (8) "Project" means any work, undertaking, program, activity,
55 development, redevelopment, construction or reconstruction of any
56 area or areas.

57 (9) "Work" includes services and any other activity of a tangi-
58 ble or intangible nature performed or assumed pursuant to a con-
59 tract or agreement with a contracting unit.

60 (10) "Homemaker—home health services" means at home per-
61 sonal care and home management provided to an individual or
62 members of his family who reside with him, or both, necessitated
63 by the individual's illness or incapacity. "Homemaker—home
64 health services" includes, but is not limited to, the services of a
65 trained homemaker.

66 (11) "Recyclable material" means those materials which would
67 otherwise become solid waste, which may be collected, separated or
68 processed and returned to the economic mainstream in the form
69 of raw materials or products.

70 (12) "Recycling" means any process by which materials which
71 would otherwise become solid waste are collected, separated or
72 processed and returned to the economic mainstream in the form of
73 raw materials or products.

1 35. Section 3 of P. L. 1971, c. 198 (C. 40A:11-3) is amended to
2 read as follows:

3 3. Purchases, contracts or agreements not required to be adver-
4 tised.

5 a. Any purchase, contract or agreement for the performance
6 of any work or the furnishing or hiring of materials or supplies,
7 the cost or price of which, together with any other sums expended
8 or to be expended for the performance of any work or services in
9 connection with the same immediate program, undertaking, activity
10 or project or the furnishing of similar materials or supplies during
11 the same fiscal year paid with or out of public funds, does not exceed
12 the total sum of \$7,500.00 in the fiscal year, may be made, nego-
13 tiated or awarded by a contracting agent when so authorized by
14 resolution of the governing body of the contracting unit without
15 public advertising for bids. Such authorization may be granted
16 for each purchase, contract or agreement or by a general delega-
17 tion of the power to make, negotiate or award such purchases,
18 contracts or agreements pursuant to this section.

19 b. Any purchase, or contract or agreement to purchase recy-
20 clable materials from any one individual, group or business as part
21 of a recycling program undertaken by a contracting unit may be
22 made, negotiated or awarded without public bidding by that unit,
23 when so authorized by resolution of the governing body of the con-
24 tracting unit, if the amount of the purchase, contract or agreement
25 does not exceed \$7,500.00 for the fiscal year.

26 **[Any] c. Except as otherwise provided in section 15 of P. L.**
 27 **1971, c. 198 (C. 40A:11-15), any purchase, contract or agreement**
 28 **made pursuant to this section may be awarded for a period of 12**
 29 **consecutive months, notwithstanding that each 12-month period**
 30 **does not coincide with the fiscal year. The Division of Local Gov-**
 31 **ernment Services shall adopt and promulgate rules and regulations**
 32 **concerning the methods of accounting for all contracts that do not**
 33 **coincide with the fiscal year.**

1 36. Section 36 of P. L. 1971, c. 198 (C. 40A:11-36) is amended
 2 to read as follows:

3 36. Sale or other disposition of personal property. **[Any] a.**
 4 *Except as otherwise provided in subsection b. of this section, any*
 5 contracting unit by resolution of its governing body may authorize
 6 the sale of its personal property not needed for public use.

7 (1) If the estimated fair value of the property to be sold exceeds
 8 \$2,500.00 in any one sale and it is neither livestock nor perishable
 9 goods, it shall be sold at public sale to the highest bidder.

10 (2) The contracting unit need not advertise for bids when it
 11 makes any such sale to the United States, the State of New Jersey,
 12 another contracting unit or to any body politic to which it con-
 13 tributes tax raised funds.

14 (3) Notice of the date, time and place of the public sale together
 15 with a description of the items to be sold and the conditions of
 16 sale shall be published in a newspaper circulating in the con-
 17 tracting unit. Such sale shall be held not less than seven nor more
 18 than 14 days after the latest publication of the notice thereof.

19 (4) If no bids are received the property may then be sold at
 20 private sale without further publication or notice thereof, but in
 21 no event at less than the estimated fair value; or the contracting
 22 unit may if it so elect reoffer the property at public sale. As used
 23 herein, "estimated fair value" means the market value of the
 24 property between a willing seller and a willing buyer less the cost
 25 to the municipality to continue storage or maintenance of any
 26 personal property not needed for public use to be sold pursuant
 27 to this section.

28 (5) A contracting unit may reject all bids if it determines such
 29 rejection to be in the public interest. In any case in which the con-
 30 tracting unit has rejected all bids, it may readvertise such personal
 31 property for a subsequent public sale. If it elects to reject all bids
 32 at a second public sale, pursuant to this section, it may then sell
 33 such personal property without further publication or notice
 34 thereof at private sale, provided that in no event shall the nego-
 35 tiated price at private sale be less than the highest price of any bid

36 rejected at the preceding two public sales and provided further
 37 that in no event shall the terms or conditions of sale be changed
 38 or amended.

39 *b. Any contracting unit may, by resolution of its governing body,*
 40 *authorize the sale or disposition of recyclable materials recovered*
 41 *through a recycling program undertaken by the contracting unit.*
 42 *The sale of these recyclable materials, by contract or agreement,*
 43 *may be entered into or negotiated without public bidding by that*
 44 *contracting unit.*

1 37. Section 2 of P. L. 1981, c. 278 (C. 13:1E-93) is amended to
 2 read as follows:

3 2. The Legislature finds that New Jersey must continue to seek
 4 solutions to its energy, environmental and economic problems;
 5 that solutions to these problems require proper solid waste and
 6 resource recovery management; that the generation of municipal
 7 solid waste is increasing while landfill capacity is decreasing; that
 8 the siting of environmentally secure landfills is an area of serious
 9 concern and limited choice; *that the planning and construction of*
 10 *waste-to-energy resource recovery facilities requires substantial*
 11 *capital expenditures and a guaranteed flow of processible and*
 12 *combustible waste; and that the disposal of [solid] reusable waste*
 13 *materials is wasteful of valuable resources.*

14 The Legislature further finds that the recycling of waste mate-
 15 rials decreases waste flow to landfill sites, *substantially reduces*
 16 *the required capacity and cost of proposed waste-to-energy re-*
 17 *source recovery facilities while contributing to their overall com-*
 18 *bustion efficiency through the removal of noncombustible and non-*
 19 *processable materials at the source, recovers valuable resources,*
 20 conserves energy in the manufacturing process, and offers a supply
 21 of domestic raw materials for the State's industries; that a com-
 22 prehensive recycling plan and program is necessary to achieve
 23 the maximum practicable recovery of reusable materials from solid
 24 waste in this State; and that such a plan will reduce the amount
 25 of waste to landfills, *result in significant cost savings in the planning*
 26 *and construction of waste-to-energy resource recovery facilities,*
 27 conserve energy and resources, and recover materials for industrial
 28 uses.

29 The Legislature, therefore, declares it to be in the energy,
 30 environmental, and economic interest of the State of New Jersey to
 31 implement a comprehensive Statewide recycling plan.

1 38. Section 4 of P. L. 1981, c. 278 (C. 13:1E-95) is amended to
 2 read as follows:

3 4. a. There is levied upon the owner or operator of every sanitary
 4 landfill facility a recycling tax of \$0.12 per cubic yard of all solid

5 waste accepted for disposal at the facility on or after January 1,
6 1982; except that any solid waste accepted for disposal on or after
7 January 1, 1986 shall be taxed at the rate of ~~[\$0.06]~~ \$2.00 per
8 ~~[cubic yard]~~ ton. In the event that any solid waste is measured
9 upon acceptance for disposal by other than ~~[cubic yards]~~ tons,
10 the tax shall be levied on the equivalents thereof as shall be deter-
10A mined by the director.

11 b. (1) Every owner or operator of a sanitary landfill facility
12 shall, on or before the twentieth day of the month following the
13 close of each tax period, render a return under oath to the director
14 on such form as may be prescribed by the director indicating the
15 number of ~~[cubic yards]~~ tons of solid waste accepted for disposal
16 and at said time owner or operator shall pay the full amount of
17 tax due.

18 (2) Every owner or operator of a sanitary landfill which accepts
19 solid waste for disposal and which is subject to the tax under sub-
20 section a. of this section shall, within 20 days after the first accep-
21 tance of this waste, register with the director on forms prescribed
22 by him.

23 c. If a return required by this act is not filed, or if a return when
24 filed is incorrect or insufficient in the opinion of the director, the
25 amount of tax due shall be determined by the director from such
26 information as may be available. Notice of such determination
27 shall be given to the taxpayer liable for the payment of the tax.
28 Such determination shall finally and irrevocably fix the tax unless
29 the person against whom it is assessed, within 30 days after receiv-
30 ing notice of such determination, shall apply to the director for a
31 hearing, or unless the director on his own motion shall redetermine
32 the same. After such hearing the director shall give notice of his
33 determination to the person to whom the tax is assessed.

34 d. Any taxpayer who shall fail to file his return when due or to
35 pay any tax when the same becomes due, as herein provided, shall
36 be subject to such penalties and interest as provided in the "State
37 Tax Uniform Procedure Law," ~~[Subtitle 9 of Title 54 of the Revised~~
38 ~~Statutes]~~ *R. S. 54:48-1 et seq.* If the Division of Taxation deter-
39 mines that the failure to comply with any provision of this section
40 was excusable under the circumstances, it may remit such part or
41 all of the penalty as shall be appropriate under such circumstances.

42 e. (1) Any person failing to file a return, failing to pay the tax,
43 or filing or causing to be filed, or making or causing to be made,
44 of giving or causing to be given any return, certificate, affidavit,
45 representation, information, testimony or statement required or
46 authorized by this act, or rules or regulations adopted hereunder

47 which is willfully false, or failing to keep any records required
 48 by this act or rules and regulations adopted hereunder, shall, in
 49 addition to any other penalties herein or elsewhere prescribed, be
 50 guilty of a crime of the fourth degree.

51 (2) The certificate of the director to the effect that a tax has not
 52 been paid, that a return has not been filed, that information has
 53 not been supplied or that inaccurate information has been supplied
 54 pursuant to the provisions of this act or rules or regulations
 55 adopted hereunder shall be presumptive evidence thereof.

56 f. In addition to the other powers granted to the director in this
 57 section, he is hereby authorized and empowered:

58 (1) To delegate to any officer or employee of his division such of
 59 his powers and duties as he may deem necessary to carry out
 60 efficiently the provisions of this section, and the person or persons
 61 to whom such power has been delegated shall possess and may
 62 exercise all of said powers and perform all of the duties delegated
 63 by the director;

64 (2) To prescribe and distribute all necessary forms for the
 65 implementation of this section.

66 g. The tax imposed by this section shall be governed in all re-
 67 spects by the provisions of the "State Tax Uniform Procedure
 68 Law," [Subtitle 9 of Title 54 of the Revised Statutes] *R. S. 54:48-1*
 69 *et seq.*, except only to the extent that a specific provision of this
 70 section may be in conflict therewith.

1 39. Section 5 of P. L. 1981, c. 278 (C. 13:1E-96) is amended
 2 to read as follows:

3 5. a. The State Recycling Fund (hereinafter referred to as the
 4 "fund") is established as a nonlapsing, revolving fund. The fund
 5 shall be administered jointly by the Department of Energy and the
 6 Department of Environmental Protection, and shall be credited
 7 with all tax revenue collected by the division pursuant to section 4
 8 of this supplementary act. Interest received on moneys in the fund
 9 and sums received as repayment of principal and interest on out-
 10 standing loans made from the fund shall be credited to the fund.
 11 The Department of Energy and the Department of Environmental
 12 Protection, in their administration of the fund, are authorized to
 13 assign to the New Jersey Economic Development Authority the
 14 responsibility for making credit evaluations of applicants for loans,
 15 for servicing loans on behalf of the two departments, and, the pro-
 16 visions of any other law to the contrary notwithstanding, for making
 17 recommendations as to the approval or denial of loans pursuant
 18 to this section. The departments are further authorized to pay or
 19 reimburse the authority in the amounts as the departments jointly
 20 agree are appropriate for all services rendered by the authority in

21 connection with any assignment of responsibility under the terms
22 of this section out of moneys held in the fund for loans and the loan
23 guarantee program.

24 b. Moneys in the fund shall be allocated and used for the fol-
25 lowing purposes and no others:

26 (1) Not less than ~~45%~~ 35% of the estimated annual balance of
27 the fund shall be used for the annual expenses of a ~~five-year~~
28 program for recycling grants *and bonuses* to municipalities. The
29 amount of these grants shall be calculated~~, for the purposes of the~~
30 the first grant to a particular municipality,] on the basis of the
31 total number of tons of materials annually recycled ~~from resi-~~
32 dential and commercial sources within that municipality. There-
33 after, subsequent grants to a municipality shall be calculated on
34 the basis of the increase in the total number of tons of such ma-
35 terials from the total in the preceding year], except that no such
36 grant shall exceed \$25.00 per ton of materials recycled. ~~For the~~
37 purpose of calculating subsequent annual grants to municipalities
38 pursuant to this subsection, not less than 15% of the estimated
39 annual balance of the fund shall be allocated on the basis of the
40 total number of tons of wastepaper recycled in the preceding year,
41 not less than 15% of the estimated annual balance of the fund shall
42 be allocated on the basis of the total number of tons of glass re-
43 cycled in the preceding year, and not less than 15% of the estimated
44 annual balance of the fund shall be allocated on the basis of the
45 total number of tons of other materials recycled in the preceding
46 year.] *The departments may allocate a portion of these grant*
47 *moneys as bonus grants to municipalities that demonstrate high*
48 *recovery rates in their recycling programs. The departments shall*
49 *adopt, pursuant to the "Administrative Procedure Act," P. L. 1968,*
50 *c. 410 (C. 52:14B-1 et seq.), a formula defining a high recovery*
51 *rate and shall announce each year the total amount of moneys*
52 *available in the bonus grant fund.*

53 To be eligible for a grant pursuant to this subsection, a munici-
54 pality shall demonstrate that the materials recycled by the mu-
55 nicipal recycling program were not diverted from a commercial
56 recycling program already in existence on the effective date of the
57 ordinance establishing the municipal recycling program.

58 ~~To be eligible for a subsequent annual grant pursuant to this~~
59 subsection, a municipality shall demonstrate that at least two types
60 of materials are currently recycled, or will be recycled in the
61 succeeding grant year by the municipal recycling program.] No
62 recycling grant to any municipality shall be used for constructing
63 or operating any facility for the baling of wastepaper or for the
64 shearing, baling or shredding of ferrous or nonferrous materials;

65 (2) Not less than ~~20%~~ 35% of the estimated annual balance
 66 of the fund shall be used to provide low interest loans or loan
 67 guarantees to ~~recycling businesses and industries, and to provide~~
 68 ~~grant moneys to public or nonprofit research institutions or agencies~~
 69 ~~for research into collection, market stimulation and reuse tech-~~
 70 ~~niques applicable to recycling or the disposition of recyclable ma-~~
 71 ~~terials, and to establish a sufficient reserve for a loan guarantee~~
 72 program for recycling businesses and industries;

73 (3) Not more than ~~10%~~ 7% of the estimated annual balance
 74 of the fund shall be used for State recycling program planning and
 75 program funding, including the administrative expenses thereof;

76 (4) Not more than ~~10%~~ 8% of the estimated annual balance
 77 of the fund shall be used for county ~~and municipal~~ recycling
 78 program planning and program funding, including the administra-
 79 tive expenses thereof; and

80 (5) Not less than 15% of the estimated annual balance of the
 81 fund shall be used for a public information and education program
 82 concerning recycling ~~and anti-litter activities~~.

83 *c. To be eligible for a recycling grant pursuant to subsection b.*
 84 *on or after January 1, 1988, a municipality shall demonstrate to*
 85 *the department's satisfaction that the municipality has recycled at*
 86 *least 15% of its municipal solid waste stream by the end of the*
 87 *first full year succeeding the adoption of the district recycling plan*
 88 *required pursuant to section 3 of P. L. . . . , c. . . . (C.)*
 89 *(now pending before the Legislature as Senate Bill No. 2820 of*
 90 *1985).*

1 40. Section 7 of P. L. 1981, c. 278 (C. 13:1E-98) is amended to
 2 read as follows:

3 7. a. The provisions of any law to the contrary notwithstanding,
 4 the owner or operator of any sanitary landfill facility may collect
 5 the tax imposed pursuant to this supplementary act as a surcharge
 6 on any tariff established pursuant to law for the solid waste dis-
 7 posal operations of the facility.

8 b. The Board of Public Utilities shall, within 60 days of the
 9 effective date of this supplementary act, issue an appropriate
 10 order increasing current tariffs established pursuant to law for
 11 solid waste collection operations by an amount equal to the total
 12 increase in the relevant solid waste disposal tariff pursuant to sub-
 13 section a. of this section. In issuing this order, the board shall be
 14 exempt from the provisions of ~~section 31 of P. L. 1962, c. 198 (C.~~
 15 ~~48:2-21.2)~~ *R. S. 48:2-21.*

1 41. Section 8 of P. L. 1981, c. 278 (C. 13:1E-99) is amended to
 2 read as follows:

3 8. Any additional expenditures for the collection, *processing*,
4 *disposition* or disposal of solid waste or *recyclable materials* made
5 by any county or municipality as a result of the tax or *other man-*
6 *datory provision* imposed pursuant to this supplementary act and
7 any expenditure of revenues received by a municipality pursuant
8 to section 5 hereof shall, for the purposes of P. L. 1976, c. 68 (C.
9 40A:4-45.1 et seq.), be considered an expenditure mandated by
10 State law.

1 42. Section 10 of P. L. 1981, c. 278 is amended to read as follows:

2 10. This act shall take effect on January 1, 1982, except that
3 section 6 hereof shall take effect immediately. Section 4 of this
4 act shall expire on December 31, [1986] 1990.

1 43. Section 3 of P. L. 1970, c. 40 (C. 48:13A-3) is amended to
2 read as follows:

3 3. As used in this act, the following words and terms shall have
4 the following meanings, unless the context indicates or requires
5 another or different meaning or intent:

6 a. "Solid waste" means garbage, refuse, and other discarded
7 materials resulting from industrial, commercial and agricultural
8 operations, and from domestic and community activities, and shall
9 include all other waste materials including liquids disposed of inci-
10 dent thereto except it shall not include solid animal and vegetable
11 wastes collected by swine producers licensed by the State Depart-
12 ment of Agriculture to collect, prepare and feed such wastes to
13 swine on their own farms.

14 b. "Solid waste collection" means the activity related to pick-
15 up and transportation of solid waste from its source or location to
16 a disposal site, but does not include activity related to the pickup,
17 transportation or unloading of septic waste.

18 c. "Solid waste disposal" means the storage, treatment, utiliza-
19 tion, processing, or final disposal of solid waste.

20 d. "Septic waste" means pumpings from septic tanks and cess-
21 pools, but shall not include wastes from a sewage treatment plant.

22 e. "Solid waste receptacle" means a container suitable for the
23 depositing of solid waste which has a capacity of not more than 30
24 United States gallons or 132.12 liters or an appropriate measure
25 set by the Board of Public Utilities and used exclusively for the
26 disposal of household solid waste.

27 f. "Recycling" means any process by which materials which
28 would otherwise become solid waste are collected, separated or
29 processed and returned to the economic mainstream in the form
30 of raw materials or products.

1 44. Section 8 of P. L. 1970, c. 40 (C. 48:13A-7) is amended to
2 read as follows:

3 8. a. The board, upon complaint or its own initiative, after
4 hearing, may direct any person engaging in the solid waste col-
5 lection business or the solid waste disposal business to furnish
6 proof that the charges or rates to be received for such service do
7 not exceed just and reasonable rates or charges for such service.

8 b. Should the board find that the rates or charges are excessive
9 then it may order the person charging such excessive rates or
10 charges to make an adjustment in the contract to a sum which shall
11 result in just and reasonable rates or charges.

12 c. *The board shall, within 60 days of the effective date of this*
13 *act, identify the variable cost elements in the solid waste collection*
14 *business related to recycling and recycling services and shall adopt*
15 *regulations or guidelines establishing a simplified procedure where-*
16 *by a municipality or any person engaging in the solid waste col-*
17 *lection business may petition the board for a separate solid waste*
18 *collection tariff based on the number of solid waste receptacles*
19 *processed per household in instances where solid waste collection*
20 *services are contracted for on an individual household basis. In*
21 *establishing this procedure, the board shall be exempt from the*
22 *provisions of R. S. 48:2-21.*

1 45. (New section) a. Any person engaged in the business of
2 solid waste collection or solid waste disposal in accordance with
3 the provisions of P. L. 1970, c. 40 (C. 48:13A-1 et seq.) may engage
4 in recycling or otherwise provide recycling services.

5 b. Notwithstanding the provisions of P. L. 1970, c. 40 (C.
6 48:13A-1 et seq.) or any other law, the Board of Public Utilities
7 shall not have jurisdiction over charges or rates for recycling for
8 services provided by persons engaging in the business of recycling
9 or otherwise providing recycling services in this State. The reve-
10 nues generated by persons engaging in the business of recycling
11 or otherwise providing recycling services shall not be included
12 within the computation of current or adjusted tariffs established
13 pursuant to law for solid waste collection.

1 46. Section 14 of P. L. 1980, c. 105 (C. 54:32B-8.2) is amended
2 to read as follows:

3 14. a. Receipts from the following are exempt from the tax im-
4 posed under the Sales and Use Tax Act: sales of food, food
5 products, beverages, dietary foods and health supplements, sold
6 for human consumption off the premises where sold but not in-
7 cluding a. candy and confectionery, and b. carbonated soft drinks

8 and beverages all of which shall be subject to the retail sales and
 9 compensating use taxes, *except as otherwise provided in subsection*
 10 *b. of this section, whether or not the item is sold in liquid form.*
 11 The exemption in this section is not applicable to food and drink
 12 subject to tax under subsection (c) of section 3 of the Sales and
 13 Use Tax Act (C. 54:32B-3 (c)).

14 *b. Receipts from sales of carbonated soft drinks and beverages*
 15 *packaged in beverage containers manufactured from not less than*
 16 *50% post consumer waste material, as defined in section 2 of P. L.*
 17 *....., c. (C.) (now pending before the Legislature*
 18 *as Senate Bill No. 2820 of 1985), and sold by the vendor for human*
 19 *consumption off the premises where sold. To be eligible for an*
 20 *exemption pursuant to this subsection, a beverage container manu-*
 21 *facturer shall certify to the Director of the Division of Taxation,*
 22 *on an annual basis and in the form prescribed by the director, that*
 23 *the beverage containers manufactured for the packaging of bever-*
 24 *ages sold or offered for sale in this State will be manufactured from*
 25 *not less than 50% post-consumer waste material during the calendar*
 26 *year for which an exemption from the sales tax on receipts from*
 27 *the sale of beverages packaged in these containers shall apply.*
 28 *Upon receipt of a certification, the director shall issue the manu-*
 29 *facturer an exempt beverage container permit for that calendar*
 30 *year under such conditions as the director may deem necessary to*
 31 *administer the provisions of this subsection. The manufacturer*
 32 *shall stamp, label, or otherwise mark each beverage container eligi-*
 33 *ble for this exemption intended for sale or use in New Jersey with*
 34 *the State recycling logo or symbol and the inscription "Exempt*
 35 *from New Jersey Sales Tax." Any person who misrepresents his*
 37 *qualification to receive an exempt beverage container permit under*
 38 *this subsection shall be personally liable for the tax that was other-*
 39 *wise due on the receipts from the sale of carbonated soft drinks*
 40 *and beverages packaged in beverage containers sold or used by him.*

1 47. (New section) a. Receipts from the sales of products manu-
 2 factured from not less than 50% post-consumer waste material, as
 3 defined in section 2 of P. L., c. (C.) (now
 4 pending before the Legislature as Senate Bill No. 2820 of 1985).
 5 are exempt from the tax imposed under the "Sales and Use Tax
 6 Act," P. L. 1966, c. 30 (C. 54:32B-1 et seq.).

7 b. To be eligible for an exemption pursuant to this section, the
 8 manufacturer shall certify to the Director of the Division of Taxa-
 9 tion, on an annual basis and in the form prescribed by the director,
 10 that the facility wherein the product or products are manufactured
 11 will utilize not less than 50% post-consumer waste material in the

12 **manufacturing of these products during the calendar year for which**
 13 **the exemption shall apply. Upon receipt of a certification, the**
 14 **director shall issue the manufacturer an exempt product permit**
 15 **under such conditions as the director may deem necessary to ad-**
 16 **minister the provisions of this section. Every product eligible for**
 17 **an exemption pursuant to this section shall be clearly identified**
 18 **by a stamp, label, or other mark securely affixed thereto, bearing**
 19 **the State recycling logo or symbol and the inscription "Exempt**
 20 **from New Jersey Sales Tax." Any person who misrepresents his**
 21 **qualification to receive an exempt product permit under this sec-**
 22 **tion shall be personally liable for the tax that was otherwise due**
 23 **on the receipts from the retail sales of products manufactured**
 24 **by him.**

1 48. Section 2 of P. L. 1980, c. 62 (C. 54:32C-2) is amended to
 2 read as follows:

3 2. As used in this act:

4 a. "Alcoholic beverage" means liquors, beer, wines, sparkling
 5 wine or vermouth.

6 b. "Beer" means beer, lager beer, ale, stout, porter, and all
 7 similar fermented malt beverages having an alcoholic content of
 8 $\frac{1}{2}$ of 1% or more by volume.

9 c. "Director" means the Director of the Division of Taxation
 10 in the Department of the Treasury or his duly authorized agent.

11 d. "Liquors" means all distilled or rectified spirits, alcohol,
 12 brandy, whiskey, rum, gin and all similar distilled alcoholic bever-
 13 ages, including all dilutions and mixtures of one or more of the
 14 foregoing, such as liqueurs, cordials, and similar compounds, hav-
 15 ing an alcoholic content of $\frac{1}{2}$ of 1% or more by volume.

16 e. "Receipts" means the amount of the sales price of alcoholic
 17 beverages valued in money, whether received in money or other-
 18 wise, without any deduction for expenses or early payment dis-
 19 counts, and excluding the cost of transportation where such cost is
 20 separately stated on the invoice rendered to the retail licensee.

21 f. "Retail licensee" means any person holding a valid and un-
 22 revoked plenary retail consumption, plenary retail distribution,
 23 limited retail distribution, seasonal retail consumption or club
 24 license issued by a municipality or the Director of the Division of
 25 Alcoholic Beverage Control or special permit to sell at retail.

26 g. "Sparkling wine" means champagne and other effervescent
 27 wine charged with carbon dioxide, whether artificially or as the
 28 result of secondary fermentation of the wine within the container.

29 h. "Vermouth" means any compound made by the mixture of
 30 extracts from macerated aromatic flavoring materials with wines

31 and manufactured in such manner that the product possesses
 32 the taste, aroma, and characteristics generally attributed to ver-
 33 mouth.

34 i. "Wines" means all wines whether known as "dry wines,"
 35 "sweet wines," "still wines," or "fortified wines" and any artificial
 36 or imitation wine or compound sold as wine, and any fruit juice
 37 containing $\frac{1}{2}$ of 1% or more of alcohol by volume, and any other
 38 beverage containing alcohol produced by the fermentation of the
 39 natural sugar content of fruits or other agricultural products con-
 40 taining sugar, which beverage contains $\frac{1}{2}$ of 1% or more of alcohol
 41 by volume, but shall not mean or include vermouth, or cider con-
 42 taining less than $3\frac{3}{10}\%$ of alcohol by volume.

43 j. "Wholesaler" means any person who sells alcoholic beverages
 44 to retail licensees.

45 k. "Beverage container" means an individual, separate, sealed
 46 bottle or can having a capacity of six ounces or more, composed
 47 of glass, metal, plastic or any combination thereof, containing an
 48 alcoholic beverage.

1 49. Section 3 of P. L. 1980, c. 62 (C. 54:32C-3) is amended to read
 2 as follows:

3 3. a. There is imposed a tax of 7.3% upon the receipts from
 4 every sale of alcoholic beverages, except *alcoholic beverages*
 5 *packaged in beverage containers manufactured from not less than*
 6 *50% post-consumer waste material, as defined in section 2 of*
 7 *P. L., c. . . . (C.) (now pending before the Legis-*
 8 *lature as Senate Bill No. 2820 of 1985), and draught beer sold by*
 9 *the barrel, by any wholesaler to any retail licensee.*

10 b. *To be eligible for an exemption pursuant to this section, a*
 11 *beverage container manufacturer shall certify to the Director of*
 12 *the Division of Taxation, on an annual basis and in the form pre-*
 13 *scribed by the director, that the beverage containers manufactured*
 14 *for the packaging of alcoholic beverages sold or offered for sale*
 15 *in this State will be manufactured from not less than 50% post-*
 16 *consumer waste material during the calendar year for which an*
 17 *exemption from the sales tax on receipts from the sale of alcoholic*
 18 *beverages packaged in these containers shall apply. Upon receipt*
 19 *of a certification, the director shall issue the manufacturer an*
 20 *exempt alcoholic beverage container permit for that calendar year*
 21 *under such conditions as the director may deem necessary to*
 22 *administer the provisions of this section. The manufacturer shall*
 23 *stamp, label, or otherwise mark each alcoholic beverage container*
 24 *eligible for this exemption intended for sale or use in New Jersey*
 25 *with the State recycling logo or symbol and the inscription "Exempt*

26 *from New Jersey Alcoholic Beverage Wholesale Sales Tax.* *Any*
 27 *person who misrepresents his qualification to receive an exempt*
 28 *alcoholic beverage container permit under this section shall be*
 29 *personally liable for the tax that was otherwise due on the receipts*
 30 *from the sale of alcoholic beverages packaged in beverage con-*
 31 *tainers sold or used by him.*

1 50. (New section) A taxpayer who purchases recycling equip-
 2 ment to be used within this State shall be entitled to a credit against
 3 the tax imposed pursuant to section 5 of P. L. 1945, c. 162 (C.
 4 54:10A-5) in an amount equal to 20% of the cost of the recycling
 5 equipment. For the purposes of this section, "recycling equipment"
 6 means vehicles used exclusively for the transportation of post-
 7 consumer waste material, or machinery or apparatus used ex-
 8 clusively to process post-consumer waste material and manufac-
 9 turing machinery used exclusively to produce finished products, the
 10 composition of which is at least 50% post-consumer waste materials,
 11 provided that this transportation, processing or manufacturing
 12 activity accounts for at least 50% of the taxpayer's production as
 13 measured by the taxpayer's net sales during the tax period for
 14 which the credit established pursuant to this section is claimed.
 15 "Post-consumer waste material" means any product generated by
 16 a business or consumer which has served its intended end use, and
 17 which has been separated from solid waste for the purposes of
 18 collection, recycling and disposition and which does not include
 19 secondary waste material or demolition waste; and "secondary
 20 waste material" means waste material generated after the comple-
 21 tion of a manufacturing process. The Commissioner of the Depart-
 22 ment of Environmental Protection, in consultation with the Director
 23 of the Division of Taxation, shall adopt rules and regulations
 24 establishing technical specifications for eligibility for the credit
 25 established pursuant to this section. Any unused portion of the
 26 credit established pursuant to this section may be carried forward
 27 by the taxpayer for four subsequent tax periods.

1 51. Section 4 of P. L. 1945, c. 162 (C. 54:10A-4) is amended to
 2 read as follows:

3 4. For the purposes of this act, unless the context requires a
 4 different meaning:

5 (a) "Commissioner" shall mean the Director of the Division of
 6 Taxation of the State Department of the Treasury.

7 (b) "Allocation factor" shall mean the proportionate part of a
 8 taxpayer's net worth or entire net income used to determine a
 9 measure of its tax under this act.

10 (c) "Corporation" shall mean any corporation, joint-stock com-
11 pany or association and any business conducted by a trustee or
12 trustees wherein interest or ownership is evidenced by a certificate
13 of interest or ownership or similar written instrument.

14 (d) "Net worth" shall mean the aggregate of the values dis-
15 closed by the books of the corporation for (1) issued and outstand-
16 ing capital stock, (2) paid-in or capital surplus, (3) earned surplus
17 and undivided profits, and (4) surplus reserves which can reason-
18 ably be expected to accrue to holders or owners of equitable shares,
19 not including reasonable valuation reserves, such as reserves for
20 depreciation or obsolescence or depletion. Notwithstanding the fore-
21 going, net worth shall not include any deduction for the amount of
22 the excess depreciation described in paragraph (2)(F) of subsection
23 (k) of this section. The foregoing aggregate of values shall be
24 reduced by 50% of the amount disclosed by the books of the
25 corporation for investment in the capital stock of one or more
26 subsidiaries, which investment is defined as ownership (1) of at
27 least 80% of the total combined voting power of all classes of
28 stock of the subsidiary entitled to vote and (2) of at least 80%
29 of the total number of shares of all other classes of stock except
30 nonvoting stock which is limited and preferred as to dividends.
31 In the case of investment in an entity organized under the laws
32 of a foreign country, the foregoing requisite degree of owner-
33 ship shall effect a like reduction of such investment from net
34 worth of the taxpayer, if the foreign entity is considered a
35 corporation for any purpose under the United States federal
36 income tax laws, such as (but not by way of sole examples) for the
37 purpose of supplying deemed paid foreign tax credits or for the
38 purpose of status as a controlled foreign corporation. In calculat-
39 ing the net worth of a taxpayer entitled to reduction for investment
40 in subsidiaries, the amount of liabilities of the taxpayer shall be
41 reduced by such proportion of the liabilities as corresponds to the
42 ratio which the excluded portion of the subsidiary values bears
43 to the total assets of the taxpayer.

44 In the case of banking corporations which have international
45 banking facilities as defined in subsection (n), the foregoing aggre-
46 gate of values shall also be reduced by retained earnings of the
47 international banking facility. Retained earnings mean the earn-
48 ings accumulated over the life of such facility and shall not include
49 the pro rata share of dividends paid and federal income taxes paid
50 or payable during the tax year.

51 If in the opinion of the commissioner, the corporation's books
52 do not disclose fair valuations the commissioner may make a rea-

53 ~~reasonable determination of the net worth which, in his opinion, would~~
54 ~~reflect the fair value of the assets, exclusive of subsidiary invest-~~
55 ~~ments as defined aforesaid, carried on the books of the corporation,~~
56 ~~in accordance with sound accounting principles, and such determi-~~
57 ~~nation shall be used as net worth for the purpose of this act.~~

58 (e) "Indebtedness owing directly or indirectly" shall include,
59 without limitation thereto, all indebtedness owing to any stock-
60 holder or shareholder and to members of his immediate family
61 where a stockholder and members of his immediate family to-
62 gether or in the aggregate own 10% or more of the aggregate
63 outstanding shares of the taxpayer's capital stock of all classes.

64 (f) "Investment company" shall mean any corporation whose
65 business during the period covered by its report consisted, to the
66 extent of at least 90% thereof of holding, investing and reinvesting
67 in stocks, bonds, notes, mortgages, debentures, patents, patent
68 rights and other securities for its own account, but this shall not
69 include any corporation which: (1) is a merchant or a dealer of
70 stocks, bonds and other securities, regularly engaged in buying the
71 same and selling the same to customers; or (2) had less than 90%
72 of its average gross assets in New Jersey, at cost, invested in
73 stocks, bonds, debentures, mortgages, notes, patents, patent rights
74 or other securities or consisting of cash on deposit during the period
75 covered by its report; or (3) is a banking corporation or a financial
76 business corporation as defined in the Corporation Business Tax
77 Act.

78 (g) "Regulated investment company" shall mean any corpora-
79 tion which for a period covered by its report, is registered and
80 regulated under the Investment Company Act of 1940 (54 Stat.
81 789), as amended.

82 (h) "Taxpayer" shall mean any corporation required to report
83 or to pay taxes, interest or penalties under this act.

84 (i) "Fiscal year" shall mean an accounting period ending on
85 any day other than the last day of December on the basis of which
86 the taxpayer is required to report for federal income tax purposes.

87 (j) Except as herein provided, "privilege period" shall mean
88 the calendar or fiscal accounting period for which a tax is payable
89 under this act.

90 (k) "Entire net income" shall mean total net income from all
91 sources, whether within or without the United States, and shall
92 include the gain derived from the employment of capital or labor,
93 or from both combined, as well as profit gained through a sale or
94 conversion of capital assets. For the purpose of this act, the

95 amount of a taxpayer's entire net income shall be deemed prima
96 facie to be equal in amount to the taxable income, before net operat-
97 ing loss deduction and special deductions, which the taxpayer
98 is required to report to the United States Treasury Department
99 for the purpose of computing its federal income tax; provided,
100 however, that in the determination of such entire net income,

101 (1) Entire net income shall exclude 100% of dividends which
102 were included in computing such taxable income for federal income
103 tax purposes, paid to the taxpayer by one or more subsidiaries
104 owned by the taxpayer to the extent of the 80% or more owner-
105 ship of investment described in subsection (d) of this section. With
106 respect to other dividends, entire net income shall not include 50%
107 of the total included in computing such taxable income for federal
108 income tax purposes. Entire net income shall exclude for the
109 periods set forth in paragraph (2) (F) (i) of this subsection, any
110 amount, except with respect to property described in section
111 168 (f) (8) (D) (iii) of the Internal Revenue Code, which is included
112 in a taxpayer's federal taxable income solely as a result of an elec-
113 tion made pursuant to the provisions of paragraph (8) of that
114 section.

115 (2) Entire net income shall be determined without the exclusion,
116 deduction or credit of:

117 (A) The amount of any specific exemption or credit allowed in
118 any law of the United States imposing any tax on or measured by
119 the income of corporations;

120 (B) Any part of any income from dividends or interest on any
121 kind of stock, securities or indebtedness, except as provided in
122 subsection (k) (1) of this section;

123 (C) Taxes paid or accrued to the United States on or measured
124 by profits or income, or the tax imposed by this act, or any tax
125 paid or accrued with respect to subsidiary dividends excluded from
126 entire net income as provided in subsection (k) (1) of this section;

127 (D) Net operating losses sustained during any year or period
128 other than that covered by the report;

129 (E) 90% of interest on indebtedness owing directly or indirectly
130 to holders of 10% or more of the aggregate outstanding shares of
131 the taxpayer's capital stock of all classes; except that such interest
132 may, in any event, be deducted

133 (i) Up to an amount not exceeding \$1,000.00;

134 (ii) In full to the extent that it relates to bonds or other
135 evidences of indebtedness issued, with stock, pursuant to a
136 bona fide plan of reorganization, to persons who, prior to
137 such reorganization, were bona fide creditors of the corpora-

138 tion or its predecessors, but were not stockholders or share-
139 holders thereof;

140 (iii) In full to the extent that it relates to debt of a financial
141 business corporation; provided that such interest rate does not
142 exceed 2% over prime rate; the prime rate to be determined by
143 the Commissioner of Banking;

144 (iv) In full to the extent that it relates to financing of motor
145 vehicle inventory held for sale to customers providing said
146 indebtedness is owed to a taxpayer customarily and routinely
147 providing this type of financing;

148 (v) In full to the extent it relates to debt of a banking
149 corporation to a bank holding company, as defined in 12 U.S.C.
150 § 1841, of which the banking corporation is a subsidiary;

151 (F) (i) The amount by which depreciation reported to the United
152 State Treasury Department for property placed in service on and
153 after January 1, 1981, for purposes of computing federal taxable
154 income in accordance with section 168 of the Internal Revenue Code
155 in effect after December 31, 1980, exceeds the amount of deprecia-
156 tion determined in accordance with the Internal Revenue Code pro-
157 visions in effect prior to January 1, 1981, but only with respect to
158 a taxpayer's accounting period ending after December 31, 1981:
159 provided, however, that where a taxpayer's accounting period
160 begins in 1981 and ends in 1982, no modification shall be required
161 with respect to this paragraph (F) for the report filed for such
162 period with respect to property placed in service during that part
163 of the accounting period which occurs in 1981.

164 (ii) For the periods set forth in subparagraph (F) (i) of this
165 subsection, any amount, except with respect to property described
166 in section 168 (f) (8) (D) (iii) of the Internal Revenue Code,
167 which the taxpayer claimed as a deduction in computing federal
168 income tax pursuant to a qualified lease agreement under para-
169 graph (8) of that section.

170 The director shall promulgate rules and regulations necessary
171 to carry out the provisions of this section, which rules shall pro-
172 vide, among others, the manner in which the remaining life of
173 property shall be reported.

174 (3) The commissioner may, whenever necessary to properly
175 reflect the entire net income of any taxpayer, determine the year or
176 period in which any item of income or deduction shall be included,
177 without being limited to the method of accounting employed by the
178 taxpayer.

179 (4) There shall be allowed as a deduction from entire net income
180 of a banking corporation, to the extent not deductible in deter-

181 mining federal taxable income, the eligible net income of an inter-
182 national banking facility determined as follows:

183 (A) The eligible net income of an international banking facility
184 shall be the amount remaining after subtracting from the eligible
185 gross income the applicable expenses;

186 (B) Eligible gross income shall be the gross income derived by
187 an international banking facility, which shall include, but not be
188 limited to, gross income derived from:

189 (i) Making, arranging for, placing or carrying loans to
190 foreign persons, provided, however, that in the case of a foreign
191 person which is an individual, or which is a foreign branch of
192 a domestic corporation (other than a bank), or which is a
193 foreign corporation or foreign partnership which is controlled
194 by one or more domestic corporations (other than banks),
195 domestic partnerships or resident individuals, all the proceeds
196 of the loan are for use outside of the United States:

197 (ii) Making or placing deposits with foreign persons which
198 are banks or foreign branches of banks (including foreign sub-
199 sidiaries) or foreign branches of the taxpayers or with other
200 international banking facilities; or

201 (iii) Entering into foreign exchange trading or hedging
202 transactions related to any of the transactions described in this
203 paragraph;

204 (iv) Such other activities of an international banking facil-
205 ity may, from time to time, be authorized to engage in;

206 (C) Applicable expenses shall be any expense or other deductions
207 attributable, directly or indirectly, to the eligible gross income
208 described in paragraph (B) of this subsection.

209 (5) *There shall be allowed as a deduction from the entire net*
210 *income of a taxpayer eligible for the credit established pursuant to*
211 *section 50 of P. L., c. . . . (C.) (now pending*
212 *before the Legislature as Senate Bill No. 2820 of 1965) against the*
213 *tax imposed pursuant to section 5 of P. L. 1945, c. 162 (C. 54:10A-5),*
214 *an amount equal to 100% of the taxpayer's energy costs incurred in*
215 *manufacturing for sale products the composition of which is at least*
216 *50% post-consumer waste material. For the purpose of this para-*
217 *graph, "post-consumer waste material" means any product gen-*
218 *erated by a business or consumer which has served its intended end*
219 *use, and which has been separated from solid waste for the purposes*
220 *of collection, recycling and disposition and which does not include*
221 *secondary waste material or demolition waste; and "secondary*
222 *waste material" means waste material generated after the comple-*
223 *tion of a manufacturing process. The Commissioner of the Depart-*

224 *ment of Environmental Protection, in consultation with the Director*
225 *of the Division of Taxation, shall adopt rules and regulations*
226 *establishing technical specifications for eligibility for the deduction*
227 *established pursuant to this paragraph.*

228 (1) "Real estate investment trust" shall mean any unincor-
229 porated trust or unincorporated association qualifying and electing
230 to be taxed as a real estate investment trust under federal law.

231 (m) "Financial business corporation" shall mean any corporate
232 enterprise which is (1) in substantial competition with the business
233 of national banks and which (2) employs moneyed capital with the
234 object of making profit by its use as money, through discounting and
235 negotiating promissory notes, drafts, bills of exchange and other
236 evidences of debt; buying and selling exchange; making of or deal-
237 ing in secured or unsecured loans and discounts; dealing in securi-
238 ties and shares of corporate stock by purchasing and selling such
239 securities and stock without recourse, solely upon the order and for
240 the account of customers; or investing and reinvesting in market-
241 able obligations evidencing indebtedness of any person, copartner-
242 ship, association or corporation in the form of bonds, notes or de-
243 bentures commonly known as investment securities; or dealing in or
244 underwriting obligations of the United States, any state or any
245 political subdivision thereof, or of a corporate instrumentality of
246 any of them. This shall include, without limitation of the foregoing,
247 business commonly known as industrial banks, dealers in commer-
248 cial paper and acceptances, sales finance, personal finance, small
249 loan and mortgage financing businesses, as well as any other enter-
250 prise employing moneyed capital coming into competition with the
251 business of national banks; provided, that the holding of bonds,
252 notes, or other evidences of indebtedness by individual persons not
253 employed or engaged in the banking or investment business and
254 representing merely personal investments not made in competition
255 with the business of national banks, shall not be deemed financial
256 business. Nor shall "financial business" include national banks,
257 production credit associations organized under the Farm Credit
258 Act of 1933, stock and mutual insurance companies duly autho-
259 rized to transact business in this State, security brokers or dealers
260 or investment companies or bankers not employing moneyed capital
261 coming into competition with the business of national banks, real
262 estate investment trusts, or any of the following entities organized
263 under the laws of this State: credit unions, savings banks, savings
264 and loan and building and loan associations, pawnbrokers, and
265 State banks and trust companies.

266 (n) "International banking facility" shall mean a set of asset
 267 and liability accounts segregated on the books and records of a
 268 depository institution, United States branch or agency of a foreign
 269 bank, or an Edge or Agreement Corporation that includes only
 270 international banking facility time deposits and international
 271 banking facility extensions of credit as such terms are defined in
 272 section 204.8(a)(2) and section 204.8(a)(3) of Regulation D of the
 273 board of governors of the Federal Reserve System, 12 CFR Part
 274 204, effective December 3, 1981. In the event that the United States
 275 enacts a law, or the board of governors of the Federal Reserve Sys-
 276 tem adopts a regulation which amends the present definition of
 277 international banking facility or of such facilities' time deposits or
 278 extensions of credit, the Commissioner of Banking shall forthwith
 279 adopt regulations defining such terms in the same manner as such
 280 terms are set forth in the laws of the United States or the regula-
 281 tions of the board of governors of the Federal Reserve System. The
 282 regulations of the Commissioner of Banking shall thereafter pro-
 283 vide the applicable definitions.

1 52. (New section) A taxpayer who purchases recycling equip-
 2 ment to be used within this State shall be entitled to a credit against
 3 the tax imposed pursuant to section 5 of P. L. 1973, c. 170 (C.
 4 54:10E-5) in an amount equal to 20% of the cost of the recycling
 5 equipment. For the purposes of this section, "recycling equipment"
 6 means vehicles used exclusively for the transportation of post-
 7 consumer waste material, or machinery or apparatus used exclu-
 8 sively to process post-consumer waste material and manufacturing
 9 machinery used exclusively to produce finished products, the com-
 10 position of which is at least 50% post-consumer waste materials,
 11 provided that this transportation, processing or manufacturing
 12 activity accounts for at least 50% of the taxpayer's production as
 13 measured by the taxpayer's net sales during the tax period for
 14 which the credit established pursuant to this section is claimed.
 15 "Post-consumer waste material" means any product generated by
 16 a business or consumer which has served its intended end use, and
 17 which has been separated from solid waste for the purposes of
 18 collection, recycling and disposition and which does not include
 19 secondary waste material or demolition waste; and "secondary
 20 waste material" means waste material generated after the com-
 21 pletion of a manufacturing process. The Commissioner of the De-
 22 partment of Environmental Protection, in consultation with the
 23 Director of the Division of Taxation, shall adopt rules and regula-
 24 tions establishing technical specifications for eligibility for the
 25 credit established pursuant to this section. Any unused portion of

26 the credit established pursuant to this section may be carried for-
27 ward by the taxpayer for four subsequent tax periods.

1 53. Section 4 of P. L. 1973, c. 170 (C. 54:10E-4) is amended to
2 read as follows:

3 4. For purposes of this act, unless the context requires a different
4 meaning:

5 a. "Director" means the Director of the Division of Taxation
6 of the State Department of the Treasury;

7 b. "Allocation factor" means the proportionate part of the tax-
8 payer's entire net income used to determine a measure of its tax
9 under this act;

10 c. "Corporation" means any corporation, joint-stock company
11 or association and any business conducted by a trustee or trustees
12 wherein interest or ownership is evidenced by a certificate of in-
13 terest or ownership or similar written instrument;

14 d. "Indebtedness owing directly or indirectly" includes, with-
15 out limitation thereto, all indebtedness owing to any stockholder
16 or shareholder and to members of his immediate family where a
17 stockholder and members of his immediate family together or in
18 the aggregate own 10% or more of the aggregate outstanding
19 shares of the taxpayer's capital stock of all classes;

20 e. "Taxpayer" means any corporation required to report or to
21 pay taxes, interest or penalties under this act;

22 f. "Calendar year" means an accounting period ending on the
23 last day of December on the basis of which the taxpayer is required
24 to report for federal income tax purposes;

25 g. "Fiscal year" means an accounting period ending on any day
26 other than the last day of December on the basis of which the tax-
27 payer is required to report for federal income tax purposes;

28 h. "Accounting period" means the calendar or fiscal year, or
29 part thereof, for which a tax is payable under this act;

30 i. "Entire net income" means total net income from all sources,
31 whether within or without the United States, and shall include
32 the gain derived from the employment of capital or labor, or from
33 both combined, as well as profit gained through a sale or conver-
34 sion of capital assets. For the purpose of this act, the amount of
35 a taxpayer's entire net income shall be deemed prima facie to be
36 equal in amount to the taxable income, before net operating loss
37 deduction and special deductions, which the taxpayer is required
38 to report to the United States Treasury Department for the pur-
39 pose of computing its federal income tax; provided, however, that
40 in the determination of such entire net income.

41 (1) Entire net income shall exclude 100% of dividends which
42 were included in computing such taxable income for federal in-
43 come tax purposes, paid to the taxpayer by one or more subsidi-
44 aries owned by the taxpayer. For the purposes of this section, a
45 subsidiary shall be deemed to be any corporation in which a tax-
46 payer is the owner of at least 80% of the total combined voting
47 power of all classes of stock entitled to vote and of at least 80%
48 of each class, if any, of nonvoting stock. With respect to other
49 dividends, entire net income shall not include 50% of the total
50 included in computing such taxable income for federal income
51 tax purposes;

52 (2) Entire net income shall be determined without the exclusion,
53 deduction or credit of:

54 (a) the amount of any specific exemption or credit allowed in
55 any law of the United States imposing any tax on or measured
56 by the income of corporations;

57 (b) any part of any income from dividends or interest on any
58 kind of stock, securities or indebtedness, except as provided in
59 subsection i. (1) of this section;

60 (c) taxes paid or accrued to the United States on or measured
61 by profits or income, or the tax imposed by this act, or any tax
62 paid or accrued with respect to subsidiary dividends excluded
63 from entire net income as provided in subsection i. (1) of this
64 section;

65 (d) net operating losses sustained during any year or period
66 other than that covered by the report;

67 (e) 90% of interest on indebtedness owing directly or indirectly
68 to holders of 10% or more of the aggregate outstanding shares of
69 the taxpayer's capital stock of all classes; except that such interest
70 may, in any event, be deducted.

71 (i) up to an amount not exceeding \$1,000.00;

72 (ii) in full to the extent that it relates to bonds or other
73 evidences of indebtedness issued, with stock, pursuant to a
74 bona fide plan of reorganization, to persons, who, prior to
75 such reorganization, were bona fide creditors of the corpora-
76 tion or its predecessors, but were not stockholders or share-
77 holders thereof;

78 (3) The director may, whenever necessary to properly reflect
79 the entire net income of any taxpayer, determine the year or period
80 in which any item of income or deduction shall be included, with-
81 out being limited to the method of accounting employed by the
82 taxpayer.

83 (4) *There shall be allowed as a deduction from the entire net*
 84 *income of a taxpayer eligible for the credit established pursuant to*
 85 *section 52 of P. L. . . . , c. . . . (C.) (now pending before*
 86 *the Legislature as Senate Bill No. 2820 of 1985) against the tax*
 87 *imposed pursuant to section 5 of P. L. 1973, c. 170 (C. 54:10E-5),*
 88 *an amount equal to 100% of the taxpayer's energy costs incurred*
 89 *in manufacturing for sale products the composition of which is at*
 90 *least 50% post-consumer waste material. For the purposes of this*
 91 *paragraph, "post-consumer waste material" means any product*
 92 *generated by a business or consumer which has served its intended*
 93 *end use, and which has been separated from solid waste for the pur-*
 94 *poses of collection, recycling and disposition and which does not*
 95 *include secondary waste material or demolition waste; and "sec-*
 96 *ondary waste material" means waste material generated after the*
 97 *completion of a manufacturing process. The Commissioner of the*
 98 *Department of Environmental Protection, in consultation with the*
 99 *Director of the Division of Taxation, shall adopt rules and regula-*
 100 *tions establishing technical specifications for eligibility for the de-*
 101 *duction established pursuant to this paragraph.*

1 54. (New section) a. The "Municipal Recycling Program Fund"
 2 is established as a special account in the Department of Treasury.
 3 The fund shall be administered by the State Treasurer and shall
 4 be the depository for all monies appropriated by the Legislature
 5 pursuant to this or any subsequent act for the purpose of assisting
 6 municipalities in the implementation of the municipal recycling
 7 program requirements of section 5 of this amendatory and sup-
 8plementary act.

9 b. The monies in the fund shall be allocated and used to provide
 10 State aid to municipalities for implementing the municipal re-
 11 cycling program requirements of section 5 of this amendatory and
 12 supplementary act. The State aid shall be distributed to the mu-
 13 nicipalities on a per capita basis, except that no municipality shall
 14 receive less than .001% of the amount apportioned to aid all mu-
 15 nicipalities.

16 c. Within 60 days of the effective date of this amendatory and
 17 supplementary act, the State Treasurer shall pay and distribute
 18 to the chief fiscal officer of every municipality in this State, from
 19 monies in the "Municipal Recycling Program Fund," an amount
 20 equal to the municipality's proportionate share of the State aid as
 21 calculated pursuant to subsection b. of this section.

1 55. (New section) Any monies due a municipality pursuant to
 2 the provisions of section 54 of P. L. . . . , c. . . . (C.)

3 (now pending before the Legislature as Senate Bill No. 2820 of
4 1985) may be anticipated by the municipality for the purposes of
5 preparing its annual budget.

1 56. (New section) The receipt and expenditure by a municipality
2 of the monies which a municipality receives under section 54 of
3 P. L. . . . , c. . . . (C.) (now pending before the Legis-
4 lature as Senate Bill No. 2820 of 1985) shall be exempt from the
5 limitations on municipal expenditures imposed pursuant to section
6 3 of P. L. 1976, c. 68 (C. 40A:4-45.3).

1 57. This act shall take effect immediately.

STATEMENT

This bill would substantially expand and extend the existing
"Recycling Act" to fully integrate recycling as a basic component
of the State's overall solid waste management strategy. The pur-
pose of this bill is to establish a mandatory Statewide recycling
program and to eliminate certain institutional, regulatory and
statutory impediments to the development of the State's commit-
ment to recycling as manifested in the goals of the State Recycling
Plan.

SENATOR CATHERINE A. COSTA (Acting Chairwoman): I would like to call the meeting to order -- this public hearing. This is the Senate Energy and Environment Committee, and we are here to have a public hearing on Senate Bill 2820, the Mandatory Recycling Act.

First I would like to introduce myself. I am Senator Catherine Costa, Vice Chairman of the Energy and Environment Committee. Paul Contillo is on my left -- Senator Paul Contillo, the sponsor of this bill. Senator Lee Laskin is on my right.

I will now call upon Senator Contillo to give us an overview of his bill.

SENATOR CONTILLO: The subject this morning -- recycling -- is one of those issues which everyone supports in concept but then has problems with in detail. "Recycling" represents, in the abstract, a complex of values and beliefs which virtually all of us admire: economic efficiency, the conservation of natural resources and energy, frugality, and the avoidance of waste. In addition to recycling's abstract attraction, there is also its particular and timely relevance to an issue which is now almost always in the daily news: New Jersey's solid waste crisis. Recycling, as we all know, can reduce the size of the State's solid waste stream, and thus prolong the life of our few remaining landfills, and allow a reduction in the size of the costly resource recovery facilities we are building.

But the attainment of a meaningful recycling program will not flow from the pursuit of recycling as an abstraction, nor will it be the result of the implementation of simply another solid waste initiative. Indeed, the switch from landfilling to resource recovery, which involves simply a change in disposal methods, will be easy compared to the achievement of a substantial level of recycling in New Jersey. The achievement of widespread recycling in New Jersey will necessitate changing ingrained attitudes acquired and reinforced by the throwaway ethic for over two generations, and will rely on changes in the organization and operation of national and international markets. In short, recycling, which sounds so simple, is one of the most complex issues the Legislature is now faced with. As the Senate sponsor of this mandatory recycling legislation, I become more aware of this complexity each day.

In this regard, I would like to first make some specific comments about recycling, which should help explain the context in which I am approaching this legislation. First, I believe that mandatory recycling must be clearly distinguished from mandatory source separation of solid waste. We must clearly understand that source separation does not magically produce recycling. Source separation involves separating the various major components of the solid waste stream: glass, aluminum, plastics, corrugated and other cardboard, newsprint, etc. And, while the separation and the separate collection and disposal of each kind of solid waste may pose a burden on individuals, and will certainly require municipalities to develop collection methods, the State can mandate that solid waste be source separated. Like other things the Legislature does, some may not like it, but we can legislate source separation into existence with the stroke of a pen.

Mandatory recycling is an entirely different proposition because the State cannot, in any meaningful sense, mandate that materials which are source separated be recycled. We can offer tax and other incentives to those who are engaged in the recycling business, and we can even change our attitude toward recycling by looking at it not as a moneymaker but in terms of cost avoidance. But this will not automatically produce recycling. Recycling will occur only when there are markets for recycled materials, markets which are stable and profitable enough to attract businessmen and investors. These markets are in fact the linchpin of the whole recycling initiative. Even if we look at recycling in terms of cost avoidance, that is, avoidance of disposal costs, and are willing to give source-separated recyclables away, if there is no market for these materials, we will end up bringing them to a landfill or an incinerator, and will have paid the cost of both separating them and disposing of them. I am optimistic that after the State makes a commitment to recycling as a major component of our overall solid waste strategy that these markets will develop, but I am under no illusion that this legislation will produce these markets immediately.

A second point I would like to make about recycling involves looking at it from what I would call the "front end" and the "back end" of the solid waste stream. Traditionally, we have looked at recycling from the back end of the solid waste stream; that is, we try to determine the basic materials which make up the components of the solid waste stream, and then try to effectuate the separating and recycling of these materials. In the past, when the attitude toward solid waste in general was "dig a bigger hole to dump it into," this approach to recycling went largely unchallenged. Today, however, we are acutely aware that virtually everything we produce must, at some point, be disposed of, and we have also become aware, often the hard way, of the true social and economic cost of improper solid waste disposal methods. Thus, it is time that the public sector -- which will, in my mind, always be responsible for safe and adequate solid waste disposal -- start looking at the front end of the solid waste stream, at the materials going into the waste stream, and any problems associated with their recycling or disposal. We may well have to tailor the waste stream to our disposal methods and goals.

The true cost of an item is not only the cost of its production, but the cost -- both environmental and social -- of its disposal. If the State makes recycling a cornerstone of its solid waste disposal strategy, then we must, logically, start looking at each component of the waste stream in terms of whether it can be recycled. And, if it is determined that certain articles cannot be practically and economically recycled, then it may be in the best interest of all to discourage the production and use of these materials, and to encourage the use of a more suitable -- from a recycling standpoint -- alternative. I also think a similar front end approach to the solid waste stream may be necessary with regard to our transition from landfilling to the incineration of solid waste. If certain materials cannot be safely burned, or perhaps even if there is a widespread belief that they cannot be safely burned, it might be necessary to discourage the use of these materials, or to ban their incineration. I realize that approaching recycling or resource recovery from the front end of the solid waste stream takes the State into new territory, but I

think it will be necessary if we are to develop coherent and comprehensive resource recovery and recycling programs.

I consider S-2820 to be a starting point for purposes of discussion. However, and I cannot emphasize this enough: New Jersey cannot afford to continue to rely upon fragmented or half-hearted voluntary recycling efforts. To those who say that we cannot recycle more than present volumes, I say that this response is unacceptable. It is my firm conviction that New Jersey's garbage disposal problems must be addressed through a statewide recycling program, and there must be a commitment on the part of the State and local governments, and the packaging, solid waste, and recycling industries to devise a workable, even-handed approach to recycling.

SENATOR COSTA: Thank you, Senator Contillo. Our first speakers will be -- from the Department of Environmental Protection -- George Tyler; Mary Sheil of the Office of Recycling; and for the Department of Energy, Chuck Richman.

GEORGE J. TYLER: Thank you very much, Senators. I appreciate the opportunity to be here today and to comment on this legislation.

I would like to begin my testimony by putting some of the issues that were on our minds in working on this bill into context. As the members of this Committee are well aware, and, indeed, as many of the people who are here today to testify are aware, New Jersey still faces many critical decisions in solid waste management.

I would just like to take a few minutes to bring you up to date on where we stand today. Right now we have 10 sanitary landfills operating in the State which are receiving more than 90% of the waste we generate. The five largest of those landfills is taking more than 50% of the waste. Of those top five, three of them are in the Meadowlands and are receiving fully 25% of the State's solid waste. They are all rapidly running out of usable space.

In addition, it's questionable whether sufficient space exists in New Jersey today to accommodate waste from landfills which are going to be closed this year, either because of environmental problems or because of lack of capacity. One of the top five landfills I mentioned -- Edgeboro Disposal in Middlesex County, for example -- is

today accepting waste from four separate counties, and that amounts to 7,000 tons a day, that come and arrive at the landfill gate in some 900 trucks.

As of late last year, Edgeboro Disposal was expected to last for at least four and perhaps eight to ten years. Given the amount of waste that is now being disposed of at that site, we expect that that landfill will be out of capacity in two to three years, if that. The fifth of the top five landfills -- the Kinsley Landfill in Gloucester County -- is operating with no legal permitted capacity left. It is operating under a court order that was issued because of an emergency situation to extend its life, solely to allow other counties to site landfills and to get them operable to move the waste streams from Kinsley.

Beyond the current situation with respect to landfills, I can give you some good news and some bad news with respect to resource recovery. The good news is that since the passage of A-1778, which was signed into law on February 4, we now have a number of municipalities which are actively seeking to become host communities for resource recovery facilities. In Middlesex County alone, there are four municipalities that have gone on record as saying they would like to host resource recovery facilities for some part or all of that County's waste. Some of those towns are even seeking to take waste from other counties.

The bad news is that none of those facilities could be on line and operational before 1988, at the earliest. Moreover, New Jersey will need a tremendous infusion of capital to construct resource recovery facilities and, unfortunately, at this time, Congress is contemplating reducing the tax incentives for investment by the private sector in such facilities and, of course, there are considerable restrictions on public financing. So, unless we can considerably reduce the amount of waste which must be disposed of at these plants, we will need well over \$2 billion to construct enough resource recovery plants to meet New Jersey's needs.

What we are trying to accomplish in New Jersey is the development of an economically efficient and environmentally sound

solid waste management program. We anticipate that by 1995, recycling, including composting, could eliminate about 20% of the nonhazardous waste stream in the State; waste-to-energy facilities could account for about 60%; and, landfilling will remain necessary for the remainder. We believe that these goals are realistic goals. Since recycling for reuse is both economically and environmentally the preferred method of handling solid waste, we would naturally like to see that percentage as high as possible. We will do everything in our power to encourage greater recycling rates. Our goal is to reach a point where only non-recyclable residuals and non-processables -- things that just can't go through the resource recovery plants -- are landfilled.

Given these goals and priorities, we set about, approximately one year ago, to help to develop legislation to meet the State's recycling needs. To assist us in that task, we invited the Recycling Forum, an organization of recycling professionals and others, to help to provide input in the development of a mandatory recycling bill. The Forum formed the nucleus of a Recycling Advisory Committee which was headed by Jean Clark of Montclair. The Committee put a great deal of time and effort into developing recommendations, many of which are now a part of the bill before you today. Their help was invaluable in that process. We realize that no one will be entirely comfortable with every provision of the bill. In fact, I understand that the Recycling Forum -- or members of it -- will testify to that effect today and will recommend changes. Nonetheless, we believe that at the very least we have an excellent starting point before you for deliberations.

The natural question the bill provokes is: Why mandate recycling? As you are well aware, since 1982, with the adoption of the Recycling Act, we have been operating a voluntary statewide Recycling Program. We have found that to be an exemplary program. It has functioned very well and has met with notable successes. Indeed, it has been nationally recognized.

Today, over 400 municipalities have some level of recycling activity within their communities. Over 100 towns mandate recycling on their own. Our figures indicate that the amount of material recycled in New Jersey has tripled since 1982, which was the first year the legislation was in effect.

We estimate that a million tons of waste is now being recycled in this State. This represents about 15% of the municipal waste stream and perhaps 10% of the total waste stream. Unfortunately, that is not enough.

Our experience tells us that the highest recycling rates are achieved by those communities that: mandate source separation; provide convenient collection systems; and, perform effective education programs. Based on that experience, we believe recycling should be placed on a mandatory basis statewide in order to achieve the waste management goals I mentioned.

One of the major issues with which the Department and the Advisory Committee had to grapple when drafting the bill was the issue of markets or other potential reuse opportunities for recycled materials. In order to achieve the goal of increased recycling, there have to be mechanisms for reuse, disposal, or, hopefully, a market for the recyclables in place. The bill addresses that issue in four separate ways.

First, with respect to market availability, I should emphasize that if a municipality, or a group of municipalities, or a county cannot make arrangements for reuse, disposal, or sale of recyclables during the planning phase, the municipality may be exempted from adopting a mandatory recycling ordinance. In addition, municipalities may build upon their existing programs to reach recycling goals. In fact, we fully expect that this would be the case.

The bill also provides four separate tax incentives to the materials recovery industry and the consumer to enhance the demand for recyclables as industrial and commercial raw materials, including: a sales tax exemption on products made from 50% or more post-consumer materials; a sales tax exemption on beverages in a package which is made of 50% or more post-consumer materials; a 20% investment tax credit against the State Corporate Business Tax for the purchase of recycling equipment; and, 100% of the energy costs incurred in manufacturing certain products will qualify as a deduction from the Corporate Business Tax.

In addition, through an increased Recycling Fund raised through taxes on waste disposed of in landfills, more money will be made available to private-sector recyclers. The bill also requires the State to increase its purchase of recycled paper, in stages, to 60% of the paper purchased by 1988. There are also procurement target rates for other materials for the State, and for other levels of government.

Recycling of products-- The bill requires that plastic and metal beverage containers be labeled to identify material composition and to identify whether or not a package is recyclable. This will aid the consumer in separating his waste, and will also encourage the purchase of recyclable packages. In a sense, it will send a message that that is the type of material we would like used in New Jersey.

As I stated earlier, there may be some controversy over certain aspects of this bill. However, it is an essential bill for the long-term environmental and economic well-being of the State of New Jersey. I welcome this opportunity to work with the Committee and to comment on the bill. I will be happy to continue to work with you as the bill goes through the legislative process.

At this point, I think Chuck Richman would like to make a statement on behalf of the Department of Energy.

SENATOR COSTA: Thank you, George. Go ahead, Chuck.

ASST. COMMISSIONER TYLER: Thank you.

CHARLES A. RICHMAN: Thank you, Senator Costa and members of the Committee. Often a Department of Energy or someone representing an energy constituency will clash with an environmental constituency over issues. There are differences of opinion on how best to achieve a balance of environmental bills and energy bills. But in this bill, and in this process, we are in lock step, believing that mandatory recycling, in this piece of legislation, is of paramount importance to the State and should be addressed by the Legislature as quickly as possible.

This bill is not only processed to save energy. It's recycling, and the process of recycling has a significant benefit in lowering the cost of energy. But it also, when examining the future power needs of the State and in examining the role that resource

recovery facilities will play-- That is not the way to produce electricity. You build a resource recovery facility because you have to, because there is no other way to dispose of that portion of the waste stream. You don't do it to produce electricity. The capital cost and the capital development is too much.

Therefore, we believe wholeheartedly that recycling can be achieved, and can be achieved in a way that is cost-beneficial to the public. The bill really boils down to three areas: It requires municipalities to do something to establish ordinances to begin the process, working with the counties, through the counties' solid waste systems, to educate the public and make them aware of the benefits, and, maybe more important, make them aware of the costs of alternatives. When you measure recycling against the direction we are presently going, that of having to build resource recovery facilities, and capital expenditures of \$100,000 per ton, or trying to locate new landfills in the State where you can't locate landfills, then the alternative -- with all the problems associated with it of recycling -- is by far the best.

The bill establishes a procedure for either removing or discouraging the sale of certain materials and packaging in the State, things that are either not easily compatible with resource recovery facilities and the burning, or not easily compatible with recycling.

Finally, the bill provides certain market incentives to build the recycling industries. You will hear things from a lot of people today about the problems of this bill. You will hear that there are no markets, or that markets are in shambles, or that they can't buy products today, or there is too much paper available. But I ask that you think of two things. One, the alternatives -- resource recovery facility construction and the landfill issue. Two, if you think about the need, or if this Committee or all the people who testify after me really recognize that if we were to overcome every one of the objections, if we were to assure that every one of the markets existed before this legislation passed-- If we went back in history and Christopher Columbus was faced with that same thing, he never would have sailed. You can't guarantee everything for everyone. But what

this puts in place is a process to make it easier for recycling to occur.

You will hear that we have to protect existing markets, and we reject that in the bill. We believe that while the Committee should be seriously concerned with those people already in the industry, we have to let the marketplace work. To establish artificial protections, particularly long-term protections, for some segments of the market would be inappropriate.

You will hear that the various industries, such as the plastic industry and the tire industry, have done a lot, but I suggest -- and I'm sorry Senator Dalton is not here-- If you go down to the Senator's district and look at the piles and piles and piles of tires in the district which are piling up even higher, you will see our inability to really deal with the plastics industry. And you will see the industry's failure to deal with the distribution of those products, and deal with them from the beginning. I think you should challenge them about what precisely is being done to recycle tires? What precisely is being done to recycle plastics, and what are they doing with those materials, and what are they achieving in New Jersey?

This bill sets some targets for that. This bill tells the industry, "Succeed, or the Legislature," through the Governor's signature on legislation, "is going to set up a process for discouraging the use of those products."

We think the bill should be looked upon very carefully by this Committee as a whole. There are going to be a lot of special interest groups which are going to testify after we are finished, to tell you: "Recycling is great; we can achieve the 25% goal, but not our industry. We can do it by ourselves." I don't think we can allow that to happen. I think we have to look at a process that is complete. We have to look at a process that takes it all in, and let that process work. I hate to repeat it, but it's true: The alternatives are so poor that any gain we have on the recycling side will be a major plus to our State.

Thank you.

SENATOR COSTA: Thank you, Mr. Richman. I would like to establish procedure here. Any time the Senators would like to ask a question of the witnesses, they will do so. I believe Senator Laskin has a question of you.

SENATOR LASKIN: I don't know if it is a question for you or a question for everybody to start thinking about. See, I don't view this as an adversary type of proceeding today. The solid waste problem is so acute, so immense, that if we are going to start sparring and jogging around for positions, I don't know that we will ever solve it. I think everybody on this Committee feels exactly the same way.

I have heard about the issue of markets and recycling for a number of years. In fact, as you know, I have a recycling bill in. It is not the bill that is going to move. This one will move ultimately, I am assuming, but I happen to believe in mandatory recycling. I am also practical and honest enough with myself to understand that if we can't get rid of this recycled stuff, what happens? You don't have to answer that now, but I will tell everybody in DEP -- and I think everybody on this Committee feels the same way -- conceptually we are all in favor of this, very strongly, but when somebody says, "Well, if industry doesn't agree, and if they don't try to sell these goods or else"-- The "or else," to me, means the piling up of trash, and not solving the problem.

I think that the most serious part of this whole mandatory recycling issue is the market. What do we do with the stuff when we grab it? Our towns are starting to do it. I can tell you what I have advised my towns in Camden County. I said to them, "Let's adopt mandatory recycling ordinances," because in Camden County they mandated it. I think they gave you about a week's notice to promulgate a mandatory recycling ordinance. So I told my five towns, "Let's first look for the marketplace, see what we can sell, or what we can get rid of, and then adopt ordinances mandating those goods to be recycled, because if we don't have a place to put it, the whole thing is silly."

I just want you to know that from my viewpoint the market issue is the most serious issue of the entire recycling problem.

SENATOR COSTA: Senator Contillo?

SENATOR CONTILLO: You know, I agreed with Senator Laskin to the point that I introduced a very similar bill to this almost a year ago, but had not dealt with the market problem. Also, it didn't deal with some of the realities of the world; that is, it was a Paul Contillo bill.

This piece of legislation is a bill that I sponsored in the Senate that has a different political party sponsorship in the Assembly, and has the full support -- apparently so far -- of the Governor's office. So we have bipartisan support and we have two branches of government. I recognize what Senator Laskin is saying; however, I don't know how you develop a market without a product. And I don't know which comes first, the chicken or the egg. I still have a lot of faith in Yankee ingenuity and the American free enterprise system. I think it is going to work that way. So I agree with you, Senator.

May I ask a question of Mr. Tyler? You said, when you were speaking, that you think ultimately only 20% will be recycled.

ASST. COMMISSIONER TYLER: That is the goal we have set.

SENATOR CONTILLO: Okay. And 60% will go into resource recovery units and 20% will continue to be landfilled. Of the 20% that goes into resource recovery units, what percentage of that is going to be landfilled?

ASST. COMMISSIONER TYLER: That is included in the 20% that is going to be landfilled. In other words, a typical resource recovery plant will reduce the volume of material burned by about 85% or 90%. The residual ash and the non-processables will make up about 20% of the waste stream, which is going to have to continue to be landfilled over the long-term.

SENATOR CONTILLO: That is a conservative estimate though. Okay. I have no-- I can't get an accurate number on it. I have asked the engineers and the people who work in resource recovery units now. They are trying to get some accurate numbers on it.

ASST. COMMISSIONER TYLER: We have a number of waste characterization studies available, which we can provide to you. Essex County, and I think the Bergen County Utilities Authority, have done

some work in this area as part of their development of resource recovery proposals. We will be glad to provide that to the Committee.

SENATOR CONTILLO: Yes, okay. Those are studies. What I was trying to get from Malcolm Perny, the engineer, was: Actually how much ash is coming out of the one in the Bronx, and how much is coming out of Saugus, Massachusetts? Then we would know exactly what was coming out of those, and we could add to that the things that can't even go into the unit in the beginning.

ASST. COMMISSIONER TYLER: I'm pretty sure we have that. If we don't, we will get it and make it available to you.

SENATOR CONTILLO: But you feel comfortable that 20% is the total that cannot go into the unit, and what comes out of the unit. Twenty percent will be landfilled only.

ASST. COMMISSIONER TYLER: That is the goal we have set.

SENATOR CONTILLO: What about the counties that do not have plans, even now, to develop resource recovery units?

ASST. COMMISSIONER TYLER: They are going to have to landfill 100% of their waste.

SENATOR CONTILLO: Okay.

ASST. COMMISSIONER TYLER: Or subtract the recycling that they take out first.

SENATOR CONTILLO: Or 80%?

ASST. COMMISSIONER TYLER: Yes.

SENATOR COSTA: Just to follow up on that, the 20% is really dependent upon the market, as you both have stated. If you haven't got something marketable, that 20% goes up.

ASST. COMMISSIONER TYLER: Well, there are a couple of ways to look at it. One, I think -- and Mary can tell you -- a number of towns in New Jersey right now do far superior to the 20% goal with their particular waste streams. So, while it is a goal, and I think a tough one from a statewide perspective, individual communities can easily get more out of the waste stream than 20%.

Second, the bill sort of encompasses the philosophies that were articulated, that markets have to be part of the solution. The bill provides municipalities with time to develop those markets first,

before the ordinance that mandates the separation of certain things is to be put into effect, in much the process you outlined, Senator, for your area.

I would add that no matter what you do with the material, the term "markets" is almost a misleading term. If you're paying \$40.00 a ton to dispose of material at a resource recovery plant, and you can collect some of it for \$10.00 a ton and give it away -- not sell it, just give it away -- I suggest that you are better off. If you have to ultimately dispose of it at a landfill, as opposed to sending it through a resource recovery stream where it will be charged \$40.00 a ton and then separated out either in the ash or before it goes into the burner in the first place, you are still better off.

So, source separation doesn't necessarily hinge on market -- although I quite agree on the term "market" -- it hinges on more a place to get rid of the material. If you can get some money for it, that's great; if you give it away, you're still way ahead of the game.

SENATOR COSTA: I believe that is why I said we have it figured that 20% is not stable.

ASST. COMMISSIONER TYLER: It will go up and down; that's right.

SENATOR COSTA: Mary Sheil?

MARY T. SHEIL: I just have a very short statement to back up what the two Assistant Commissioners said.

S-2820 is a comprehensive and complex piece of legislation. If you read through it, you cannot completely absorb it the first couple of times through. But it is necessarily complex because the ultimate goal is to change the way we have been managing solid waste for many years in the State of New Jersey. To accomplish that goal through recycling includes changing the habits of seven million people in this State, impacting business operations, dealing with the competition of the international marketplace and the international exchange rate for United States export products, addressing product design, developing new markets, providing tax incentives and disincentives, competing with other sources of raw materials that have significant tax subsidies through Federal taxation, and changing bureaucratic procedures that have governed solid waste management over many years.

As mentioned already in this hearing, throughout the day you will hear the word "market" several times. The Committee should be aware that S-2820 only mandates the recycling of aluminum cans and leaves. It requires that municipalities recycle two other materials only after agreements or contracts for the disposition of those materials have been obtained. In the event such agreements are not obtained, an exemption can be granted by DEP, if DEP is convinced that the municipality or county has actually done its job.

In addition, Assistant Commissioner Tyler outlined the various procurement and tax proposals in the bill that address the market issue. We are certainly interested, as we hear throughout this hearing, in other proposals that may expand this section of the bill, particularly market incentives that encourage the use of New Jersey-generated waste materials, and that encourage the purchase of recycled products. There is no reason why we can't provide tax incentives or expand the ones that we have to include an incentive for the publishing industry, the newspaper industry, to purchase more recycled news. The highest rate we got from one of the newspapers in the State so far is that about 15% to 20% of their paper purchases are recycled news.

Some other controversial issues that will be addressed today include the restrictions on convenience packaging and the deposit on plastics and tires. S-2820 is a bill that encourages the packaging of products in recyclable materials and addresses the problems of convenience packaging materials that become part of the daily waste and litter stream. It seeks to make industry more responsible for the products that they manufacture and sell. Plastics have displaced highly recyclable and reusable materials and have contributed to an expanding waste stream. New product design, especially for packaging, is a major problem in solid waste management and in establishing and maintaining recycling programs. The industry manufacturing these products and the industry using these materials for packaging their products, must assume some responsibility for the disposition of these materials.

In his statement before the Assembly Committee, Assemblyman Albohn said that the bill is a hard-hitting bill and it pulls no punches. We have laid out the problems in the bill that exist in trying to resolve the solid waste management in the State today. These issues on packaging and so forth are issues that must be addressed. Plastics are coming into the waste stream; they are increasing every day. Up until, I would say two weeks ago, at least I could buy one liter of soda in a glass bottle. The major brands -- I can't find one on the market shelf today. The plastics industry is talking about making more and more extruded plastics. These are plastics with layers and layers of different types of plastics in them. If we do not address this issue now, the industry will be fully in place in future years, and it will be much more difficult to change that at that time. We must address this issue now and make industry, when they design a product, assume some responsibility for the disposition of those products.

SENATOR COSTA: Thank you very much, Assistant Commissioners and Ms. Sheil. We have one question from Senator Laskin.

SENATOR LASKIN: I have to again get back to reality. I expect that most witnesses will come forward and say, "We love recycling; it is the thing to do. Everybody is in favor of less trash in the trash mainstream, or whatever we call it." Nobody disagrees with that. If I sound abrupt, I don't mean it in a discourteous way; but I am so serious about this problem, that to hear philosophy from anybody in this room about how wonderful it will be when we have less trash-- We all know that.

We have to figure out how to do it. Now, the easiest way to solve one of the problems is to pass a law that says: "There will be no products sold in New Jersey if the container is not made out of glass. No plastics sold in New Jersey." That would solve the problem because we wouldn't have that problem to worry about. But we can't do that. If we say, "All newspapers sold in New Jersey have to be made out of recycled paper" -- I would love to do that. But how do you stop The New York Times from selling in New Jersey, or The Pittsburgh Gazette, or whatever the heck they are outside of the State?

We would love to be able to solve this problem, but we have to be very practical. I'll tell you that from my viewpoint, I'm looking for some very practical, down-to-earth ways to solve the problem. I am really personally not interested any more in hearing about the philosophy of solving the problem, because everybody agrees with the philosophy. We need dollars and cents ways, specific ways on how we can handle this situation.

MS. SHEIL: Well, I think the bill does that. I think it provides disincentives for plastics. Essentially, what we are saying to the plastics industry is: "We are not banning your product." We're saying, "Okay, if you want to make this product, please make it more recyclable. It is going to be your responsibility to handle it." I think that when it becomes their responsibility to handle it, they will look at the recycling aspect. If it continues to be only government's responsibility to handle solid waste, then we will have no control over it.

SENATOR COSTA: I think that is a very good point you make, Ms. Sheil, about the responsibility. When they are considering making new products, they should consider the disposition also. Thank you very much.

Our next speaker will be Morris County Freeholder Carol Murphy.

CAROL J. MURPHY: Good morning. Madam Chairman, members of the Committee, ladies and gentlemen: My name is Carol Murphy. I am a member of the Board of Chosen Freeholders of Morris County, and I wish to thank you for giving me this opportunity to share some of our concerns with you.

My appearance today is on behalf of my Board to voice our support for the principles of the measure before you -- S-2820.

Not too long ago, we told a companion committee of our concerns, pointing out how we in Morris County have taken steps to initiate county-wide recycling, and asked our 39 municipalities to pass ordinances by this September that would mandate recycling as part of the County's solid waste management plan.

As evidence of how seriously we take this problem, I would like to invite you to attend the kickoff of our internal County recycling program next Tuesday at one p.m. in the Morris County Courthouse.

Unfortunately, this is not our first time around, for when we last attempted a recycling effort, it failed when our markets evaporated, and given the vagaries of the market, we fear it could happen again as local markets become overloaded with the amounts we want taken out of our solid waste stream.

This is an area where we -- and we are sure the other solid waste districts in the State -- are looking to the State for guidance.

We do suggest that the Office of Recycling be given another arm, that to be a Division of Research and Marketing. We are not recommending another layer of government, but we are talking about staffing an office in an existing agency that could track the markets on a statewide basis, and make that information available to the local districts.

As a further aid to clarifying the legislation, Morris County's Solid Waste Advisory Council and its staff suggest that recycling goals, rather than mandated percentages, would be better left to the counties, in consultation with DEP and the State Office of Recycling, considering the varying make-up of the many counties, including ours, that still contain large areas not conducive to curbside pickup.

In addition, we respectfully suggest that the definition of municipal solid waste exclude commercial sources in order to direct more effort to reducing the residential waste stream, since including commercial recycling can account for large numbers, without affecting the major producers.

We are submitting more material for inclusion in the record, and wish to thank you again for permitting us to appear today. If you have any questions, I and Lori Scozzafaua, who is the senior member of our staff -- Solid Waste in Terms of Recycling -- will certainly attempt to answer them for you.

SENATOR COSTA: Senator Contillo?

industry. Accompanying me today is Matthew Antuzzi, who is not only the owner of Antuzzi's Winery in Delran, New Jersey, but he is also President of the New Jersey Winegrowers Association.

Today, there is a measure before you, Mr. Contillo's S-2820, an act concerning mandatory statewide recycling. Our industry recognizes that New Jersey is faced with a garbage crisis and that there is the need to enter a totally new era of waste management. We must begin an awareness effort and recognize that the whole problem, not just a small part of it, needs to be addressed.

We do not question the intent of the sponsor to address the serious problem of solid waste disposal. However, we are concerned about the inclusion of alcoholic bottles in the legislation in general, and wine bottles in specific.

For the record, it should be noted that no other state, except Iowa, requires that wine bottles be included in returnable bottle type programs. In Iowa, wine is sold through a state store system. Thus you have an intergovernmental system program. Our understanding is that the rate of return on wine bottles is approximately 55%. This figure certainly does not reflect justifying this type of program.

We would like to bring to your attention some points involving our industry as a whole and its interrelationship with aspects of S-2820.

First of all, there is no standard wine bottle. There is a wide assortment of sizes and shapes since some wine bottles are even used as decorative items. This aspect makes them more difficult to return for recycling than beer or soft drink bottles.

Second, wine bottles contain what is known as "green glass," which is used as a flavor guard. This particular difference between regular glass and wine bottle glass creates specific recycling problems. An additional problem with wine bottles is that they are not designed as "returnable," and there is a breakage problem because of thin glass. This breakage problem could become a risk factor to citizens and workers handling recyclable materials.

SENATOR CONTILLO: I don't understand why you would want us to eliminate the commercial from the recycling.

LORI SCOZZAFAUA: All right. What I found -- what our staff found in evaluating percentages of recycling that are currently occurring in municipalities was, a large part of the percentages of commercial recycling-- We are not saying that commercial recycling should not be addressed. We're just saying that if you are going to have goals for municipalities, those goals should be for residential solid waste reduction. They shouldn't include their commercial recycling base in their percentage.

SENATOR CONTILLO: In the percentage -- okay.

MS. SCOZZAFAUA: Just for an example, we have a municipality -- using our County solid waste projections for each municipality -- which has such a large tonnage of commercial recycling reported for 1984 that the commercial recycling rate is 200%. Their total waste stream rate would be 56%, if they had to submit that to the State to, say--

SENATOR CONTILLO: Excuse me. Two-hundred percent?

MS. SCOZZAFAUA: Two-hundred percent, using our waste projections, they had so much commercial recycling that they reported.

SENATOR CONTILLO: They are recycling twice as much garbage as they produce.

MS. SCOZZAFAUA: That they have -- in the commercial sector. Okay? For the total waste stream, it comes out to 56% for their level of recycling. The way the bill is now, with commercial, institutional, and residential, they would be able to provide records showing 56% waste stream reduction. Point four percent of that is residential recycling.

SENATOR CONTILLO: You make a good point then.

SENATOR COSTA: Thank you very much. Our next speakers will be Matthew Antuzzi and Barry Lefkowitz of the New Jersey Wine Institute.

BARRY LEFKOWITZ: Madam Chairman, members of the Committee: I am Barry Lefkowitz, President of MGR, Inc. Our firm represents the Wine Institute, which acts as a spokesperson for the domestic wine

Approximately 30% of the wine sold in New Jersey is from foreign countries whose governments subsidize their products so that they will be cheaper than our domestic wines. This raises a whole different type of problem, which in part Matty is going to address after I finish.

Wineries throughout the country have serious problems with Section 41 (3A and 3B) which require the labeling of beverage containers in order to be exempt from the 7.3% tax. This labeling is an untenable burden and an unnecessary waste of money and employee time. Our industry would find it next to impossible to comply with the labeling requirements in order to get that exemption. The reason we argue this point is that labeling requirements would mean wineries would have to set up separate bottling lines and separate warehousing to ensure products intended for use in New Jersey will fulfill State labeling law. New Jersey wineries which have out-of-state sales will have similar problems of separation and warehousing. This could be devastating to New Jersey wineries. Once again, Matty Antuzzi will address that. All separate bottling lines and warehousing will do is add a significant cost to our product, and could create a hardship for consumers, domestic producers, and retailers.

A plan calling for consumers to separate their trash at curbside, as the Chairwoman is familiar with in my home County -- Burlington County -- we believe, is the appropriate way to deal with the total problem as far as recycling. It is the most cost-effective and has the least harmful impact on the business community.

In further addressing Senator Contillo's S-2820, mandatory recycling, we must admit to having some great difficulty in fully understanding the various aspects of his measure.

Some questions need to be raised. If there is a 7.3% tax imposed on wine, will this tax be on a bottle regardless of size? If applied to wine, this proposed tax increase is neither fair nor equitable from the standpoint of both the consumer and the retailer. This tax will inevitably impact negatively on the economy of our State, particularly in those municipalities and counties close to New York and Pennsylvania. New Jersey retailers in those regions will be placed at

a severe competitive disadvantage. Loss of jobs, income, and ultimately tax revenues will be the result. Wineries will be unable to comply with the labeling requirements for exemption. As previously noted, the cost to set up separate labeling lines just for New Jersey will be astronomical.

We agree that mandatory recycling is necessary to remove New Jersey from its crisis situation, but, as I said before, we think it should be done at curbside. But once again, we believe there may be legislation that already exists here in the State that addresses the fiscal needs of handling a recycling program, and not as proposed here today with the 7.3% tax whereby, once again, we would be unable to apply for exemption.

Therefore, we ask the sponsor and the Committee to reconsider the inclusion of wine bottles in S-2820. If necessary, strengthen aspects of the bill as far as providing for curbside recycling, but the labeling or the tax issue itself could create a severe problem, not only for the domestic wine industry, but also for the New Jersey wineries.

At this time, Madam Chairman, I would like to turn it over to Matthew Antuzzi, who can provide the Committee with some insight into what the impact would be for him as a small winegrower. It must be recognized that the wine industry, which is made up of thousands and thousands of small wineries-- The average wine size nationally is about 20,000 gallons. You're not talking about an industry such as other industries where maybe three or four may be so large that they control the industry. The wine industry is a totally unique industry in this country.

SENATOR COSTA: Mr. Antuzzi?

MATTHEW ANTUZZI: Thank you. I represent 14 wineries in the State of New Jersey. The production rate now for New Jersey wineries represents about 200,000 to 225,000 gallons.

Our biggest problem with the bill as it is, is that we are requested to do some things that the Europeans are not being requested to do. Any time we have to do something the Europeans are not requested to do it is going to cost us more money. We are in a

situation now where the Italians are bringing in wines as low as \$.60 a bottle. They are not--

SENATOR CONTILLO: I can't buy any of that. I don't know where they sell it. (laughter) I'm sorry.

MR. ANTUZZI: That's okay. We have quite a competitive problem as it is. They -- the Italians, the French, etc. -- are not required to do all the things that our Federal government asks us to do. Now we are going to have a problem of labeling. I would like to give you an example of what that means to a very small winery, such as myself.

I am somewhere around 18,000 gallons production. A labeler costs me \$14,000. It costs me \$2,000 for every change part I must use. In order to affix another label, as required, to a bottle, it is going to cost me \$6,000 because I have three sizes of labels. Then I have to go back and say, "How much wine do I have to sell in the course of the year to make up for that \$6,000?" In a declining domestic market--

SENATOR CONTILLO: I don't want to interrupt you, but we're trying to understand what your problem is. In reading the bill, staff tells me, and I concur from reading it, that the labeling only refers if you are going to package in a plastic container, which you don't put wine in, or do you? If you are only doing it in glass, we feel that the labeling does not apply to you.

MR. LEFKOWITZ: Mr. Contillo, we don't--

SENATOR COSTA: There is an exemption, not an extra tax. It is an exemption--

SENATOR CONTILLO: In other words, that is a different product.

SENATOR COSTA: --if you use the recyclable material in your glass bottles.

MR. ANTUZZI: Yes, but you see--

SENATOR CONTILLO: There are two separate problems here. One is the tax and one is the labeling. We are talking about the labeling now. Okay? The labeling, according to my staff and the reading of the bill, only applies if you are using plastic or metal. It doesn't apply

to-- You are describing glass. You don't have to have separate labeling, describing the glass you're using. The labeling will not affect you.

MR. LEFKOWITZ: Our interpretation and the interpretation of the Wine Institute attorneys, as well as other attorneys, has been that this labeling would be on wine products across the board, including on glass. That was a major concern for us. This is how we read it.

SENATOR COSTA: Only if the glass uses 50% recycled material. Then you have to have that on the bottle. Correct? Then you are exempted from the 7.3% tax. Other than that, if you are just using your bottles as they presently are, you're still paying the tax and you don't have to label because you have just plain glass.

MR. LEFKOWITZ: This is where the confusion comes in. If we don't label -- okay? -- because our people are very clear; they cannot do any kind of labeling.

SENATOR COSTA: To start with, what kind of a bottle are you speaking of?

MR. LEFKOWITZ: Right. We're talking about-- The majority of our industry is glass. Our interpretation was that in order to get the exemption from the 7.3% tax, we have to label our products that they are recyclable.

SENATOR COSTA: No. As I understand it, if the bottle container is 50% recycled material, then you have to have a label.

MR. LEFKOWITZ: Madam Chairman, as you know, the glass in wine bottles-- The entire bottle would be recyclable.

SENATOR CONTILLO: So if you are willing to label, you can save yourself 7.3.

MR. LEFKOWITZ: But that is what the issue is. What we're saying -- and we'll emphasize it -- is, in order to get the exemption from that tax, we have to label. Our problem -- which Mr. Antuzzi is now trying to explain -- at a small winery is, the cost to wineries to label their bottles is so astronomical that it would almost put him out of business. When you talk about a winery that does 18,000 gallons, and he's talking about a figure of \$14,000 for a machine, \$6,000 a year--

SENATOR CONTILLO: If the worst happens, he loses his 7%.

MR. LEFKOWITZ: But that's the next problem we are going to address.

SENATOR CONTILLO: Okay.

MR. LEFKOWITZ: But we are correct though. In order to get that exemption, we have to do the labeling.

SENATOR CONTILLO: Right.

MR. LEFKOWITZ: So, we haven't misinterpreted that.

SENATOR CONTILLO: Are you also saying that all the wine bottles are made from recycled glass?

MR. LEFKOWITZ: Yes.

MR. ANTUZZI: No, they're not made from recycled glass.

MS. SHEIL: Oh, well, you can't get the exemption unless you make your container out of 50% or more post-consumer material.

SENATOR COSTA: As Ms. Sheil says, you can only get the exemption if your bottles state that they have been made out of 50% recyclable material. Now, if they're not, nothing changes.

SENATOR CONTILLO: They're not made out of 50%?

SENATOR COSTA: It doesn't cover you at all.

SENATOR CONTILLO: Then you don't have a problem because you don't have to label, because you can't get the 7% discount, until you are ready to use-- And that is an encouragement. This goes into the market development.

MR. ANTUZZI: Except I really must go with the manufacturers. I am so small that I cannot be Ernest and Julio Gallo and tell the manufacturer what they must meet. I'll give you an example. I'm sure there is a representative from Owen-Illinois. They predict a lot of things to me. They tell me when I will get my bottles, and where, and how, and what I will pay, and I do that because I have no alternative.

What I'm saying is, even though I have a real desire to buy a glass that is half recycled, I may not fit into that category because I may not have the power -- the purchasing power to influence my distributor.

MR. LEFKOWITZ: But you bring up another problem when you start talking about using recyclable glass in wine bottles, and that

is-- If you recall in the beginning of my testimony, I mentioned that wine bottles are unique. In terms of most wine coming from, for example, the Coast-- Most bottles are made with the green flavor guard. They have green glass, so you are going to have to have special separation and special treatment in order to continue to have that flavor guard in the bottle. But, be that as it may, eliminating, you know, this topic of labeling, let's address the issue of that 7.3% tax that you are now talking about, which Mr. Antuzzi--

SENATOR COSTA: It is not an addition.

MR. LEFKOWITZ: Excuse me?

SENATOR COSTA: It is not an addition.

SENATOR CONTILLO: If you use the recycled glass, you get the 7.3 exemption, as opposed to an additional seven point on what you are doing now. You're saving 7% by using-- It's an incentive to have people start using--

MR. LEFKOWITZ: In other words, you're saying to us that as we interpreted this, and as our attorneys interpreted it, we're not paying the 7.3%.

SENATOR COSTA: You are presently doing that right now.

MR. LEFKOWITZ: Yes, that is correct.

SENATOR COSTA: All right. Nothing changes unless you start using bottles that have at least 50% recyclable material -- no, not recyclable -- that have been recycled. Using that material, then you get that exemption. That's it; otherwise, it is not an additional amount. Okay? Is that cleared up for you?

MR. LEFKOWITZ: I think so, but I think it also reflects one of the things I raised near the end of my speech, and that was that the bill-- We had great difficulty in fully understanding the various aspects of this measure. I think that probably clarification of things like this makes it very helpful for those of us in the industry to truly understand the impact.

As I said, our interpretation by two attorneys was that: 1) there was going to be an additional 7.3% tax if, in fact, we could not meet the exemption for doing labeling.

SENATOR COSTA: No, that is not so.

MR. LEFKOWITZ: All right.

SENATOR COSTA: The tax is there right now; you're paying it. It is merely an exemption should you use the recyclable bottles. Okay?

MR. LEFKOWITZ: Okay.

SENATOR COSTA: I think there is a question from Senator Laskin.

SENATOR LASKIN: If you have two attorneys giving you that opinion, if you use two more you'll have two different opinions. (laughter) But I do think you raise a good point in that some of this language should be clarified. I don't think you raised a good point at all that wine bottles should be exempt from the bill. Hopefully, every conceivable recycling item that is ever used in this State will be included in a mandatory recycling law -- hopefully.

MR. LEFKOWITZ: Senator Laskin, I did, in fact, state that we support and have and would desire to see wine bottles picked up at residential curbside. That was because we believe this whole issue of labeling, as we had interpreted it, became a confiscatory problem for wineries.

SENATOR LASKIN: I understand that, but suppose you didn't have a labeling problem. We all know that glass is ordinarily recyclable, and we want glass bottles to be made from recyclable glass from somewhere else. Suppose you had a procedure, which I think makes more sense-- The problem of actually labeling may have to be considered in another way, not to eliminate the concept, but suppose we had another way of finding out, or of insuring that the bottles that were utilized by the wine industry, or any other industry, would be made of more than 50% recycled glass from somewhere else. Suppose you had a way to do that by just filing a statement from your manufacturer saying, "This is the glass we're giving these people." That wouldn't bother you, would it?

MR. LEFKOWITZ: No, as long as we didn't have to do it on the individual bottles. No, not at all.

SENATOR LASKIN: So there is no problem with using recycled glass in the industry?

MR. LEFKOWITZ: No.

SENATOR LASKIN: Not at all. That is important because maybe some of us interpreted that in a different way. You have no problem with using that product. The problem is, "Don't make us put a piece of paper on each bottle." If you could do it another way, we have no problem.

MR. LEFKOWITZ: That is correct.

MR. ANTUZZI: Exactly, because it is very costly. I also feel that somewhere along the line in my future years in this business, I will find that the Federal government is going to require a separate label, requesting that the ingredients be listed on the package. In doing so, I can visualize a whole lot of labeling requirements coming ahead of us.

SENATOR COSTA: The only thing is, I was discussing this with Ms. Sheil, and regarding putting that-- It doesn't necessarily have to be a label. If the glassmakers would-- I have seen it raised on the bottle. It just has to be an identification, so that when the salesperson is going through, the tax is not charged. Is that correct, Mary?

MS. SHEIL: Yes. See the problem is, it is tied to the fact that the container is made of 50% or more post-consumer materials. And there the multi-glass containers out there that don't meet that requirement. Therefore, the salesperson has to know that that specific product is exempt from the sales tax when they ring it up at the cash register. If you don't have that label on it, they will not know that. There has to be some way for them to identify what has sales tax on it and what does not.

MR. LEFKOWITZ: But the one thing I think you have to take into account when you talk about using a raised label is, what do you do, for example, in California, where several of the larger wineries manufacture their own glass? Now, are they--

MS. SHEIL: Frankly, sir, I am not concerned about California wineries and the green glass they're dumping in New Jersey's solid waste stream. If they have a problem, that's too bad. They can either meet our standards, or they are not going to be exempt from the sales tax.

MR. LEFKOWITZ: Would you be more interested in seeing more foreign products in this State than California or other--

SENATOR CONTILLO: Maybe some more Jersey wine?

MS. SHEIL: No. I would be more interested in seeing the products packaged in glass that was recycled from the New Jersey solid waste stream. That is the purpose of this exemption. It is to get industry to use more recycled product when they package. If you can't meet that standard, then you don't deserve the exemption.

SENATOR COSTA: Okay. Thank you very much.

MR. ANTUZZI: Just one comment, if I may. Our biggest problem right now is, with all the Federal rules and regulations that we do have, they are not applying to the Europeans. They get away scot-free in manufacturing--

MS. SHEIL: No. This would apply to the Europeans. There will be no exemption on the European products if they can't meet our standards.

SENATOR CONTILLO: It would seem to me -- excuse me.

SENATOR COSTA: We're having a little confusion here now. I asked Ms. Sheil to respond because she is such an expert in this field. Now Senator Contillo, and then we are going to go on.

SENATOR CONTILLO: It would seem to me that the problem we have is with the glass manufacturer. If you could get him to identify every one of his bottles that is made with more than half recycled glass, then it would put the foreign manufacturer at a tremendous disadvantage because he would not even be entitled to the 7% reduction in the tax, but all of our American manufacturers, and particularly our Jersey manufacturers of the wine, would have the 7% advantage over the foreign wine makers. So that might be really the answer with the manufacturers, to designate recycled bottles. I know it would probably require Federal legislation, but if they sell enough bottles in New Jersey, and eventually other states, it might be effective.

MR. ANTUZZI: I think that is a very good point. The thing that I found out many years ago was-- I took glass and smashed it into barrels with a little, small automated grinder. I ground that up and kept it on my premises, and found out that I could get \$4.00 a ton for

it, but the guy wanted \$18.00 to haul it away. So you see some of the things we run into.

I am a consumer; I am a citizen, and I really feel strongly about doing something with that waste.

SENATOR COSTA: And he lives in my neighboring town. If you ever want to go see his winery, you are welcome to go.

SENATOR CONTILLO: Which winery is that?

SENATOR COSTA: The Antuzzi Winery.

SENATOR LASKIN: Let's conclude this. You have no problem with using the product that we want to be used. Your only problem is how to describe it. I don't think that is an unsolvable problem by us.

SENATOR COSTA: Thank you very much.

MR. LEFKOWITZ: Madam Chairman, thank you very much.

SENATOR COSTA: We will now call on the glass industry. Bob Donovan?

BOB DONOVAN: Good morning, Madam Chairman, Senators, and Mary Sheil. I am retired from Owens-Illinois -- it's the life.

SENATOR CONTILLO: How about someone who is still working there? We would like to talk to him.

MR. DONOVAN: Perhaps I can comment on that. As far as the possibility of recycling glass and saving 50% of the material that goes into glass, that is a distinct possibility. It is more than a possibility.

Owens-Illinois ran 100% color in the Atlanta plant some years ago. They are presently running 70% color in the Albany, New York plant. The average, I would say, is somewhere around 30% or 40% throughout the country. So, as far as the use of color is concerned in the glass industry, there is no problem. It is a matter of a continual, reliable source of supply of furnace-ready color.

So, the program that was just described, as far as the wine industry is concerned-- I am sure that the industry could somehow identify the containers that do contain more than 50% recycled material.

Are there any questions on that before I--

SENATOR CONTILLO: You're saying-- We had some discussion about the core of this bill, the problem being the markets. You're saying, again, which comes first, the chicken or the egg? Does the market come first, or does the product come first? In other words, you suppose -- or, it's a fact -- that certainly an inexhaustible supply, potentially, of glass, in this State alone-- There is not enough to keep a plant going?

MR. DONOVAN: Keep a plant going?

SENATOR CONTILLO: Yes.

MR. DONOVAN: Shall I go through this statement first? Perhaps--

SENATOR COSTA: Yes. Senator Contillo, I prefer he complete his statement.

MR. DONOVAN: Okay. My name is Bob Donovan. I represent the Glass Packaging Institute and the New Jersey Glass Industry. Senator Laskin, we support the basic concept of county and municipal programs of mandated source separation and selection of recyclable materials as a means to achieve the State's initial objective, the recycling of 25% of municipal solid waste. And that was the initial objective of the Recycling Act that was passed in 1981.

The use of tax credits and exemptions, as proposed in the bill, to stimulate recycling markets would probably be of significant benefit to our industry. Now, as a member of the Board of Trustees of the New Jersey Recycling Forum, Inc., we share some concerns about S-2820 as presently written. The trustees and other members of the Advisory Committee on Recycling, organized at the request of Commissioner Hughey, worked diligently during the latter part of 1984 to develop a list of recommendations which, we think, would make for a more viable and realistic bill and program. Now, this aspect of the Forum viewpoint will be covered by Jean Clark, and we concur with the Forum recommendations.

I would like to dwell a moment on the role of the New Jersey Glass Industry, the present recycling program administered by the New Jersey Office of Recycling, and the role we see for ourselves in the future. Despite the attrition in the New Jersey glass industry because

of three plant shutdowns in recent years, due primarily to beverage container deposit laws of the so-called bottle bills in four New England states and New York, the industry recycled more than 200,000 tons of glass in 1983, based upon a Glass (inaudible) Institute survey of the industry taken in October, 1984.

It is our estimate that a major portion of this glass came from sources in New Jersey. The total potential of recycled glass containers from New Jersey sources has been estimated to be about 380,000 tons per year. Now that is a long way from the predictions for 1986, contained in the original Recycling in the '80s Report published in 1980, but those early projections were based upon 1975 production figures and an anticipated continued rapid growth rate, which did not occur.

In fact, glass container production nationally, according to the U.S. Department of Commerce, has declined for the last five years by 15%. However, the decline in the Eastern states is estimated to have greatly exceeded this percentage, due primarily, again, to deposit legislation. The industry, in its report to Commissioner Hughey, which was attached to the Recycling Forum recommendations relative to the proposed mandatory recycling law, stated it should be able to absorb an additional 350,000 tons per year -- that's the New Jersey glass industry. This would balance out the potential supply if the industry stabilizes and does not deteriorate further.

One problem to the industry in absorbing additional scrap is the amount of green glass. Very little green glass is produced in New Jersey, and that scrap from locally-produced glass can be absorbed. However, foreign imports appear to provide a disproportionate amount of scrap. An incentive program to help us ship this green scrap to other parts of the country might help.

One of the major obstacles to complete glass recycling in New Jersey is the necessity that recycled glass be furnace-ready. The industry is addressing this problem rapidly. On April 19, Brockway Glass in Freehold dedicated its Glass Recycling Processing Center, a \$600,000 investment which will complement the recycling concept. It can take glass from municipal and other sources and produce

furnace-ready cullet. The system is capable of processing more than 100,000 tons per year. Its function is similar to the Owens-Illinois Processing Center which operated in North Bergen from late 1981 to April 19 of this year, when the company was forced to discontinue this operation by its landlord.

There are a number of potential buyers for the equipment, and my understanding -- this is a fact -- is that Anchor will purchase that equipment and install it in their Cliffwood plant.

The industry is also looking at various options to provide similar capability for the southern part of the State. We will continue to work with the sponsors of S-282U through the Forum to effect the changes necessary to make it a viable measure.

SENATOR COSTA: Thank you, Mr. Donovan. Senator Laskin?

SENATOR LASKIN: I forgot to ask this question. Why do I keep hearing witnesses talk about this green-colored glass? What is so important about that?

MR. DONOVAN: Well, in using color in the glass manufacturing process, you have three different -- primarily three types of glass. You have flint, or clear glass, and that runs 50% to 60% of the total. Then you have amber glass -- your beer bottles and so forth -- and that is a certain percentage. Then you have the green, which is used primarily in wine bottles.

SENATOR LASKIN: I understand that. Why is it such a big deal that we have to keep talking about green glass? If that presents a problem, don't use it. I don't understand what we are talking about here.

MR. DONOVAN: Well, okay. Most of the green glass that is manufactured and used, is used by the wine industry; it is used by the beer industry. For example, you have Heineken beer coming into this country. That is made in Europe.

SENATOR LASKIN: I understand this, but if it presents a problem to our recycling goal, why use colored glass at all? I don't understand that.

MR. DONOVAN: Well, the Wine Institute people, I think, explained that there is a certain light barrier that is necessary for certain wines.

SENATOR LASKIN: I've heard this. Now I am not going to tell you how smart I am, or how dumb I am, but I keep in my home about 300 bottles of wine at all times. I have a very romantic, exciting wine-cooling system because it is a hobby I developed about 25 years ago when I was in college. Of the 300 bottles of wine that I keep in my house, not one of them -- not one bottle -- is made of colored glass. Now, they are from France; they are from California; there are a couple even from New Jersey -- not too many, Antuzzi, Renault, and some of his other friends down in South Jersey -- which I keep. But, primarily, it is not from this area. Not one bottle is made of green glass, or any colored glass.

MR. DONOVAN: Not even a light amber?

SENATOR LASKIN: No, and I never had a problem in spoiling the wine. I'm sure that if these wine bottles were shipped properly, and kept by wine stores properly -- which is another problem -- you would never have a spoilage problem. So I still don't understand why we must insist on using colored glass in this State. If it's a problem, stop using it. Go to natural glass, and then everybody can recycle and everybody will be happy.

MR. DONOVAN: We don't insist that any color be used, in the first place.

SENATOR LASKIN: Okay.

MR. DONOVAN: The wine industry and, again, the beer industry, the ale industry up in Canada -- Molson's beer, and so forth -- they package in green.

SENATOR LASKIN: All right. I just wanted to throw it out for discussion.

MR. DONOVAN: As far as any restrictions are concerned, I don't know how you can restrict California and New Jersey, you know, the type glass they use, unless you ban the package, and I am not suggesting that.

SENATOR COSTA: Senator Contillo?

SENATOR CONTILLO: I want to go visit Senator Laskin.
(laughter)

Something you said-- There's a plant in Bergen County now that has just been closed down?

MR. DONOVAN: Well, the North Bergen Owens-Illinois plant was shut down in 1982 -- early 1982. However, prior to that we had 45 years of Owens-Illinois -- excuse the we. Owens-Illinois had installed a Glass Processing Center and operated it up until this year. However, the glass that was purchased at that center was shipped to other Owens-Illinois plants in other states because of the shutdown of that North Bergen operation.

The North Bergen operation was sold to Hartz Mountain. I'm talking about the entire property.

SENATOR CONTILLO: Yes.

MR. DONOVAN: And our lease was to have extended until next May, a year from now. However, the landlord wanted us out and there was a clause in the contract that permitted him to move us out of there. We had to shut down and be out of there by May 30.

SENATOR CONTILLO: It would seem to me-- Obviously my County is Bergen County.

MR. DONOVAN: Yeah, I know.

SENATOR CONTILLO: It would save every municipality in Bergen County an awful lot of money if they had a very close plant to ship to. What can we do, from a government standpoint, to maintain that, because Hartz Mountain is-- It's in the Meadowlands.

MR. DONOVAN: Yes. It's right on Tumulty Avenue.

SENATOR CONTILLO: Well I mean, aside from this hearing, maybe I could speak to you about that later.

MR. DONOVAN: Okay.

SENATOR CONTILLO: To see if we can't get involved to help you to stay there.

MR. DONOVAN: Now, Mary Sheil and the Office of Recycling has been very cooperative. They have been working with the industry in attempting to locate a suitable site in that area.

MS. SHEIL: We have been trying to do that. We have had the economic development agencies in the various counties looking for a site, but we were not able to come up with a site before their system closed. We worked with Anchor Container Corporation, which finally agreed to buy the equipment because it was going to be purchased,

possibly, by a Canadian firm or a firm outside of New Jersey. So we have been able to keep the equipment in New Jersey, but it looks like it is going to go to one of Anchor's sites, and one of those sites is in South Jersey in Cumberland County. The other one is in Cliffwood, which I think is just south of Perth Amboy, which is in northern New Jersey. But we were not able to find a suitable site to meet the needs of operating that type of a facility in the northern part of the State, but we certainly-- There is a site--

SENATOR COSTA: I appreciate this very much, but I would like to continue on S-2820. Thank you very much, Mr. Donovan.

MR. DONOVAN: Thank you.

SENATOR COSTA: I would like to call Don Stewart, Society of Plastic Engineers. I'm sorry; I didn't mean to say Plastic Engineers. It's Plastics Engineers.

DON STEWART: We're still a little confused, but we'll straighten that out, Senator. For the record, my name is Don Stewart. I am here today representing the Society of Plastics Industries. I have with me Roger Bernstein, who is the Director of State and Governmental Affairs, and also Carl Kamena, who is the Director of Governmental Relations and Public Issues for Dow Chemical. The purpose is to have these two gentlemen give you some brief testimony and, hopefully, answer some of the questions that are developing on what is a major concern in this piece of legislation, and that is plastics. You have heard from glass, you've heard from recycling people, and it has become very obvious that plastics is a major, major portion of this particular piece of legislation.

If I am to get one little plug in, in the 30 seconds or so that I am going to talk to you, it would be to reiterate what Bob Donovan pointed out to you, and what I think Jean Clark will point out to you again later on from the Recycling Forum. That is, a lot of people have spent a lot of time studying this issue. You people are among them. But the Recycling Forum was a bipartisan group, a mixture of a lot of different interests, which spent a lot of time looking at this issue and came up with some recommendations that, as far as I know anyway, a great majority of the people in New Jersey who are concerned

with this issue could live with and could support if it was put into the legislative form, and we would probably be moving along a lot faster than some of the other proposals.

This particular bill seems to go a lot further than that recommendation did, and that is what has caused a lot of the concern that you are experiencing here, and that the Assembly Committee experienced at their public hearing about 10 days ago. I might add, the Assembly sponsor backed off on some of the provisions of the bill at that public hearing in his initial testimony.

SENATOR CONTILLO: He's new and inexperienced though.
(laughter)

MR. STEWART: But I'm sure you are aware of that already, Paul, and I'm sure that your staff has brought you up to date on some of the concerns that the Assemblyman has with some of the provisions of that bill.

But I would like now to turn it over to the experts, and let Roger Bernstein, the Director of State and Governmental Affairs, tell you a lot more about how this bill will affect the plastic industry.

ROGER D. BERNSTEIN: Senators, thank you for allowing us to be here. I represent the trade association for the plastics industry. We have about 1,400 member companies overall. We have 115 companies that are members that are based here in New Jersey. They encompass producers of plastic raw materials and the firms that make the molds and the companies that fabricate the actual finished products, and machinery manufacturers as well. Our New Jersey shipments alone, in 1982, were about \$6 billion. We are a growing industry, and we view ourselves as really partners with this State in its efforts to provide jobs and a healthy economic climate.

At the same time, we are very much aware -- and Mary has helped us to get very much aware -- of the landfill crisis here in New Jersey. We view ourselves as a resource in helping to cope with this ever-increasing solid waste burden that you're facing, and which is driving a lot of legislation into your chambers.

The New Jersey Recycling Forum, as Don has mentioned, has expressed itself on feasible solutions to these problems, and we are in

agreement. If their testimony does not change from what it was at the Assembly hearing, we agree with their basic thrust. However, it is the sections, as you know, which go after the jugular of our industry really -- Sections 10 through 17 of the Mandatory Recycling Act, dealing with plastic containers -- that are the most devastating and drastic legislative language that I have ever seen in tracking 50 states on any packaging of solid waste issues. Maybe I would make one exception to probably the Speaker's bill, which came in a little while ago, that would ban all petroleum-based packaging in the State of New Jersey, but short of that I would say that this is the most drastic that we have seen.

I think the basic-- Well, there was a comment made at the Assembly hearing on May 2 by one of the members of the Committee, who referred to those sections of the bill -- or parts of them anyway -- as "environmental book burning and very over-zealous reaching." We would agree with that. They failed to recognize that there is no such thing as a universal plastic material. Everybody says, "Plastics, plastics," but plastic containers can be as different from one another as aluminum is different from copper. Plastic is a very broad generic term which doesn't represent the actual distinct products made up under that umbrella.

They are different because-- This difference is necessary to create the properties of product protection, safety, and other desired properties that the people who make the ingredients insist on.

The recycling of plastics has to take into account the fact that the materials must be separated according to their distinct types. Collecting containers consisting of various types of materials does not produce anything of value for our industry in the way of recycling. This is why most of the post-consumer plastic material currently being recycled today is really the soft drink container and the milk container. They contain one type of plastic material. They are identifiable as to shape. They don't need esoteric labeling. People can see what they are and they can get separated without undue hardship. These account for approximately 40% of the plastic packaging -- for beverages anyway -- by volume.

In this State, there are about 1,200 plastic industry processing plants, and there are about 60,000 employees, and over about \$1 billion in payroll. We view ourselves as a vital growth industry that wants to focus on three components needed for progress to occur on the recycling front for plastics. We believe progress must occur. These are the three areas: 1) We need a consistent source of plastic which is separated into generic types; 2) an economically viable process to clean it up to usable quality, which gets back to the point that Senator Contillo was making about the fact that we need to create a product for the market. That is one of our basic problems. We don't have, as of yet, a system that rapidly creates a product for the market; and 3), regular markets for which the recovered material is suitable.

We're working very diligently right now to create a better product for recycling purposes. The plastics industry has recently organized a Plastic Recycling Institute. This is a nonprofit organization whose purpose is to spur research for all types of post-consumer plastic materials. It has received \$1 million in initial funding. The Institute has been established at Rutgers University in New Jersey to really develop state-of-the-art technology to improve both the quality and the economics of recycled plastics. Soft drink and milk containers will be in the forefront of early research because we think they are simply the best targets for more massive plastic recycling.

Some plastics lend themselves to regrinding for manufacturing; others are only suitable for recycling energy value through incineration and resource recovery. I think that is a basic fact about our industry. We are not, no matter how creative they are at Rutgers, going to develop recycling markets for a lot of the plastics we make. I just don't see that happening based upon the technical problems I alluded to of mixed plastics contained in one container and the fact that-- I'll give you an example. PVC containers have been extensively used in Europe. They are extensively used in this country. Several years ago, a number of French firms set up a plant to recover PVC bottles for recycling purposes. It was found

that in actual operation, the recycled material gave an unacceptable product. It was necessary to add about 80% of virgin material into the batch. As a result, the plant suffered millions of dollars in losses and the whole effort was shut down. The European experience has convinced a lot of knowledgeable people in our industry that this form of recycling to recover PVC, for example, is just not practical. This kind of scenario I could lay out for you for a number of other different types of plastic materials.

The thing that I think is really so devastating about the sections I am referring to, is that they set up these ultimatums of 55% recycling rates for all classes of materials, some of which by their nature are not recyclable, and readily recyclable, or else a mandatory deposit would be imposed on them, or banishment for others. You're not just getting at the industry and penalizing the industry. You're penalizing the packaging industry. You're penalizing the people who make all of the ingredients that go into the products. Believe me, once this bill was introduced, my phone has been ringing fairly constantly from people who are wondering what is going on -- from the food industry, the detergent industry, the cosmetics industry, the shampoo industry. They wonder whether you are trying to encourage glass back into the showers, etc., etc. So it is not just the packaging industry that is devastated here. And the consumer would be forced -- I would imagine because I have gone into a grocery store and surveyed how much plastic is on the shelf -- to have a lot of money, maybe three or four dollars in change, perhaps, to pay for the deposits on all the packages that they would be required to put back into -- to take out of the store.

I think a concern we would have would be that that would not actually be funneling containers back for recycling purposes because those markets don't exist.

SENATOR COSTA: Senator Laskin feels that he has to--

SENATOR LASKIN: Only because I don't want you to go to the next point without me remembering this. I am going to oversimplify something. Suppose the law in New Jersey was that the only plastic to be sold or utilized in this State, by means of containers primarily,

was recyclable plastic, period. No nine pages of laws that allow rules and regulations and identifies different chemical things and stuff I don't understand. Suppose you had a law that said: "The only plastic container to be used in New Jersey has to be made out of recyclable plastic, period." What's the problem?

MR. BERNSTEIN: First of all, there would be a definition problem there because what--

SENATOR LASKIN: We would define recyclable.

MR. BERNSTEIN: As being what?

SENATOR LASKIN: Whatever it is.

MR. BERNSTEIN: A container, for example, would be just one type of plastic?

SENATOR LASKIN: You could write the definition.

SENATOR CONTILLO: Something you could recycle.

SENATOR LASKIN: Yes.

MR. BERNSTEIN: That there would be a ready market for?

SENATOR LASKIN: No, no. No, no, we don't talk about that. We talk about plastics that can be recycled by your definition.

MR. BERNSTEIN: Okay. I would like the opportunity to change the definition of recycle to include the capturing of the energy values through incineration and resource recovery, because I think that that is a legitimate part of the recycling equation. If I were given that opportunity, I think I could live with that kind of definition.

SENATOR LASKIN: Okay. If you could define recyclable, you as the representative of the plastics industry would be content with a law that said something to the effect that only plastic that could be recycled in accordance with your definition could be utilized in New Jersey.

MR. BERNSTEIN: Because I think that would include every plastic that we made. I think we would be protected in that we could be part of the recycling picture here, if incineration and burning and recovery of energy value were included under those definitions.

SENATOR LASKIN: I think that would be a remarkable advancement in the whole world, if New Jersey stopped worrying about the fact that, well, this item is sold in every state and it would have

to be made differently in New Jersey, because I am a firm believer in private enterprise taking care of itself. New Jersey's market is giant, and if the New Jersey law said to industry in plastics or anything else, "We will only allow certain things to be sold in our State," I guarantee that the industry would develop a New Jersey product because of the tremendous profit that they would lose if they didn't. I really believe that private industry can take care of itself if we say to them: "This is all we are going to allow to be sold in this State. We'll define it." I'll guarantee you that they will come up with a product.

SENATOR CONTILLO: Cathy, as long as we have interrupted him--

SENATOR COSTA: All right. Since we interrupted him, I will let Senator Contillo go on. But after this I would like to just let you finish your presentation.

SENATOR CONTILLO: On the plastic problem, I believe that if we can't burn it, and we can't recycle it, and we have no room to put it in a landfill, you have to come up with a solution. You have a year and a half to deal with it. That is the reason the bill is written the way it is.

Now, I have been trying to determine if it makes sense if other parts of the world and other parts of this country are burning plastic, if they are burning it, did the engineers figure that into the plants they built because it has such a high value? And, what comes out of the stack? Is it poisonous or is it not poisonous? If we remove part of the plastic, we haven't solved any problem because apparently the resource recovery units still have to be built in such a way as to deal with the plastics that still go into the waste stream.

So, it seems that if we can't remove all the plastics, I don't know why, aside from some we may be in at the front end, and say you can't use that type of material in the State, if the scientists and the professionals will tell us that, we could define what goes into plastics and we may end up in burning it in five years. But in the next five years, we will have a terrible problem of dealing with plastics in the State of New Jersey. We don't have the room to landfill them anymore.

Now, it is up to you to come up-- I understand duPont is working on it right now -- even the material that goes into the landfills. They are starting to develop biodegradable plastic. It is in use and starting to-- It's duPont. I don't know if you have seen that piece in last week's New York Times. You have to come up with a solution. Everyone complains that they don't like governmental solutions to problems. We have given you a year and a half to tell us how you propose to deal with the problem -- the shipping, the movement. Even if we develop a product that is recyclable, you know, the shipment of that product--

MR. BERNSTEIN: Senator, the bill does not give us a year and a half to tell you how we are going to come up with a solution to the problem. The bill, as it is written, gives the industry a year and a half to either recycle 55% of all the products it makes, or, in the case of PVC, be banned, and in the case of other plastics, would face a mandatory deposit, which I think would penalize both the industry and consumers to a drastic and really almost ludicrous extent.

One of the things I invited Carl Kamena of Dow to do, is to respond to the concerns you have expressed about incineration, because this is an extremely viable option.

SENATOR CONTILLO: Well, you understand that you will have a deposit on plastic and glass if this does not work.

MR. BERNSTEIN: No, the bill does not--

SENATOR CONTILLO: What I am saying to you is, as a practical matter, as an elected official, as a person responsible for finding a place to put our solid waste, if this bill -- this recycling project -- does not work, I guarantee you you will have a deposit on glass and plastic within a year and a half.

MR. BERNSTEIN: All plastic and all glass?

SENATOR CONTILLO: You are going to have a deposit bill if recycling doesn't work. It's that simple.

SENATOR COSTA: Senator Contillo, let us stick with S-2820. We have a number of people who want to be heard. Mr. Bernstein, do you want to turn it over to Mr. Kamena?

MR. BERNSTEIN: Yes, I would like to turn it over to Carl.

SENATOR COSTA: Thank you.

CARL KAMENA: Sure. I would be happy to start with a couple of comments which do address some of the questions you've asked.

Roger indicated that some plastics are more suitable for recycling by recovering their energy value through incineration and waste-to-energy facilities. I might say here that theoretically, all thermoplastics are recyclable materials. In fact, every plant that processes plastics recycles some of that internal scrap. The rub comes in -- what are you going to do with post-consumer scrap to separate out the post-consumer scrap?

Speaking for both my company and the industry, let me state that we believe that incineration is the environmentally preferred alternative to landfill. Not only can energy be recovered, but waste volume and hazards are reduced. Just as this bill proposes to decrease waste flow to land sites, recover valuable resources, and conserve energy, the Dow waste management philosophy parallels this thinking.

In our manufacturing operations, we first look to recover raw materials -- recycled raw materials. Second, to recover energy through incineration. Third, to treat our waste. And finally, with no other options left, we would dispose by landfill. In our company alone, we have over \$100 million invested in incineration facilities, and the energy we recovered saved over two trillion BTUs per year.

This bill also refers to New Jersey's proposed waste-to-energy incinerator facilities, and we applaud this action. But Section 13 specifically excludes any plastic containers composed of PVC or PVDC from being processed in these facilities. There is absolutely no technical or factual basis for proposing this exclusion. A chlorinated plastic like PVC or PVDC will, in fact, add to the energy content of the waste flow, and will promote combustion efficiency. The subject of pre-combustion separation and removal of PVC from the incoming waste stream has come up before, and has recently been studied extensively by your neighbors in New York City, who have concluded that it would not be appropriate to remove PVC.

SENATOR CONTILLO: Everyone accepts that it will burn, and will burn very well. The problem is what comes out of the stack after the burning of some of these plastics. That is the problem.

MR. KAMENA: Well, you mentioned earlier when you introduced the bill that there may be a perception that there is a problem.

SENATOR CONTILLO: Which is equally as dangerous.

MR. KAMENA: Well, no, it is not as dangerous. There is--

SENATOR CONTILLO: They're saying it is.

MR. KAMENA: There is not a problem with the emissions when burning PVC.

SENATOR CONTILLO: What facts do you have to establish that?

MR. KAMENA: We have several studies that were done by New York City. There have been studies done by the University of Waterloo in Ontario on some French facilities. There have been a number that we can make available to this Committee.

SENATOR CONTILLO: I would appreciate that.

MR. KAMENA: Sure. We will be happy to.

SENATOR CONTILLO: I would like to see the factual information that the material coming out of the stack is not hazardous, particularly where you are burning plastics, or just whatever reports you have on the subject. I know there are responsible engineers studying the problem now, and that there are cause and effect types of things. But I would like whatever facts you have to be forwarded to, certainly, myself.

MR. KAMENA: Yes. We would be happy to do that. I might add that it is really a common misconception that these waste-to-energy incinerators have a propensity for improper operation, resulting in the formation of these products, which are basically products of incomplete combustion, when, in fact, they are intentionally designed for maximum destruction in order to achieve the best possible conversion to energy. That is how they are designed.

We support New Jersey's move to waste-to-energy facilities, and suggest that recovering the inherent energy value of plastics may often be the most cost-effective and efficient means of recycling post-consumer scrap plastics.

We would be happy to make any of these studies available to you.

SENATOR COSTA: Thank you very much. We would be very much interested because we have been under the impression that the emissions, of course, could contain dioxin. If you have proof to the fact that that is not so, we would certainly like to see that.

The second thing, though, is that certain counties do not burn or do not intend to incinerate at all. I think most of the southern counties would be in that position. I know my county would be there. Then what do you do?

MR. BERNSTEIN: What we are trying to do is identify those plastic containers that we make that we think would be the best targets for a source separation program and where we could provide markets. In New Jersey, what they are developing now are -- what they are working on are the processes for cleaning up post-consumer soft drink containers, milk containers, and developing the processes that create a very desirable product that competes favorably with virgin material, so that the recycling can be market-driven. So we are trying to go through those technical hurdles. It isn't just our industry that is supporting it; it's a million dollars. It is supported by the beverage industry, the soft drink industry, the people who, you know, are dedicated to recycling and to the package.

SENATOR COSTA: Thank you very much.

SENATOR CONTILLO: Let me just add this. You know, there is a public, and we talked about perception. I think the public is finally coming around to saying, "It's not enough for you just to produce something and say, 'I no longer have any responsibility for that product.' You enjoy the profit you make from it, and it seems somewhat unfair to leave the cost of disposing of your vehicle for profit on, sort of, the rest of the world. You have to assume that responsibility." I think corporately you recognize that.

MR. BERNSTEIN: We do.

MR. KAMENA: We don't disagree with that.

SENATOR COSTA: I believe you heard previously, when Ms. Sheil was discussing recycling, that we are speaking of new products. You are in plastics and are going to the larger bottles. Before you do that, as stated here, you have a responsibility for its disposition.

Thank you very much.

SENATOR CONTILLO: Are you working--

SENATOR COSTA: Excuse me, Senator. Just let me finish what I'm saying. The next speakers will be Robert Marcalus, Chairman and Chief Executive Officer, Marcal Paper Mills, and J. Rodney Edwards, Vice President, Paperboard Group, American Paper Institute. Okay, Senator.

SENATOR CONTILLO: Mr. Kamena, are you working on a biodegradable plastic in your company,

MR. KAMENA: Yes. We have developed a biodegradable polyethylene for the so-called high cone ring carriers, and we have one that is currently being sold.

SENATOR CONTILLO: So that type of thing is coming down.

MR. KAMENA: Yes, but you can't assume that all plastic packaging can be made biodegradable.

SENATOR CONTILLO: It becomes dangerous.

MR. KAMENA: Sure; exactly.

SENATOR CONTILLO: I understand.

MR. KAMENA: Thank you.

SENATOR COSTA: Mr. Marcalus, please go ahead.

ROBERT L. MARCALUS: Madam Chairman, Senators Contillo and Laskin, and Ms. Sheil: I am Robert L. Marcalus, Chairman and Chief Executive Officer of Marcal Paper Mills, Inc. Marcal Paper Mills, Inc. produces napkins, facial and toilet tissue, and paper towels, predominately from wastepaper. In 1984, our mill, which is located in Elmwood Park, New Jersey, utilized over 80,000 tons of wastepaper as raw material.

I am speaking today on behalf of my company, the paper recycling mills that operate in New Jersey, and for the American Paper Institute (API), the paper industry's national trade association. The API is vitally interested in New Jersey because 22 of its member companies operate 30 manufacturing facilities in the State, including primary mills and converting plants. There are 19 recycling mills operating in New Jersey, of which eight are operated by API member companies.

With me today is Mr. J. Rodney Edwards, Vice President, Paperboard Group, the American Paper Institute. The Paper Recycling

Committee of the API conducts an extensive public relations program, costing over \$500,000 annually, to encourage additional collections of recyclable paper, and encourages buyers of paper products and paperboard packaging to purchase paper products and packaging with a recycled wastepaper content. These public relations programs have been ongoing for many years, during which time there has been a dramatic increase in the collection of recyclable paper. In 1970, approximately 12 million tons of recyclable paper were collected in this country, for domestic use and export. In 1984, collections were almost 21 million tons, of which about 17.6 million tons were used in the mills located in the United States which use wastepaper as a raw material, and almost 3.4 million tons were exported to recyclers overseas.

As you and your Committee members know, if mandatory recycling legislation is enacted in New Jersey, it will have national significance. Many other states are considering similar legislation which, if enacted along with New Jersey's proposed legislation, could have a substantial impact on increasing the collection of recyclable paper without corresponding increases in demand.

New Jersey has a success story -- a highly efficient paper recycling system operating through the cooperation of enlightened local governments, voluntary efforts of New Jersey residents, and private enterprise. This network of paper recycling services consists of 75 dealers and 19 paper mills that are already recycling more than 50% of New Jersey's recoverable wastepaper. We believe the collection rate in New Jersey to be close to, if not the highest in the nation. Continuation and expansion of this existing, successful, cooperative effort should be encouraged.

New Jersey also has a problem. We recognize that the disposal of municipal solid waste is becoming increasingly difficult for many local governments in New Jersey. It is more and more difficult to site new landfills, and recent Federal legislation will make land disposal of municipal solid waste even more difficult and costly.

Senate Bill 2820, which would establish mandatory statewide recycling, is an effort to ameliorate this problem. While we are

sympathetic with the goal of achieving more effective solid waste management, the paper industry has the following grave concerns with this bill:

1) The existing successful paper recycling network is endangered by this bill. Although this proposed bill requires each district recycling plan to "give due consideration" to existing recycling services, this language is next to meaningless. The existing networks of separation, collection, transportation, and sales of recyclable wastepaper must not be disrupted.

About 768,000 tons of paper were recovered in 1983 in New Jersey. The recovery rates of commercially viable grades of wastepaper are well above the national averages -- old corrugated containers, 53% against 46%; old newspapers, 56% as against 29%, mixed office waste, 33% as against 20%; high grades, 97%, equal to the national rate. Keeping in mind that large amounts of the paper and paper products in municipal solid waste cannot be recovered for recycling because of today's technology and fundamental economics, the above figures truly reflect a success story.

2) Markets should be secured. Any effort, whether by public or private entities, to further increase the source separation and collection of recyclable paper should be accompanied by purchase agreements for the materials that might be collected. A sensible balance between added supply and demand must be maintained over time in order to preserve a healthy system.

The sale and utilization of paper and paper products are determined by national and international markets. It is the overall requirements of these markets which drive the paper recycling system -- not the available supply of wastepaper in a single state.

Because of the complex market forces of this national and international business, a State-mandated increase in the available supply of wastepaper in New Jersey may not be matched by a comparable increase in demand. Unless markets have been secured in advance by contract, the State would be left with mandated excess supplies. That would just be another pile of waste in a different place that must be disposed of somehow. These excess supplies could also: (a) seriously

damage the dealer network, resulting in lost jobs and the weakening of the collection network that has served the State so well; and (b), reduce the market value of generated wastepaper, resulting in a loss of revenue to the municipality.

3) State purchasing preference program will not significantly reduce waste in New Jersey. The proposed bill would require that by January 1, 1988, not less than 60% of paper products purchased by the State or by local governmental entities within the State shall be made from recycled paper. We believe that the State of New Jersey purchases about 1,700 tons of printing and writing papers and 1,300 tons of sanitary tissue products. The tissue products purchased have a high recycled fiber content. If the State were able to obtain all of its printing and writing papers as required by the new bill, the additional wastepaper used would equal 500 tons a year, or less than one-tenth of one percent of what is now recycled in New Jersey. Inasmuch as there are no printing and writing paper mills in New Jersey with deinking capacity, all of the recycled printing and writing paper which New Jersey would purchase would come from out-of-state mills. Therefore, there would be no lessening of New Jersey's solid waste stream.

Another result of such a mandated purchasing preference program would be a substantial reduction in the number of bidders for government contracts on printing and writing papers. Out of the 174 paper mills in the United States which produce printing and writing papers, only 12 have the necessary equipment to deink wastepaper and produce recycled printing and writing papers.

4) A ban on packaging could hurt New Jersey consumers. We note that the proposed legislation would ban the sale of aseptic packaging -- commonly referred to as "brickpack" -- on the basis that this package, composed of laminated paper, aluminum, and plastic, is non-recyclable. This packaging meets an important need for preserving flavor without refrigeration, thereby offering energy savings. The proposed ban would deprive New Jersey consumers of the advantages of this packaging system.

We acknowledge that New Jersey faces a very real and imminent problem as to how to dispose of its solid wastes. The New Jersey mandatory recycling bill, as presently drafted, will not resolve the problem. We believe that the solution lies in a balanced approach to solid waste management. Such a balanced approach should combine materials recovery programs with strategically located waste-to-energy facilities and adequate landfills. Recently enacted legislation in the State has already established these priorities.

Paper recycling in New Jersey is already a success story, as we have noted above. While we are concerned that a government-imposed, government-run paper separation and collection program would prove disruptive to the present well-working recycling system in New Jersey, there are steps that the State could take, working with representatives of the New Jersey recycling industry, to encourage increased paper recycling. To be sure that the costs do not outweigh the benefits, however, two points should be kept in mind:

- 1) Existing networks of separation, collection, transportation, and sale of recyclable materials should be preserved.

- 2) Market studies should be conducted of the availability of clean homogeneous wastepaper and the markets for same -- present and future -- both within and outside New Jersey. Prior to the collection of significant additional quantities of recyclable wastepaper, markets for that paper should be secured by contract.

We appreciate this opportunity to express our concern with the proposed mandatory recycling legislation. We recognize the seriousness of the solid waste disposal problem facing many municipalities within New Jersey, and we would be pleased to work with designated officials in New Jersey in developing a feasible solution.

Thank you very much.

SENATOR COSTA: Thank you. Mr. Edwards? Hold on a minute, please; we have a question. Senator Laskin?

SENATOR LASKIN: I'm starting to think a little differently today. I generally try to over-simplify problems because politicians have a way of greatly exaggerating, thus making problems more complex than they are.

I'm starting to believe that we may have a solution without all these dozens of new laws we're contemplating. I'm going to ask you the same question I asked the plastics industry. Suppose there were a law in New Jersey that said, in proper language, of course, that only recycled paper products could be utilized in New Jersey for any reason at all -- packaging, newspapers, school books -- you name it. Suppose we just had a very simple one-paragraph law that said something like that. Don't you think that New Jersey would be creating this giant market that we are concerned about, because after all, this giant State would only accept recycled newspapers and paper? Don't you think that would solve the problem?

MR. MARCALUS: No, sir, I don't. You got me in the position of wearing a couple of hats, I'm afraid, because as I said at the outset, I am here not only on behalf of my company, but on behalf of the industry and API. If I were talking for Marcal Paper products, we would have a real winner there because we are just about 100% recyclable, and I don't think the State would be buying any sanitary paper products other than from Marcal under those conditions.

SENATOR LASKIN: For now.

MR. MARCALUS: For now, possibly.

SENATOR LASKIN: But, ultimately, we would be establishing a giant market in this whole world.

MR. MARCALUS: I doubt it, sir. I really think that you would be creating a very, very noncompetitive atmosphere for the State -- its residents, its consumers. I think it would be totally counterproductive in terms of the economics of the affair. I am not trying to comment about what the ultimate result would be to recycling or not recycling, but certainly the economics would not be favorable, in my opinion. And the State would be depriving itself, its residents, and in almost every way that I can think of, the opportunity to compete in a fair, open market situation. I don't think you want to do this.

SENATOR COSTA: Senator Laskin, first of all, where are they going to get the products to recycle if they don't have the original products?

May I just say, let's get back on Senate Bill 2820. You may be coming up with a big bill, Senator Laskin, but let's stick to this one, or we will never get through today. Okay? Thank you.

SENATOR LASKIN: Now, are you saying, in response to the question I asked, that-- You said that the costs would be unbelievable to the consumers if we had such a law, but you're telling me that Marcal products use almost 100% recyclable product. Does that mean that your products are more costly than Waldorf or somebody else who sells toilet paper?

MR. MARCALUS: No. I am not prepared at the present time to compare our prices with those of our competition, Senator, and I don't think you want me to do that. I forget the manner in which you described the extra cost to the consumer, but I don't say that it would be drastic. I am only maintaining that people living in this State, myself and you included, and everyone here, would certainly lack, almost altogether, the opportunity to compete and to buy competitively from that which might be produced within the State, without the State, from out of the country. That is not a situation that we contemplate with any pleasure. We like to deal competitively with people in our own country.

SENATOR LASKIN: I'll conclude because I'm getting nasty looks, but I have a great feel for private industry, and I think if there were some kind of a law, as silly as it may sound to some people -- which is not sounding so silly to me the more I talk about it-- If there were such a law in New Jersey to the effect that we would only allow Products A, B, C, and D to be sold here, I think private enterprise, using its good ingenuity, which I think it has, would develop such a product for our people. We may be setting the greatest pace in the universe for doing good things for the environment, and still allowing private industry to utilize its own resources and benefits to come up with a solution.

MR. MARCALUS: If I may say so, sir, maybe by way of my final comment on this, not to debate it, I think that our paper industry is doing a very responsible job -- I have to say it with some pride -- possibly more than others that have material that either has to be

recycled, or should be, or otherwise. But we are doing a good job, and it is an example of market forces working in this particular instance. Our concern is that those market forces would be severely disrupted if there were an excessive material brought into the picture that focused theirs on markets. That is why we are suggesting that there are some alternatives and some ways in which we would like to work with you on this bill.

SENATOR LASKIN: Except there would be a market. If the law were to the effect that only recyclable products could be sold in the State, you would have an eight-million people market built in, because that would be all we could buy in New Jersey. I don't think that is a bad idea.

SENATOR COSTA: Senator Contillo?

SENATOR CONTILLO: I would like to speak to -- is it Mr. Marcal?

MR. MARCALUS: Marcalus.

SENATOR CONTILLO: Marcalus? That is where the Marcal came from?

MR. MARCALUS: That is correct, sir, with the u and the s dropped off.

SENATOR CONTILLO: With the u and the s dropped off. (laughter) I'm surprised that you don't put that back on.

I'm puzzled, you know, because I met with the different groups of recyclers, and I do see you in sort of a conflicting role here. I applaud you for what you're doing and what you have been doing for years; that is, using the resource of the recycled paper in your product. You are here both as the President of that company-- I'm sure you're not afraid there will be other companies similar to that sprouting up across the State, because I'm sure you have done such a good job, and you are established. It would simply mean that you could run to your full capacity.

I'm not sure-- The other hat you wear is the API, is it?

MR. MARCALUS: Well, I am here not only as Chairman and head of my own company -- our company -- but I am a member of the American Paper Institute -- the company is, I should say -- and I am

representing, in this case, our business, our industry, and the group which represents our industry, which is the API.

SENATOR CONTILLO: The API -- is that a recycling--

MR. MARCALUS: Oh, by no means. The American Paper Institute is the trade organization representing a very large percentage of the entire pulp and paper, and, to a great extent, forest products industry in our nation. What percentage, Mr. Edwards would be better prepared to answer than I, but a very high percentage. Almost without exception, every major producer of paper, pulp, and wood-oriented product is a member of the API.

SENATOR CONTILLO: Well, I certainly didn't expect the forestry people to come in here and encourage us to use recycled paper, instead of their raw material. I mean, there is certainly a vested interest in that position.

J. RODNEY EDWARDS: May I just add one thing? Sixty percent of the raw material used to make paper is waste product. Only 25% is wastepaper; 35% is sawdust and waste wood from the manufacture of lumber and timber products. The other 40% is trees harvested for making paper. But if you look at the waste material that is used to make paper, far more waste wood and sawdust is used to make paper than even wastepaper -- to make new paper.

SENATOR CONTILLO: Well, we would like to change that and have far more additional recycled-- I am in a printing business, and I understand some of what you are talking about. But, you know, there are many, many other advantages that virgin material -- whether it be paper, glass, or metal -- have over using scrap metal or scrap paper or scrap whatever it is. Those are the laws that we have to-- You know, as a manufacturer, you are not going to be pleased to hear it, but there is an unfairness in transportation. You can bring in aluminum ore cheaper than you can cart around--

MR. EDWARDS: That is not true in paper.

SENATOR CONTILLO: I don't know that yet.

MR. EDWARDS: It is not true in wastepaper versus wood.

SENATOR CONTILLO: But, I have been dealing with my Congressman on that entire issue of why the government doesn't deal

more fairly with recyclable types of materials that it does with virgin materials. There is a total unfairness there, and it has bent our marketplace out of shape. But I would be happy to hear what you have to say.

SENATOR COSTA: Thank you very much for appearing before us.

MR. MARCALUS: Thank you all very much.

SENATOR COSTA: Joe Katz and Phillip Waugh.

JOSEPH W. KATZ: I have a few props, Madam Chairman (referring to items he is holding in his hands). I know it is lunch hour and this might make you thirsty.

Thank you, Madam Chairman and Senators. I am here on behalf of Tetra Pak, Inc. I have Phil Waugh here, who is Vice President of the company. Tetra Pak is the producer of one of the world's most advanced food packaging systems. Our product, often known as "Brik Pak" or "Tetra Brik Aseptic" -- TBA I will refer to it here -- is most frequently utilized in the United States for the aseptic -- which means bacteria-free -- packaging of juice. It is increasingly being used for wine in California, Italy, Portugal, Spain and, based on its record elsewhere in the world, it may be the coming package for milk.

Not only do TBA cartons preserve the full taste of the product for long periods of time, but they require no refrigeration -- as has been mentioned -- less shelf space, and are much more resistant to breakage than existing packages. As a result, the product is used in 90 countries with packaging material factories in 21 nations, a number of them in the United States.

Except for a thin aluminum foil -- which is somewhat wrinkled; it was smooth when I got it -- this TBA package is pretty much the same as what you get in a milk or the non-aseptic juice carton. I will leave these for you to look at (referring to packages he is holding). This is the aluminum foil on paper which is plastic-coated, as is a milk carton.

In reading S-2820, we were struck by the fact that TBA and similar products are being produced almost as if the manufacturers were following the prescription contained in Section 1, which spells out your objectives.

First, Section 1 calls for a decrease in "waste flow to landfill sites." Both from the standpoint of weight and mass, the TBA carton meets this specification. The empty carton is more than 20% lighter than the lightest aluminum can; compared to glass containers and the tinsplate-coated steel "tin cans" that are so familiar -- but aren't even mentioned in the bill, as far as we can read -- its weight advantage is even more striking. Discarded, this package occupies about the same space as a small crushed cardboard box of raisins, bicarbonate of soda, or a thousand other items that you buy in the grocery store.

The bill's second objective is to recover valuable resources. Now, if fuel is considered a valuable resource, then this is a tailor-made product for the legislation. Two tons of this material, when burned in one of the garbage incinerators in common use in Europe and coming on-line in New Jersey -- I realize not in the southern part of the State--

SENATOR CONTILLO: Signal-Resco?

MR. KATZ: I think so, yes; the one that is going up in Essex County, for example. Two tons of this material, when burned in one of those facilities, will produce approximately the energy contained in a ton of oil. This compares to a five to one ratio between oil and ordinary household garbage. Indeed, TBA acts as a stimulant to the process. Most important -- and this has come up before -- it produces no adverse emissions. Senator Contillo, I know that is one of your major concerns.

SENATOR CONTILLO: I'm sure it is one of yours too, Mr. Katz.

MR. KATZ: Yes, sir. The third objective as outlined in the bill is "conserving energy in the manufacturing process." A major objective of the various bottle bills is to encourage the use of refillable containers. Yet, refillable glass would have to be used 20 times in order to be as energy-efficient as one TBA carton of the same volume. Experience shows that a refillable bottle averages about 10 trips to and from the store, before it is broken, lost, or something else. One-way glass is generally used for juice and wine, which is what goes into this package (demonstrates). Even a one-way bottle made

entirely of recycled glass consumes 2.6 times the energy of a TBA carton of the same capacity.

I've done a little something here. The bill has incentives if you can use over 50% of glass and other packaging for recycling. I have here 45% of a 12-ounce beer bottle, which would go into a landfill, because the other 55 would be recycled, on average. I have here the ash from a 12-ounce package of TBA. This is 92.4 grams for 45% of it. This is 1.98 grams for 100% of this package. This is burned in a low temperature, lower than the one you referred to, Senator -- an 800 degree incinerator.

SENATOR CONTILLO: And the aluminum burns?

MR. KATZ: Yes, sir. This is it all packed up (witness passes materials around).

We recognize that glass has played and will continue to play a major role in the food and beverage distribution system. For instance, we don't package carbonated beverages in here. It's not strong enough. But our product, as you can see, is assuming an economically and environmentally beneficial position in the market.

Regarding cans, TBA cartons consume about one-fifth the energy of a new aluminum can. And recycled aluminum is very efficient. But as efficient as it is, it still takes as much energy to recycle a 100% aluminum can as to manufacture one of these from scratch.

As to increasing the supply of reusable raw materials for the State's industries -- another objective of your bill -- we point to the fact that TBA will enhance the production of electricity. I realize that Chuck Richman said that is not the objective of a waste plant, to make electricity, but if you are going to have waste plants, you are going to make electricity. This is going to help you to make more relative to other stuff you're putting in.

Finally, this preamble refers to "contributing to the overall combustion efficiency." My presentation has been laced with that. This does contribute more than almost anything else, short of fossil fuel.

New Jersey is in the forefront of this type of packaging. There are a number of juice-packaging operations in the State. Johanna Farms up in Flemington packages this, and I have some more up here (demonstrates). They package under various private labels. Coca Cola has packages. Hi-C over here in Hightstown, and a number of other products. The Ocean Spray Company uses our cranberries. They package them in Massachusetts, but New Jersey is one of their main sources. I understand that this type of packaging is at the threshold of major expansion. Campbell Soup -- and you know how important they are -- is seriously considering this type of packaging for its line of soups and, I understand, for other products.

Aseptic packaging is the subject of important study at Rutgers. You will recall that the bond issue last year provided \$6 million for a Food Technology Center, and one of its most important areas of research is into aseptic packaging.

Having said all of this, I ask the question: "Why are we here?" Tetra Pak and its competitors seem to be an answer to a recycler's prayer. But that doesn't seem to be the view of whoever inserted Section 17 in the bill, but I am happy to report that Assemblyman Albohn -- and perhaps even Senator Contillo-- Assemblyman Albohn did reach the conclusion -- and perhaps Senator Contillo might -- that there is no reason for this to be included, and asked that it be amended out, as was done in the Assembly.

I would note that Section 17 singles us out for a specific ban. It says that after July 1, 1987, we just can't sell this product. We don't understand that, frankly, since until this, no other state had ever even hinted at imposing such a barrier. No other country has done so, even some of the most environmentally advanced countries in Europe.

We hope you will reach the same conclusion. We will try to answer any questions you may have and present you with any scientific findings we have made in our studies. I thank you for hearing me out.

SENATOR COSTA: Thank you, Joe. Senator Laskin has a question.

SENATOR LASKIN: I have heard the presentation and, of course, I read it in advance and, based upon what you said, I have to say to myself: "Why do we care about these people?" but there has to be a reason. What about the laminate in the product?

MR. KATZ: The laminate is the same stuff that you see in a package of cigarettes.

SENATOR LASKIN: Let's not talk about burning. Let's assume that every one is not going to burn. Can you recycle this package?

MR. KATZ: I don't think so.

PHILLIP WAUGH: It is scientifically possible to do so, but rather difficult.

SENATOR LASKIN: Scientifically possible, but rather difficult?

MR. WAUGH: Yes, it is possible to do it, but you would have to centrifuge it out -- separate your materials.

SENATOR LASKIN: As a practical matter if we don't have burning -- now I'm hopeful that we do, but let's assume we don't-- As a practical matter, can you recycle? Talking as a practical matter, if you tell me, "Yes, it can be done, if you spend \$17 billion to do it," that is not what I am talking about. Can it be done in a practical way without an astronomical cost, meaning that it won't be done at all?

MR. WAUGH: Well, right now I would say that it can't be.

SENATOR LASKIN: So, the presentation assumes a burning process, and then you have no problem. But if we don't have the burning at a high degree or a high intensity, you do have a practical problem on the source separation concept?

MR. KATZ: I would like to comment on that, Senator. It is not recyclable, but it does break down, not only the laminate, but the paper would.

SENATOR LASKIN: I understand, but the answer was that it would be practically difficult because of the money.

MR. KATZ: Even it weren't laminated it wouldn't be too easily recyclable, unless you were going to recycle milk cartons.

SENATOR LASKIN: Except that I think the laminate is the main problem on recycling.

MR. WAUGH: The laminate is polyethylene, as in a plastic milk carton.

SENATOR LASKIN: That is the principal problem.

MR. WAUGH: The laminations are, in fact, polyethylene, and then, of course, you have a very, very thin aluminum film, which is the oxygen barrier.

SENATOR LASKIN: If you sail a boat, it is a great product, because you don't have to worry about glass bottles spilling all over in the wind. That is when I started to become familiar with that kind of packaging. But here where most people are not sailors -- they live in homes which don't rock and roll -- the problem is the recycling of it. If you have burning, you don't have a problem. That is the reason why it was put in the bill.

MR. WAUGH: May I just say that no country in the world has, in fact, banned the product. The Common Market and the directive regarding beverage containers have said the following: "The manufacture of new containers or new products from used containers, or their use as fuel--" That is from the recently adopted directive on beverage containers.

SENATOR COSTA: Thank you very much. I must admit I like these products. They are wonderful with children, too.

MR. WAUGH: Thank you.

MR. KATZ: Thank you.

SENATOR COSTA: Thank you. I would now like to call Al Kent of the Sierra Club and the New Jersey Can and Bottle Coalition. After Mr. Kent we will have Ezra Bixby, Tire Manufacturers.

ALBERT KENT: Thank you, Senator Costa. I attended the Assembly hearing a week or so ago on this same bill -- on the Assembly companion measure, and from what I heard there and some of the things I heard today, it seems as though we really have some grave difficulties with most of the materials that we would really like to recycle.

Tires are a real problem in landfills. The resource recovery people tell me they really don't want to try to burn them in their burning plants, and the recycling prospects don't look too great. Plastic PVC is a problem for recycling. Asphalt has some potential,

but I understand the Department of Transportation has no specifications or certifications on how it can be used, or approvals.

The market for scrap glass is extremely depressed and municipalities are not only having trouble now recycling glass, but they feel that even under a mandatory law that glass may be one of the products they choose not to attempt to recycle. Bimetal containers are not being recycled, and they present considerable difficulties. There is virtually no recycling of plastic beverage containers in the State, and the market prospects look as though they will not be a favored material for towns to select for recycling. We hear that it will be very difficult to increase the amount of newsprint that we are recycling.

All of these things have some potential, but it looks as though it is really a long, tough pull to get them going. So the question is: Is there anything we are not doing now that we could be doing that would really move us ahead? The answer is yes. New Jersey does not have a beverage container deposit law. It could have one. Nine states now have them. This is not new, unexplored territory; it is a proven method for increasing recycling, and has some other benefits also.

Right here in the Northeastern United States, Maine, Vermont, Massachusetts, Connecticut, New York, and Delaware all have beverage container deposit laws. Ironically, beverage containers were one of the main targets of the Recycling Act of 1981 and the original New Jersey Recycling Plan, which was devised by the State Advisory Committee on Recycling in 1980. And yet, presently we see that only 6% or 7% of our beverage container glass is being recycled; perhaps 20% of the aluminum cans; virtually zero of bimetal cans; and virtually zero of plastic PET containers.

Now by way of comparison, we can look at the Rockefeller Report, which was published in March and reviewed the situation in New York State, which enacted a beverage container deposit law in 1972 -- I guess it was. It went into effect in September-- I'm sorry, 1982. It went into effect in September, 1983. In New York State they are recycling 77% of their glass. They are recycling 59% of aluminum and

bimetal containers combined -- beverage containers. Aluminum recycling alone in New York State, I understand, is up in the 80% or 85% range.

Plastic PET containers-- The only states that are recycling PET containers are beverage container deposit law states. New York is recycling 33% of its PET containers. These statistics, incidentally, were as of July, 1984, almost a year after their law was -- or their recycling -- their deposit system started up. I would assume that these statistics would be somewhat higher today.

Where is all of this material going? We hear there is no market for glass; there is no market for plastics. Where is all of this material going that New York State is producing under its deposit law? Well, a good chunk of it is coming right here to New Jersey, where it is being processed for use in New Jersey, or to be shipped out to Pennsylvania or to states further south of New Jersey.

In Newark, there are 100 people employed in Murray Fox's intermediate recycling plant, recycling material brought in from New York and New England. Coca-Cola, I understand, is planning to set up an intermediate processing plant of some sort in Livingston. Anheuser Busch is bringing in glass from New York State for refilling in Newark, and I understand they are also bringing in some nonrefillable glass. I am not clear why they would be doing that. Perhaps their distributors are pressuring them to help relieve the distributors of this glass.

It is ridiculous that hundreds of thousands of tons of this material should be coming from deposit law states and brought through New Jersey, while we sit here watching our own glass and our own PET, and 80% of our own aluminum, going into our overburdened landfills. The market is here, and to tap that market we've got to have a beverage container deposit law. The distributors of beverages--

SENATOR COSTA: I'm sorry. I would appreciate it if you would stay on this bill. This is not the bottle bill today.

MR. KENT: All right. Well, let me come to my point. What I'm hoping is that a beverage container deposit system might be incorporated in S-2820 in place of the present sections -- I believe they are 13 and 14 -- which point toward that kind of a system. Under certain limited conditions, if bimetal cans and PET plastic containers

do not achieve a 55% recycling rate at the end of 18 months, then we talk about putting deposits on those containers. So, we are already addressing the deposit system in this law.

But let's bring it up here and now, and let's cover all appropriate beverage containers by incorporating that into the present law. Or, in the absence of that -- and perhaps even preferably -- we would like to see hearings held on Senator Long's beverage container deposit law by this Committee, so that we could move ahead on that, and not be held up during what appears to be a long process of getting this mandatory recycling program going.

That concludes my testimony.

SENATOR COSTA: Thank you very much, Mr. Kent.

MR. KENT: Thank you.

SENATOR COSTA: Mr. Bixby?

EZRA BIXBY: My name is Ezra Bixby. I am with Lovell Associates. I am representing the Tire -- Rubber Manufacturers Association. Today I have with me Mr. Frank Ryan, Vice President of the Association from Washington, who will present the testimony.

FRANK T. RYAN: Senator Costa and members of the Committee: As Mr. Bixby has indicated, I am Frank Ryan, Vice President of Government Relations of the Rubber Manufacturers Association. RMA is the national trade association which represents the interests of the domestic producers of finished rubber goods.

I am here today to express the views of the domestic tire manufacturing industry. At the outset, let me state that the RMA agrees that New Jersey needs to find a way to manage the disposal of its solid waste, and that scrap tires are clearly an element in the solid waste stream. It should be pointed out, however, that although scrap tires are a distinct type of solid waste, they constitute less than 1% of all solid waste.

We do not believe, however, that the provisions included in Section 21 of the legislation under discussion now, would produce the best solution for dealing with the scrap tire portion of the solid waste stream. As the members of this Committee may already know, the RMA and its member tire companies have been working with the New Jersey

Office of Recycling in an effort to develop a statewide plan for dealing with the disposal and recycling of this State's scrap tires.

We have brought together a team of experts which, in a series of meetings with the Office of Recycling, has shared extensive experience and technical information. That dialogue continues and agreement on developing a statewide plan has recently been achieved. Parties to this agreement include agencies of the State, the tire manufacturers, and the tire dealers and retreaders. We have attached a copy of the latest Outline Agenda for that joint effort to our testimony. This document served as the basis for the agreeing parties to define the tasks involved, and the work product of this group should be completed by October of this year.

Without question, the disposal of scrap tires presents some special problems which need to be addressed. In their normal or whole state, they are unsuitable for disposal in landfills, even if adequate landfills were to exist. However, the basically simple act of shredding a tire into smaller pieces, greatly enhances the ability to deal with its disposal. Shredded tires can be used in several ways -- as a supplement to coal in stoker-fired boilers, as a fuel supplement in burning residue from forest products, and in the composting of sludge. Whole tires can be used for fuel in cement kilns and as a component of incineration systems. Scrap tires, either in whole or in part, can be used for other purposes, such as artificial reefs, artificial breakwaters, sound attenuation barriers, and finely ground up tires can be used as an additive to asphalt paving, thereby extending road life significantly.

Thus, we feel strongly that scrap tires are a valuable source of energy or other useful by-products, and not just merely a disposal problem. They cannot, however, be recycled in the same way that a beverage container or paper product is recycled. Whereas the recycled glass, paper, or metal can be reused in the process of producing another glass or metal container or paper product, there is minimal reuse of scrap tires as material in the tire manufacturing process.

I would now like to turn to the specific language of Section 21 of the bill before you. First, Subsection (a). As I just pointed

out, tires cannot be recycled to the same degree as glass, metal, and paper. Thus, we believe the terms "recycling" and "marketing" in this subsection need clarification.

It is also unclear as to how and by whom the number of tires sold in New Jersey and the number of tires recycled will be determined. How is the baseline to be established against which the 55% will be measured two years hence? We would also suggest that the 24-month time period should begin with the issuance of any regulations pursuant to Section 21(d), not with the date of enactment.

Further, we see no rationale for assigning the burden of proof to only the tire manufacturers to determine whether "a convenient and economically feasible" method is available to each county and municipality in the State. Clearly, such burden of proof should be shared by tire dealers, recyclers, and State agencies.

Subsection (b): The deposit and labeling system envisioned in this subsection creates an absolute administrative nightmare beyond description. Tires, as I have said, are not like bottles or cans. They are not merely one-use throwaways. We do not have manufacturing facilities in each and every state, or even every geographic region of the country. In fact, there is presently a total of 45 tire plants divided among 20 states. Tires manufactured in any given plant are likely to be shipped anywhere in the world. Similarly, tire manufacturers supplying tires to vehicle manufacturers have no way of telling beforehand where any given automobile is to be shipped. The question of tire and vehicle imports, obviously, compounds the problem.

Thus, the affixation of the markings would have to be done at the retail level. We are not aware of a feasible means to mark tires that would not damage the tire physically. Further, the potential for fraud and counterfeiting is clearly unlimited. The problem is further exacerbated by tires which may be sold in New Jersey but delivered into New York, Pennsylvania, or Delaware. Similarly, New Jersey tire dealers would be put at a great financial disadvantage, as New Jersey consumers might very likely be inclined to purchase their tires from out of state.

In summary, we believe that the enactment of this section of the bill is inappropriate and unnecessary. We further believe that a scrapped tire can pay for its own disposal and produce energy or other useful by-products. There are companies in existence today which specialize in dealing with these types of concerns.

We therefore recommend that Section 21 of this bill be deleted, or at least that legislative action in the area of scrapped tires be put aside until the joint efforts of the Office of Recycling and our Association can be finalized, implemented, and evaluated.

Thank you. I would be glad to answer any questions you might have.

SENATOR COSTA: Thank you very much. You're speaking of using tires for a base on roadways. Has this been done anywhere?

MR. RYAN: Yes, it has. Arizona is the leading state, and it has been used in other states as well.

SENATOR COSTA: It acts as a rock base?

MR. RYAN: It is not tires alone. Finely ground up tires are used as an addition to asphalt in a certain proportion, roughly doubling the life of the road.

SENATOR COSTA: That sounds very good. Are there any questions?

SENATOR CONTILLO: Just that, you know, a tire manufacturer-- We're all discouraged. Everyplace we go, with nature or on the roads, we see abandoned tires. They are a danger in streams; they are a danger to navigation. You have a responsibility, as a manufacturer of that product, other than just the profit you make from it. I think we're telling you, "You have a year or two to come up with a solution." You may feel that government is going to have to help you with that solution, and you're correct, even though government doesn't quite -- certainly not the State and the local governments -- share in the profits that you produce.

What I'm saying to you is, you have a deep responsibility to come up with these plans and proposals, and you have the time to do it.

MR. RYAN: Senator, I appreciate the point you're making. I think what you're saying is-- You're really underscoring the thrust of

part of our testimony, namely that we have been in a dialogue with the Office of Recycling for nearly a year, and we have committed ourselves to developing a plan which we think will help reach the goal set forth by the Office of Recycling.

SENATOR CONTILLO: You've been meeting with Mary Sheil here?

MR. RYAN: Yes, sir. Attached to our testimony you will find an outline for a work plan. My understanding is that we are the first, and perhaps the only industry, to be involved in a joint effort with Mary's office.

SENATOR CONTILLO: May I ask Mary to comment on that?

MR. RYAN: Sure.

MS. SHEIL: Well, the reason that they are involved is, we called them to a meeting, and it took a lot of arm-twisting before we got the tire industry to agree to be involved. In fact, some of the proposals you see that are in the bill are part of that suggestion. We do have a plan. Most of that plan, I have to say, was drafted and put together by the Office of Recycling. We put many, many hours into that. We have not gotten any concrete feedback in terms of exactly what the tire industry is going to invest in making a plan work. In fact, we do have a feeling that there will be no financial investment, except for maybe some technical advice in getting this program going. It is our feeling that there has to be a little bit more than that.

But we are working along with the plan. We hope that this plan will bring some material results, and we will come up with some type of a tire recycling program in the State of New Jersey.

SENATOR COSTA: Mary, regarding what we were discussing before about using the material as a roadbed -- a base on a roadbed-- Has the Transportation Department been called in on this also?

MS. SHEIL: We will be. If you look at the plan we have outlined, we will include the Department of Transportation. What we hope will be gotten will be some experimental sections in the State to evaluate using crumb rubber as part of highway construction, as well as glass -- as a source of using recycled glass.

SENATOR CONTILLO: It still leaves a collecting system out in the open, even when you find a use for it.

SENATOR COSTA: But if that could be used, it would be a great advantage. They have looked into using solid waste for roadbeds -- solid waste that would turn into slurry, that would turn into a hard mass that could be crushed and used with a hard base, but this sounds good too, in order to get rid of the tires and, at the same time, have a functional use. I would like to see that pursued.

Thank you very much.

SENATOR CONTILLO: You know, Cathy, the concept of using the ash from the resource recovery units, when we really don't know what it does or what it will do, is sort of like the old public official who spread the oil on the roads 10 or 20 years ago, and now it develops into toxic materials. So, while the engineers are testing that-- I don't know that we can really look forward to that for a decade.

SENATOR COSTA: You're speaking not of the top layer; you're speaking of a base. Is that correct?

MR. RYAN: The road itself.

SENATOR COSTA: The road itself?

MR. RYAN: The paving itself.

SENATOR COSTA: I was thinking of the base on the road, because you have the base first and then you have the top layer of asphalt on top.

MR. RYAN: But in response to the Senator's concern, I think you would find over 20 years of history in the State of Arizona.

SENATOR CONTILLO: I was talking about the ash from the resource recovery--

SENATOR COSTA: I wasn't speaking of the ash; I was speaking of--

MS. SHEIL: What we have to be careful of, and what we would have to evaluate in New Jersey's using it-- Maybe they used it for 20 years in Arizona, but we have to remember that we have different climatic conditions that affect highway construction. So that would have to be all evaluated. Just because it works in one area, doesn't necessarily mean it would work here.

SENATOR COSTA: It is certainly able to--

MR. RYAN: We have also made arrangements for a similar trade association which specializes just in asphalt rubber use to be put in contact with Mary's office.

SENATOR CONTILLO: Do we have the same problem here when we are dealing with the manufacturer of the virgin materials, who may not be the least bit interested in seeing the use of these recyclable materials? Sometimes these things are more complex than we realize and there are other forces involved that appear here at the hearing.

MR. RYAN: I'm glad you made that point. I think the automobile tire has to be put in the perspective of being somewhat different than some of the other products you're looking at, with all due respect to those products. Anyone can correct me, if they would like. I believe it is the only product you're looking at that falls under Federal standards. Automobile tires must meet Federal Motor Vehicle Safety Standards under the Motor Vehicle Safety Act of 1966.

So the companies we represent are not only interested in pleasing consumers, but also in the national interest of meeting those standards, designing and making products that must take the beating on the road.

SENATOR CONTILLO: That pleases the consumer too, you know.

MR. RYAN: That is what I just said. I think if you review the track record of tire life, you will see that it has increased from about 20,000 miles per tire to the realm of 40,000 or more.

SENATOR COSTA: How much of it is being used in fisheries, where they have spawning fish?

MR. RYAN: I couldn't give you a percentage for that, Senator. It's a minimal amount; it has limited use. We are starting to find out that it is better suited in the warmer climates. You need certain temperatures to induce marine life.

SENATOR COSTA: Thank you very much.

MR. RYAN: Thank you.

SENATOR COSTA: Larry Levy of Foster-Forbes?

LAWRENCE D. LEVY: Thank you for the opportunity to speak to your Senate Committee today. My name is Lawrence D. Levy. I am a member of Local #9, Glass, Pottery, Plastics, and Allied Workers, and an officer

of that local. I am here today representing not only that Local, but also the International Glass, Pottery, Plastics, and Allied Workers and the rest of the glass workers in the State of New Jersey.

We are in favor of recycling. I mean, we have to have glass to make glass. That is common knowledge. However, after listening to the testimony of different people who testified today, we are very much concerned that somebody shouldn't-- Like the Senator had mentioned, about having to put a deposit on there-- This testimony, basically, is a warning to your Committee of what would happen if such a deposit was placed on the glass industry in the State of New Jersey. It is quite evident that it hasn't worked, and I am not going to go through the whole rigmarole of what is in the back of this thing. It is very self-explanatory. I am going to read my statement.

Labor has consistently opposed any type of forced deposit, and we continue to do so. We have endorsed the Clean Communities and Recycling Act, which is being sponsored by Senator James R. Hurley and Assemblyman Marcella. This particular bill has been passed out of Committee and should be voted on in the near future. Basically, this is the type of legislation that is needed.

The greater Northeast has lost, in the last four years, almost 9,000 members, which doesn't include the thousands of people who have lost jobs that depended on the glass industry. Just last month in New York State, Allied Corporation announced plans to close its upstate New York manufacturing operations which had employed 1,400 workers. This was a direct loss of jobs from the bottle bill legislation. The glass companies will now have to get this needed material all the way from Green Creek, Wyoming. This is soda ash. It costs more to transport it than it does to buy it.

In 1975, we had 14,277 members in New Jersey. Presently, we have 6,718. In five years, between 1975 and 1980, we lost 2,517 members in New Jersey. We lost 400 members in the plastic industry in New Jersey, with the greater number of jobs lost being in the glass industry, for a total of 7,509 jobs. Those jobs were in the \$17,500 to \$30,000 wage bracket. Those figures do not include the excellent fringe benefits enjoyed under the negotiated contracts.

A few items that should be considered are: New Jersey is losing tax-paying jobs; for every job lost in the industry, three jobs are supported by it; bottle bill proponents claim that deposit laws create jobs for unskilled workers, and their claim is not unfounded.

SENATOR COSTA: Sir, you are on the bottle bill again and, as I said to the others--

MR. LEVY: I understand that. The reason why we brought this up was because we know that somehow along the line, if the recycling program doesn't come about the way you people wish it to come about, this thing will be put into effect. That is one of the reasons we are against it. We're all for recycling. We will do anything we have to, to help to support recycling. But what we are afraid of more than anything else is the fact that recycling is the answer, provided -- like you heard today-- Everyone wants their own little thing put in there. We are afraid that it is going to get right back to where we will wind up with a forced bottle bill, along with mandatory recycling. That is basically what we are concerned about.

SENATOR COSTA: I understand your concern, Mr. Levy, but the Committee is just listening to comments on Senate Bill 2820, which is not being addressed.

MR. LEVY: Our International is 100% in favor of recycling.

SENATOR COSTA: You are in favor of this bill?

MR. LEVY: Provided there is nothing put in it--

SENATOR COSTA: About deposits.

MR. LEVY: For deposits.

SENATOR COSTA: Okay.

MR. LEVY: That's all.

SENATOR COSTA: Thank you very much.

MR. LEVY: Thank you.

SENATOR COSTA: Jean Clark, New Jersey Recycling Forum.

JEAN CLARK: My name is Jean Clark. I am here to testify today as President of the New Jersey Recycling Forum. The Forum is a group composed of representatives of major recycling industries, dealers, recycling coordinators, haulers, and environmental organizations -- the people who are most involved in the day-to-day business of making

recycling work. All members of the Forum also served on the Recycling Advisory Committee, which spent long hours preparing a series of recommendations requested by Commissioner Hughey prior to the drafting of the mandatory recycling legislation, S-2820, which you are considering today. We argued, discussed, compromised, and arrived at the consensus which was included in these recommendations. We thank the Committee for giving us this opportunity to submit our comments.

While we are pleased to see that many of our recommendations have been included in this bill, we are very concerned that some of its provisions may hinder, not help, to achieve the goal of increasing the amount of material recycled in New Jersey.

First, we feel that this goal should be spelled out in the bill by adding the following language at the end of Section 1:

"In the implementation of this legislation it is not the intent of the Legislature to replace or displace existing recycling activities, but to generate new or additional recycling programs to further reduce the amount of material going to landfills."

The Forum's major concern is to see that, in the desire to increase the amount of material being removed from the landfills, we don't forget that this material is not recycled -- as Senator Contillo said -- unless and until it is converted into a useful product. This usually means selling it to a market. No useful purpose will be served if existing for-profit or nonprofit recycling networks are simply replaced by municipal or other public sector employees. We feel strongly that the wording in Section 3(c) of the bill, which says only that private sector recycling should be given due consideration in district plans, is not adequate and that the following wording should be substituted:

"No recycling plan, solid waste district, or municipality, shall divert materials from or compete with a commercial for-profit or nonprofit organization operating within the solid waste district."

Basic to the recommendations of the Forum is the belief that a market must be assured before the requirement that a municipality mandate separation or provide for the collection of materials takes effect. This can be done by securing agreements with the markets.

While we believe this is also the intent of the drafters, the language of the bill must be changed in Sections 4(a) and (b) and 5(a) and (b) to make this clear by stating that the agreements required are for the disposition of materials, rather than for providing -- as the bill states -- "recycling services," which are defined in the bill to include collection, processing, and storage, as well as disposition.

Another of our concerns is that the time periods allotted for obtaining markets and setting up collection and processing systems start with the adoption of the district recycling plan. However, there is no time limit given within which these plans must be adopted. Without some time limit this process could be protracted interminably. We feel therefore that the requirement in Section 3(a) should state that plans must be prepared and adopted within six months. By the time this becomes law, some counties will have completed and most will have started a recycling plan, since this is also a requirement of Chapter 326.

We realize that there is great concern about the increasing shift from the use of recyclable packaging materials such as paper and glass to materials for which there is no ready recycling market, such as plastic containers, aseptic packaging, and bimetal cans. We feel, however, that this is a very complex issue and should be dealt with in a separate bill. We feel it is particularly unwise to provide for the almost automatic imposition of deposits on both plastic containers and tires, solely at the discretion of a department head, without any further action by the Legislature. Any such proposals should be acted upon separately through the legislative process after full debate on both environmental and economic aspects. We feel that the hazards attributed to aseptic packaging and PVC containers should be carefully documented before such a drastic action as an outright ban is imposed. The Forum recommends, therefore, that the following alternative provision be substituted for Sections 12 through 17 and 21.

The industry and the State Office of Recycling shall investigate alternative methods for the collection, processing, and recycling of tires and plastic containers, including the imposition of deposits, and shall make recommendations to the Legislature by July, 1986.

We also feel that singling out aluminum cans as the only material mentioned in the bill for which mandatory separation ordinances are specifically required is likely to reduce, rather than increase, their share of the beverage container market. This is precisely the opposite of the effect desired.

In its recommendations, the Forum accepted the \$.36 per cubic yard landfill surcharge included in the October report of the Office of Recycling, which also outlined the anticipated use of this money. But we have seen no justification for the increase to \$2.00 per ton, or about \$.60 a yard, which is called for in this bill. It may be to provide more money to municipalities through grants and to recycling businesses through loans. However, our experience with the current Recycling Act has been that the State is much too slow in getting money back out where it can do some good. Of first importance is increasing the ability of markets to handle the additional material generated. But almost as of this date -- I think maybe it has passed -- but almost as of this date, not one penny of the money allocated for low interest loans to recycling businesses has yet found its way into the hands of a single business, although the bill anticipated money would be available on January 1, 1982. There is no point in collecting more money if it never gets distributed.

We also approved an immediate distribution of \$1.00 per capita to municipalities to cover some program start-up and education costs. This money was to come from general appropriations and be distributed within 60 days, and was later to be reimbursed from the recycling fund. However, the appropriation has not been included in the bill.

One of the areas we spent a great deal of time on was to recommend ways in which legislation could stimulate markets. One recommendation was an investment tax credit of 50% on recycling equipment with a 10-year carry-over period. This has been reduced to 20%, which we think is far too little to provide the incentive needed, and we urge that this be raised. The carry-over period was also reduced to four years, and we feel this is far too short. We examined the possibility of a sales tax exemption, as included in the bill, but did not recommend it since we felt it to be unworkable.

Since time is limited and since the Forum is still working on proposed wording, I hope you will permit us to provide you with additional written comment on some other items pertaining to solid waste haulers and BPU regulations mentioned in the bill.

The final point I would like to make today is that the Forum feels that the Office of Recycling should not be split between two Departments -- the Department of Energy and the Department of Environmental Protection -- as it is at present, but should be given status in law in this bill and be included within the Department of Environmental Protection, since its problems are most closely related to those of solid waste management.

SENATOR COSTA: Thank you very much. Our next speaker will be Susan Remis of the Department of the Public Advocate.

SUSAN C. REMIS: Good afternoon. My name is Susan Remis, and I am appearing today on behalf of the Department of the Public Advocate. The Department has repeatedly emphasized the need to increase recycling as part of New Jersey's overall solid waste management strategy, and we appreciate this opportunity to testify on S-2820, the Mandatory Recycling Act.

As early as May, 1984, the Public Advocate recommended that each county in New Jersey be required to adopt a mandatory waste reduction program as part of its solid waste management plan. By placing planning responsibility at the county level, each county can tailor its program to meet local markets and the individual needs of its community. Moreover, since mandatory recycling programs generally result in about twice the level of participation as voluntary programs, a mandatory approach guarantees the maximum amount of materials recovery and the most significant reduction in the waste stream.

The Public Advocate supports the goals of S-2820 and its companion bill, A-3320, but proposes nine areas in which this Committee should modify the Act to better achieve the stated purposes of the bill. I will address each of these proposals in my testimony today.

First, on the critical issue of markets, the Public Advocate strongly recommends that the State of New Jersey take the lead in developing new markets through its own procurement policies.

Accordingly, Section 18 of the Act should be expanded to explicitly require the Division of Purchase and Property to prepare a recycled products impact statement that reviews every item the State purchases. A systematic review of all purchased goods would allow the State to make substitutions and buy either materials made from recycled products or materials capable of being recycled or reused. Such a review could be done six months after the Act took effect and updated annually to determine whether additional recycled or recyclable products are available for State purchase.

In addition, Section 18, as it is currently drafted, directs the State to purchase recycled items only under certain circumstances and when the price is "competitive." Yet, there is no explanation or definition of what constitutes a "competitive" price. The Public Advocate recommends that the State be directed to buy recycled or recyclable products whenever the cost is within a certain percentage of the cost of a comparable non-recyclable item. Due to the high cost of waste disposal, the State can actually spend additional money to buy recycled or recyclable items and still come out ahead.

Second, the Public Advocate recommends that S-2820 establish a Market Strategy Council comprised of State officials, representatives from each county, environmentalists, and community members. This Market Strategy Council should be charged with the responsibility to identify and develop markets for recycled goods.

Under the Act as it is currently drafted, each county has the incentive to reach its 15% or 25% recycling share by being secretive about its markets or, worse yet, to underbid other counties to obtain a recycling contract. The Public Advocate proposes that the development of a Market Strategy Council is a way for the State to develop and coordinate strategy in this highly important area. It also provides a cooperative forum for the State, counties, and others involved in the recycling business to share market information and work together to develop additional markets. Each year the council should identify the maximum level of market capacity for recycled items and report to the DEP and the Legislature any recommended changes to New Jersey legislation or regulation to increase market capacity even further. In

addition, the State of New Jersey should devise an equitable process to match the counties' recycled goods with the available markets, taking into account which counties have the most severe solid waste disposal problems. Such a regional and cooperative approach can only help to facilitate the successful implementation of the Recycling Act.

Third, the Public Advocate strongly recommends the deletion of Section 4(b) of the proposed act, which allows a county to be exempt from any material recovery targets if it cannot secure recycling contracts. This provision provides a broad excuse for counties to avoid any meaningful recycling activity. If this Committee adopts the Public Advocate's suggestion, and the DEP and Market Strategy Council determine recycling capacity based upon market availability, counties will be able to tailor their recycling efforts to available markets. Given this flexibility, counties should have no reason to petition for a waiver of the requirements of the Mandatory Recycling Act. The need for recycling is simply too great to allow for blanket exemptions from recycling in the manner proposed by Section 4(b).

Fourth, the Public Advocate further recommends that the Committee, in addition to the 15% and 25% waste reduction requirements in the Act, also require the DEP to establish specific, measurable performance standards. Although we do not doubt that counties can achieve a 15% or 25% reduction requirement, a county's waste stream simply cannot be accurately measured for numerous reasons. For example, the State has still not installed scales at landfills despite the passage of legislation that requires such installation. In addition, the moisture content of waste can alter the weight of the garbage by a few percentage points. Moreover, as our waste stream contains more plastic and less glass, the removal of light items will not have the same impact on tonnage. These factors make complete reliance on a percentage reduction inadequate to further the goals of the Act.

Therefore, in addition to the requirements of percentage reductions, the Public Advocate recommends that the Act require DEP to promulgate regulations establishing objective standards for county and municipal performance. These performance standards should include, but

not be limited to, clear requirements for adequate staffing and enforcement, public notification and education, and reporting of the impact of recycling upon the county or municipality's waste stream. Performance standards should also prohibit landfills and resource recovery facilities from accepting unsorted waste; the mechanisms for enforcing this standard can then be established by the individual counties.

Fifth, the Public Advocate recommends that this Committee add provisions to the Act to encourage the recycling of used oil. Each year, New Jersey generates 24 million gallons of used motor oil, and at the present time, the State is unable to account for the disposal of approximately half of this oil. Although used oil recycling is already required in the law, the law is not being enforced at the present time. In order to encourage used oil recycling, this Act should require oil companies to designate and publicize a "used oil collection site" with a large, permanent sign wherever the oil company markets its products for sale at a New Jersey facility that is designated to collect used oil. This proposal is recommended by the Office of Recycling in its report to the Governor and addresses a serious omission in the present Act.

Sixth, the Office of Recycling has also suggested that a program be established for asphalt recycling. Along these lines, the Act should also require the Department of Transportation to issue regulations that encourage both the recycling of asphalt pavement and the addition of recycled materials, such as crumb rubber from tires and cullet from glass into asphalt material. Recycled asphalt pavement requires 75% less new asphaltic materials than virgin pavement materials and virtually eliminates the necessity for landfill disposal of discarded material. Moreover, not only would this create good recycling markets for these waste materials, but the inclusion of crumb rubber and glass into asphalt will benefit pavement durability.

Seventh, the Public Advocate recommends that this Committee seriously consider which tax incentives are most effective to encourage manufacturers to use recycled materials in their products. The Act proposes the use of tax credits on energy costs incurred in

manufacturing products made from post-consumer waste material. The Office of Recycling, however, in its recycling report to the Governor, strongly recommends that manufacturers receive a reduction in their public utilities gross receipts and franchise tax. This approach deserves careful attention. The Public Advocate recommends that the Committee obtain information on the comparative costs and benefits of the tax credit presently contained in the bill, and the gross receipt and franchise tax reduction proposed by the Office of Recycling, to determine which approach provides better incentives for manufacturers to increase their use of recycled materials.

Eighth, the Public Advocate recommends that certain definitions in the bill be modified to eliminate potentially serious problems in the Act's implementation. For example, in the bill as it is currently drafted, the definition of "district" excludes the Hackensack Meadowlands District from compliance with any of the Act's provisions. However, since the Hackensack Meadowlands District is already a district under the Solid Waste Management Act, no discernible reason exists for requiring it to develop a solid waste plan under that Act, and at the same time excluding it from the recycling activities mandated by the Mandatory Recycling Act. The end result is to exempt the Hackensack Meadowlands District from employing what is, in our view, an essential component of any effective solid waste strategy. In addition, the definition for "plastic container" only applies to plastic containers having a capacity of 12 ounces or more. Unless this definition is altered, we are concerned that this size limitation excludes too many plastic containers from the Act. While we recognize a need to establish some cutoff point for recycling obligations, we think a lesser amount should be selected -- one that would not be so small to include insignificant items in the waste stream, but one that is more inclusive than the present provision in the Act.

Similarly, Section 16 of the proposed Act prohibits a landfill from accepting leaves only between the months of September and December. This provision should be amended to read "between September 1 and December 31" to make it clear that a four-month, rather than a two-month period is contemplated by the Act.

Furthermore, Section 3 of the Act only requires a county to prepare a recycling plan within six months of the Act's effective date, but does not require the county to actually adopt a recycling plan. This apparent omission can easily be corrected by inserting the words "and adopt" after the word "prepare."

Finally, S-2820 contains absolutely no provisions that address the issue of enforcement. In our experience and opinion, rigorous enforcement is essential to the success of any environmental law. If the Act's provisions are not enforced, it doesn't matter how comprehensive or rigorous a mandatory recycling act is enacted. The Public Advocate recommends that the Act be amended to include provisions to penalize counties or municipalities that fail to comply with the Act. Even more importantly, S-2820 should be amended to require that DEP use some of the money generated by the Act to set up an enforcement program and hire inspectors to closely monitor the Act's implementation. Some of this money should also be directed towards the purchase and installation of scales at landfills and resource recovery plants. This would enable the State and individual counties to determine how much waste is being disposed of and how much can be diverted to recycling programs.

In sum, New Jersey is now faced with the challenge to reduce the flow of waste into our seriously overburdened landfills. Recycling will accomplish this goal and, in addition, will enable us to recover valuable resources; will result in substantial savings in resource recovery plant construction and operation; and, will protect our environment. The Mandatory Recycling Act, if amended in a manner consistent with our testimony today, is an important first step in reaching these critically important goals. Thank you, and we would welcome the opportunity to work with the Committee in the development of appropriate amendments to the Act.

SENATOR COSTA: Thank you very much. Senator Contillo, do you have any questions? (negative response) Very good.

MS. REMIS: Thank you.

SENATOR COSTA: Your former Public Advocate is now sworn in today.

MS. REMIS: That's right.

SENATOR COSTA: Just 10 minutes ago. Pat Witmer, New Jersey Chamber of Commerce.

PATRICK WITMER: Good afternoon, Madam Chairwoman. Senator, my name is Patrick Witmer, Director of Legislative Affairs, New Jersey State Chamber of Commerce. With me is Linda Pelrine, Legislative Analyst, also with the State Chamber.

We appreciate the opportunity to speak on behalf of the Chamber and its entire membership to address the issue of mandatory recycling and express our strong desire to see changes in the bill before the Committee this afternoon.

No one can deny the urgency which faces every citizen of this State to act now to resolve the critical problem of solid waste disposal. Jim Morford, Vice President of the State Chamber, is a trustee of the New Jersey Recycling Forum. The Forum, representing solid waste haulers, the plastics, paper, and beverage industries, municipal recycling coordinators, and others, was asked by Commissioner Hughey to work with the State Office of Recycling to develop a mandatory recycling program. After nearly a year of conscientious and exhaustive effort, we are disappointed that the Department of Environmental Protection chose to ignore so many of the New Jersey Recycling Forum's recommendations.

With regard to the bill before us this afternoon, we ask you to consider the following recommendations:

First, of utmost importance is the fact that these proposals do not protect the private sector in its efforts to continue established recycling programs or begin new ones. The fundamental right to compete must not be denied to commercial, nonprofit, or for-profit organizations by new municipal programs. We believe the main purpose of this legislation should be to encourage new and additional collection and reuse of recyclable materials. Without this protection for private or volunteer organizations, we believe the State would be defeating its purpose.

Second, the State Chamber believes we cannot isolate recycling as a single issue. New Jersey must adopt a comprehensive plan incorporating recycling, resource recovery, and the limited use of

landfills. In evolving the solution to cleaning up solid waste, as we continue to gradually phase out reliance upon landfills as the primary method of disposal, we must turn toward a balance between recycling and the use of resource recovery facilities. Turning solid waste into energy is a relatively new concept in this country, but the technology is realistic. The remaining ash from incinerated garbage is far less bulky, and the need for landfills can be reduced by as much as two-thirds. The significance of resource recovery is that it can extend the life of our State's landfill capacity, while also unlocking energy from garbage, thus producing electricity and steam.

Our ultimate goal should be to arrive at the least expensive, but most environmentally sound method of waste disposal. An effective recycling program can remove up to 25% of the flow of garbage, and incineration can reduce garbage to ash, which requires up to 70% less landfill capacity. The State Chamber, therefore, recommends that amendments be made to the legislation to incorporate resource recovery provisions.

Third, we take strong exception to the absolute power given to the Department of Environmental Protection to impose mandatory deposits on all plastic containers, bimetal containers, and tires. We believe that obtaining the goal of 55% recycling on these products within 18 months is not a target, but a mandate for a forced deposit law in New Jersey, which we would strongly, and have always strongly opposed. The enforcement of these particular provisions of the recycling bill would amount to virtually the most offensive, costly, and ineffective consumer tax ever imposed upon the citizens of this State. It is in every sense of the word an overkill.

Because you have already heard testimony from many industries which would most seriously be affected by the deposit mandate, I will not take the time to address our concerns regarding specific products. However, I want to emphasize that the scope of a mandatory deposit on all plastic containers alone is mind-boggling when we consider that it would affect not only beverage and food containers, but literally thousands of other products sold in the State, including such items as cosmetics, drugs, medical supplies, toiletries, household cleaning

agents, and toys. The costs associated with manufacturing, processing, distributing, and selling all of these products would skyrocket, placing excessive burdens on New Jersey's industries and consumers.

The State Chamber strictly opposes all provisions allowing for mandatory deposits, and recommends that these be deleted from the legislation before us.

Section 17 of the bill, which would ban the sale of certain products sold in New Jersey, such as the Brik Paks, simply because they are not recyclable at this time, is another concern. We believe alternative methods can be developed so that these waste products can be utilized more effectively, such as waste-to-energy facilities.

Again, we would like to emphasize that the State Chamber supports the original recommendations of the Recycling Forum. However, we recently outlined some changes to the original proposals which I believe have been made available to you, and have also been forwarded to Governor Kean for his consideration. We are further willing to cooperate in every way with this Committee, with DEP, and with the State Office of Recycling to develop a sensible recycling plan which will achieve our mutual goal of solving our solid waste crisis.

In closing, I would like to thank you, Madam Chairwoman and Senator, for listening to our concerns. We trust you will give serious consideration to our recommendations. Thank you.

SENATOR COSTA: Thank you. I believe Senator Contillo has something to say.

SENATOR CONTILLO: Yes. I am somewhat-- You represent the Chamber of Commerce.

MR. WITMER: That's right.

SENATOR CONTILLO: And you're asking for government protection for the existing private enterprise.

MR. WITMER: I wouldn't say we're asking for government protection for--

SENATOR CONTILLO: "We're asking for guarantees," are the words that the Recycling Forum sent to me; to insert that we guarantee that they continue with whatever it is they are doing. I am somewhat shocked at that.

MR. WITMER: Where private organizations, whether they be for-profit or not-for-profit -- where they had been effective, we believe that, as you said, we can use the word "protection." We believe that the State would more effectively and efficiently use its resources elsewhere, in perhaps another area of that same municipality, which is not covered in recycling for that particular program.

SENATOR CONTILLO: What we are talking about is giving you priority, suggesting that they deal with it in a cooperative effort with counties and municipalities. There is no direction in this bill for a municipality to-- They are not directed by the State to supplement or supplant what is being done by private enterprise, but merely to develop a plan. I would hope that good business practice would enter into this in a cooperative venture between private enterprise and government to solve it. But there is no way that I would ever suggest that we now give guarantees to those who are doing something that they will have that government protection.

Most of the time from the Chamber in a business community we hear, you know, "Leave us alone. Let free enterprise-- Let capitalism take its swing."

MR. WITMER: Supplementing a plan, we have absolutely no problem with. But our concern is that this language would allow a substitution of currently effective private programs with government-financed programs. That really is a step away from free competition in our minds. But supplementing, again, we have no problem with. It is just the wording there that we would--

SENATOR CONTILLO: Well, I would oppose a program at taxpayer expense to supplement or to change something that is being done now. What I see now is, those who are distributing and dealing with these recyclable materials are going to be the beneficiaries of the increased volume of business that has to come forward.

MR. WITMER: Again, we would be in support of that kind of a program, but with the specific language that is in the bill right now, we would like to see at least an amendment that would say that it would supplement and not substitute private programs. That was a part of the recommendations of the Recycling Forum. I believe they were deleted in the bill before us now.

SENATOR CONTILLO: That's correct.

SENATOR COSTA: Thank you very much. Our next witness will be Naomi Yager, League of Women Voters. She will be followed by Mr. Steven Fass from Essex County.

NAOMI YAGER: Before I start I would like to say that I like the idea of making the roads out of tires. Maybe we could make the wheels out of concrete and then the roads would get the flats.

I am Naomi Yager. I am the Energy Director of the League of Women Voters. I am one of three Energy and Natural Resource Directors for the League of Women Voters of New Jersey. We are a nonpartisan, grass roots organization with 5,500 members in 80 local Leagues throughout the State. It is the hallmark of the League that each biennium our members select certain governmental issues for concerted study and action. In this manner, our present position on solid waste management was developed and it is within this context that S-2820 was reviewed by the Natural Resources Committee, which wrote this statement.

The League supports the district and municipal planning requirements, and we are particularly pleased with the requirement that municipalities notify their residents biannually of recycling opportunities available to them. Adequate public education is critical to the success of any recycling program. We do not, however, agree with the inclusion of aluminum as a material to be recycled by all districts. Although at this time the market appears to be limitless, to single out this material to be recycled by everyone may, in fact, impair its distribution and yield some of its market share to a less recyclable material, i.e., plastic.

Because contracting with markets is fundamental -- and indeed a material is not recycled until it is reused -- we recommend a clarification in the language of Section 3(c). Counties should enter into agreements for the disposition of materials, rather than for recycling services, and this should occur before source separation and collection services are mandated. Furthermore, it is the recommendation of the Recycling Forum, and concurred by the League, that Section 3(a) should require that the district prepare and adopt

recycling plans within six months. With this clarification, implementation of the plans can begin, and lengthy, unnecessary delays will be avoided. Additionally, some type of enforcement capability or penalty provision needs to be provided for the Department of Environmental Protection to use when districts fail to fulfill their recycling planning responsibilities.

The League opposes entirely Sections 10 through 17, which impose certain deposits and ban aseptic packaging. The provisions are regarded as unworkable in some instances, and technically inappropriate in others. Further study and separate legislation is recommended to most effectively address these complex packaging issues.

The League opposes the amendment to the Recycling Act that would levy a \$2.00-per-cubic-yard tax on all sanitary landfill facilities. The present disbursement of funds from the Office of Recycling is far too inefficient and inadequate to support legislation which would mandate such additional activity. Since the adoption of the Recycling Act in 1981, recycling grants have never been awarded in a timely manner, and, to date, no low interest loans have been made. Clearly, this fee, as well as the role of the Office of Recycling, needs to be evaluated. In place of the grants program, a per capita distribution to municipalities is recommended that will provide initial program and public information funding.

Lastly, the stimulation of the markets through the establishment of policies and programs to increase the demand for secondary materials, and to encourage and support the construction and operation of recycling facilities is an important role of State government. We support both the investment tax credit -- although we recommend 50% over 10 years, instead of 20% over four years -- and the energy tax credit. The sales tax exemption appears to be too complex as a State issue, and hence, unworkable.

The League position calls for action to reduce the waste stream, to recycle suitable portions, and to safely dispose of what is left. We commend the State effort on this behalf, and look forward to continued involvement in the development of this important solid waste management strategy.

SENATOR COSTA: Thank you very much. You have some concrete proposals there.

MS. YAGER: I want to tell you that I am also a member of my local Environmental Commission, and we are watching this very carefully.

SENATOR COSTA: Thank you very much. I will ask your indulgence as I call Mr. Bud Fuller of the American Can Company. Mr. Fass will be next.

EVERETT E. FULLER: Thank you very much. I will try to paraphrase my testimony in the sake of time, so I can get through it and cover just the important points.

I am Everett Fuller, and I am Director of Government Relations for American Can Company. I am here representing the can industry in New Jersey. The beverage portion of the industry consists of five plants employing over 1,200 people. Two other plants in New Jersey were closed in the past two years due, in large measure, to reduced sales of beverage containers in the deposit law states surrounding New Jersey.

We have supported the concept of voluntary recycling as a more productive alternative to a forced deposit/return system. We have been in the forefront of recycling, especially aluminum cans, for a number of years, with a return rate on a national basis now of over 55%. But other types of packaging are much more difficult than direct recycling into the same product, like aluminum is. Really, a constructive approach by government and industry in this whole area, I think, can be achieved by reductions and separating out those materials for which uses and markets can be found or developed, and using the other materials to create energy.

We could support S-2820 if it was amended along the lines that the Recycling Forum has recommended. We would be glad to work with you in that area. But our overriding concerns are those sections imposing unrealistic recycling rates to be achieved in the near-term and giving more or less absolute authority to the Commissioner of Environmental Protection to arbitrarily impose deposits on packaging, based solely on the achievement of these rates. Any deposit scheme has

complex ramifications. Recyclability of a package -- and this is really what I want to stress today -- is only one of the many criteria which must be considered in designing and producing a package to deliver a product to the consumer.

My company is a manufacturer of a wide range of metal containers and plastic packaging, including film, film laminates, and plastic tubes and bottles. In fact, we have a plant in Washington, New Jersey, employing over 350 people making toothpaste tubes from plastic laminates. I am going to touch on that a little bit later.

I want to talk in terms of the priorities required of all the packages we make and recognize the role of packaging in our society from raw materials to ultimate disposal. You just can't look at it in terms of its appearance in solid waste. That is important; I am not trying to underestimate that. But sometimes if you look at the package, you don't recognize all the things that went into why it's there.

A package really is a system of converting raw materials into a package -- container, I should say -- filling it with a product, closing it, processing it to prevent spoilage or deterioration, unitizing it for shipment, distribution of it, deunitizing, sale to the ultimate consumer, and then disposal. In this chain, what influences one link can have a very great effect on any other. During this passage through the chain, it must protect the product, reduce waste, improve nutrition, provide convenience, save time, prevent pilferage, convey information, prevent adulteration and contamination, and do all of these things at the lowest possible cost. Sometimes I wonder how we really do it, but--

I just have a couple of illustrations--

SENATOR COSTA: Yankee ingenuity.

MR. FULLER: I don't want to outdo Mr. Katz and I should have brought this out earlier, but there are eight oranges -- I will be glad to supply those for part of your lunch. Those eight oranges are in this little can as frozen concentrate, the point being that when you look at solid waste, you only see this (demonstrating). You forget about all of the other stuff that was left in Florida to feed cattle.

So we have to look at that balance there. If you ban this, or put a deposit on it, or say we can't use it, and go back to this (demonstrating), you are going to end up with more solid waste. Lettuce, for example, is now wrapped in a plastic film in the field in California and shipped here without all those extra leaves that you used to buy in the supermarket and have to throw away in your local garbage. So, you're substituting a plastic film. Incidentally, this has reduced the amount of spoilage that the lettuce encounters on the way to market, in addition to eliminating the leaves, leaving them in the field for recycling there as fertilizer or as feed for cattle.

In retailing, you can look at watch batteries. Now they are in a plastic blister pack, rather than being included in a little box underneath the counter, where the clerk had to go get it. Now you can self-serve this in a supermarket. The cost tends to be less; prevents pilferage; protects the product; and really conveys information to the consumer about what is there, without having to wait in line for a clerk. So all of those things are important to the blister packets you see. Again, if you look at it just in terms of solid waste, it seems like it is a big problem, and it is a problem in solid waste. Again, I am not trying to underestimate that, but you cannot look at it just in those terms. I guess that is my principal point.

Another example is protection from contamination. You remember the Tylenol incident. Well, the ultimate package from an adulteration standpoint is to have the Tylenol inside of a can, where it can't be tampered with. But that adds to solid waste and adds to the cost of the container. Not a good solution from that standpoint, but a solution from the primary criteria of protecting the product from adulteration. So those factors all go into the packages we make that end up in solid waste.

The toothpaste tube is a very graphic example. We make these tubes (demonstrating) in Washington, New Jersey. We used to have toothpaste come in lead tubes. They folded up well and they dispensed the product well. There was a problem with lead ions migrating into the product -- a public health problem. So, the next step was to go to aluminum, which was satisfactory to some degree and is very recyclable

as a waste product. But the problem with an aluminum tube was, it cracked easily -- if you remember that period we went through when toothpaste could be used out of the cracks -- and if you didn't coat the inside with a coating that was complete and had no discontinuities in it, the product reacted with the dentifrice and you had little black spots created where the product did contact it, and as you squeezed it out, along came the black spots along with your dentifrice, which was not very sightly. So, now we have a plastic tube that is made up of nine layers of plastic, with one of them being a very thin layer of aluminum foil, much like the Brik Pak contains. That is the ultimate solution that has solved all of these problems, but you have to be able to make the package so that it will squeeze out and stay squeezed out, and that you can roll up to some degree.

But now we have ended up with a package that is not as recyclable as the lead foil or the aluminum one, but it serves to satisfy those other requirements that are so important in getting the product from the manufacturer to you on your bathroom shelf.

I just wanted to emphasize those things so we didn't lose sight of this in trying to solve this problem that we are all so concerned with, and should be concerned with. I won't go into the detail I've got in my testimony, but the metal can -- the beverage can -- weighs 46% less than aluminum, for instance, than it did just a few years ago. So just the improvements in packaging that we make have reduced solid waste without really-- You look at a can in solid waste, but a few years ago it was even a bigger problem. We need to work along those lines; you need to recognize that also.

Anyway, I really haven't tried to address the problem that New Jersey has with solid waste. That's important. Some of the rest of my testimony dwells on that and where we think -- and I think -- some of the solutions lie. Obviously, industry has to cooperate with government. We both have to work on the mutual problem, and certainly we in the packaging industry -- now that you know all the other problems we have to face in designing a package -- are willing to try to do the things that are necessary to help in the solid waste program.

Thank you.

SENATOR COSTA: Thank you very much. Any questions?
(negative response) We appreciate your coming. Next, Mr. Fass. Mr. Fuller, don't forget to leave the oranges. (laughter)

STEVEN FASS: Good afternoon. I am Steve Fass; I am the Recycling Manager for Essex County.

I have had some fairly extensive conversations with the Public Advocate over the past week. That office has incorporated a lot of the comments, so I think what I'll do in the interest of time, and my own lunch, is try to keep things short and paraphrase my testimony to some extent.

In Essex County, we feel that problems that mandatory recycling and beverage container deposit legislation are trying to solve are very closely related. I understand that you want me to keep to S-2820, and I think you'll find that I will for the most part, although I do address deposits to some extent. Public debate on these subjects has reflected their inseparability for some time, especially when you look at concerns regarding markets. It is extremely difficult to devise a concept that eliminates the numerous conflicts between mandatory recycling and a beverage container deposit system, but it really needs to be done.

Essex County supports the goals of waste reduction and litter reduction through recycling and beverage container deposits. In February, 1983, a requirement for county-wide mandatory recycling was included in our solid waste management plan. In addition, County Executive, Peter Shapiro, and the Board of Chosen Freeholders have stated their support for beverage container deposits on a number of occasions. Any legislation that is passed must advance both goals, and not hinder either.

I would like to offer some suggestions for improving specific provisions contained in S-2820, and to propose a concept which we feel adequately integrates the two concepts of mandatory recycling and beverage container deposit.

The first particular provision I would like to address is that of market development. You have already heard today that this is probably the most fundamental concern of anyone who is involved in

recycling, or is otherwise considering this legislation. I would like to begin by saying that, first of all, we are not recommending waiting in the development of the program until markets have expanded or the demand is increased in New Jersey. I feel that we need to extend both the collection system and the supply in a parallel fashion with expanding demand for those materials.

We feel that it requires a stronger role on the part of the State than is currently envisioned in the bill. Essentially, what we feel should be the State's role falls into three categories: First -- and I believe this was mentioned by the Public Advocate -- there is a need to establish some sort of concerted statewide approach to allocating, in particular, the limited amount of market capacity that exists for certain materials. The last thing that I want to have to do is to be in a cutthroat underbidding position with, let's say, Union County, where we have a number of materials and have limited markets, and we go and try to gain access to this market through price cutting. I don't think that it is necessarily going to serve as any great benefit.

One of the things we feel might get around that is to establish a secondary material marketing council on the State level, which would involve counties, the State, and, in particular, representatives from the New York and Philadelphia area port authorities, since export markets are so very intimately involved in general market development in New Jersey.

The second role for the State would be to considerably expand the procurement of secondary material products, those products derived from primarily recycled materials. In order for market development for secondary material products to transcend the level of being a buzzword and become a real priority on the State's agenda, it is necessary that the State demonstrate its faith in the value of these products through its willingness to share some of the risks in developing and marketing them. What this should mean is that the State should examine the potential for designing, and then procuring secondary material products that are comparable in terms of function and quality to the products that it now uses. The possibility exists that the combined purchasing

volume and value to the State and other local governments for specific products may be sufficiently high enough to make the release of production contracts based on State-developed design specifications to be a reasonable option.

The State could also license specific designs and processes for secondary material products developed under public sponsorship, or to private companies for their own use for minimal fees. Specific market development actions -- and I know that some of them have been mentioned already, but I think they bear repetition -- are the use of rubberized asphalt mix in road construction and repair; the use of compost product -- I know this is primarily leaf compost -- on all State lands; the development of secondary material products by State use industries -- those are basically the folks who put license plates together. They manufacture a number of other products too, from what I understand. These secondary material products should be developed by the State use industry, based on existing product lines; for example, where there is an opportunity to substitute, once again, secondary materials for virgin materials.

Also, the procurement of energy production systems that use high BTU waste-derived fuels to replace some of the antiquated heating and hot water systems in State facilities-- There are small package plants that can do that. The use of ground cullet as a sand substitute for erosion control in New Jersey beaches, and the specification of preference for secondary material products in all State-sponsored or regulated construction projects--

We agree with the Public Advocate that an across-the-board review of all State procurement to examine the opportunity to substitute secondary material products for virgin material products would be very beneficial.

I have also heard a lot today. I wasn't originally going to mention this, but there was so much talk today about the fuel value of certain otherwise non-recyclable containers, specifically Brik Paks and plastics, that in my own opinion, it seems to me that if the fuel value is really that terrific, perhaps these industries should buy them back to use as fuel. I don't think we will have any difficulty with them

doing that sort of a market development program. I believe you will probably see a lot of that happening with mixed low-grade wastepaper anyway.

The third role for the State in terms of market development would be to develop a package of tax incentives oriented toward keeping existing recycling industries healthy and attracting new ones to the State. In the bill as it stands right now, there is a somewhat varied package of tax incentives, which we feel is almost adequate. We suggest two improvements. One would be that the gross utilities receipts tax reduction or abatement for recycling companies, rather than the 100% energy cost deduction from net corporate income tax, should be instituted. This would provide benefits for a whole variety of different sized industries involved in recycling and to both marginally profitable and nonprofit private sector activities in recycling, which I don't think we necessarily would be subject to the net corporate income tax abatement.

Again, we support the Forum's recommendation of the 50% recycling investment tax credit with a ten-year period to carry it forward, rather than the 20% credit as proposed in the bill right now. In addition, we would also urge that this particular credit be tied, in some way, to the creation of new production capacity, rather than just to become a windfall for existing industries in the State. I think that is consistent with the need that you have heard on a net basis to increase the demand for secondary raw materials in the State.

I have a few others here. This one was again covered by the Public Advocate, but I think it merits reiteration; that is, the use in the bill right now of percentage requirements -- the 15% and 25% requirements -- for waste stream reduction. These are probably unworkable for the reasons that the Public Advocate described to you. They should be changed to performance standards that can be used to judge the adequacy of programs set up at municipal and county and private levels throughout the State.

I have some provisions concerning the economic regulation of the recycling and solid waste collection industries that we feel should be adopted. First -- which I believe is in the bill -- an exclusion of

all recycling revenues from tariffs established by the Board of Public Utilities for solid waste collector/haulers, plus no economic regulation by the Board of Public Utilities of recycling collections. The bill should also require, with regard to private contract scavenger collection, that either collectors be more easily franchised by the municipality, or that collection fees be established on a per-bag basis. Otherwise, residents who receive homeowner-contracted collection really have no opportunity to see a reduction in the costs of garbage collection and disposal through their recycling efforts.

Finally, to require a two-tiered tariff structure for commercial waste collection service, which involves roll-off containers -- typically these are 20, 30, and 40 cubic yard containers-- This, to some extent, anticipates the ultimate use of scales at landfills, which, sadly to say, is well behind schedule in this State. But, essentially, the tariff would split collection transportation from disposal, where the tariff would be established just for collection and transportation, and then the waste generated would be billed after disposal for the disposal costs. We feel that this would directly provide an incentive to recycle these materials, without necessarily threatening the existing solid waste collection and the collection industry.

We also feel that there should be an exemption to the requirements in the legislation which would apply to those counties and municipalities which have already substantially complied with portions of the bill. I am not particularly enthused about the idea of having to go back and create another recycling plan for Essex County. I have been doing that now as my career to date and I, quite frankly, would like to get on with making things happen.

The requirement for a separate collection of leaves should also be removed from the bill in order to allow for maximum flexibility as to the manner in which leaf collection is accomplished. In addition to the ban of leaves at landfills, leaves should also be banned from waste-to-energy facilities since they are not a particularly desirable fuel.

Let me skip ahead now. As I mentioned in my opening remarks, we have developed a proposal that goes a long way, we feel, toward integrating mandatory recycling and beverage container deposit concepts. I would like to essentially offer that as an alternative to this bill as it stands right now, or something that could be incorporated.

What this tries to do is to address the concerns that advocates of each of these bills have, as well as to look at market development. We feel that this addresses a number of goals that are part of this legislation, including reducing the amount of materials disposed of as garbage and strengthening markets for recycled materials; using the "polluter pays" principle to reduce litter; discouraging the use of non-recyclable containers and packaging; protecting existing jobs and creating new jobs; and maximizing private-sector involvement.

These provisions would primarily apply to selected food and beverage containers. With regard to these particular containers, essentially two courses of action would be required. The first would be that the State must receive from the private sector -- which could be further defined -- for our purposes, we are considering it to be container manufacturers, food and beverage distributors, and retailers-- The State must receive a commitment, in a form acceptable to the State, that a type of container will be accepted or purchased at a fair market value and will be recycled or otherwise reused and not disposed. The amount to be bought back essentially by the industry would be equal to a percentage typically recycled in states currently employing beverage container deposits. In other words, on the order of 75% to 90% of all containers sold.

In the event that a commitment cannot be received, again now looking at this bi-container type plastic -- bimetal containers, aluminum containers, etc.-- In the event that a commitment can't be obtained for beverage containers, there will be a requirement that it be redesigned to be refillable and that a deposit would be placed on it to ensure its return. Alternately, if it is a food container -- food packaging as specified by the bill -- it would then be subject to a

tax, the intention behind that being that it would, for the first time, provide an incentive on the supermarket shelves for consumers to buy the same products in recyclable packaging as opposed to non-recyclable packaging. Ideally these packages that are subject to a market commitment should be labeled that they are not intended for disposal in New Jersey as another part of education.

Container deposits would be collected and empty containers would be redeemed at retail establishments or at an alternative location agreed upon by retailers, municipalities, and counties, and that taxes collected would be utilized for litter abatement, market development, and recycling programs, and could possibly, to some extent, shift the tax burden away from property owners. Landfill, as it stands right now, is oriented more toward consumers.

That's it for now. Thank you for the opportunity. If you have any questions, I would be happy to answer them.

SENATOR COSTA: Any questions, Senator Contillo?

SENATOR CONTILLO: I'm curious. In Essex County you say you now have mandated recycling.

MR. FASS: Yes.

SENATOR CONTILLO: How do you mandate it? What is the penalty for noncompliance?

MR. FASS: We are working on defining exactly what the enforcement procedure is going to be right now. This mandatory recycling program is not per se mandatory recycling. We have kind of taken a back door approach to it, since we were advised at the time we were considering the plan, by our County counsel, that we really didn't have the authority to just make an outright requirement of the municipalities, for example, to pass ordinances. The State can do that; apparently, the counties cannot. What we did was combine our recycling planning with our planning for a waste-to-energy facility, and decided that it was in the best interest of the County to reduce the size of the waste-to-energy facility by 15%, in anticipation of expanded recycling.

SENATOR CONTILLO: I'm asking you-- You have no system of enforcement then?

MR. FASS: As it stands now--

SENATOR CONTILLO: You're voluntary recycling in Essex County?

MR. FASS: Well, we do have 12 of 22 municipalities currently in the County with mandatory recycling ordinances.

SENATOR CONTILLO: That they themselves have voluntarily--

MR. FASS: Yes. However, with the opening of the waste-to-energy facility, waste which contained more than negligible amounts of specified recyclables -- in this case newspaper, corrugated cardboard, glass, and metal cans -- will not be accepted at that facility.

SENATOR CONTILLO: That's three years down the road.

MR. FASS: Yes, it is.

SENATOR CONTILLO: So for the next three years, though, it's really a voluntary system, except for those municipalities that have passed ordinances?

MR. FASS: For the most part, yes.

SENATOR COSTA: Thank you, Mr. Fass. John Brewer, Scoutmaster/Paper Recycling.

JOHN BREWER: Madam Chairman, Senators: My name is John Brewer. I represent Explore Post 189 from Wyckoff, New Jersey. We are a youth group, which for the past 25 years has been involved in recycling in our community. We have a depot system; we don't have curbside service. The reason I wanted to come down was to have some input into the Legislature as to what is happening to the groups which have, in the past, done the greatest amount of this recycling, how this is impacting at the current time, and with some ideas of how you might be able to help us with our financial problems that are coming in as a result of the impending legislation.

During the last two months, I have seen our rates on #2 paper, which is mixed papers and magazines, fall from \$24.00 down to \$14.00 a ton. According to my records, which have been around since the mid-1960s, this is the sharpest drop I have seen ever. This comes at a time when automobile and construction materials, which are the prime users of this material, are going quite strong.

In effect, what this is doing to the groups -- the volunteer groups that have this -- is that it is removing our financial base at the current time. As I say, we are--

SENATOR COSTA: What do you attribute that drop to?

MR. BREWER: I am told by my contractors that the reason for this is because the market is being inundated with material from more and more municipalities. My contractor also tells me that within a short amount of time he will be refusing paper. What I wanted to basically address was the problem of the market, that is to say that the industries are not there to absorb the product and, therefore, what is happening is, the groups that I say have done it in the past, are being-- I know our group will be in a position, within a short amount of time, where we will have to go out of business because we financially will not be able to support ourselves.

I can say that within the towns around me this represents quite a number of youth groups which, in the past, have been primarily financially supporting themselves in this manner.

One of the other things I wanted to bring up was the fact that the townships now get the money for the rebates, so there is a floor on this for them. This is not true for the volunteer groups. Even though that amount may be minimal-- For instance, in our case we have a bimonthly paper drive. In our community of 16,000, we recycled, last year, approximately 450 tons of paper -- #2. This represents about a \$3,000 rebate from the State. To a township that might not represent much money, but to a youth organization such as my own, it represents a considerable percentage of our income.

There are no methods now that the townships -- or that the money is going to them and it is not going to any of the groups that are involved in this, that have done this in the past--

SENATOR CONTILLO: Do you mean that the town gets the credit for the collection that the charitable groups do?

MR. BREWER: That is correct. Now for instance in my own community, we have had this since 1955.

SENATOR CONTILLO: What is your community, sir?

MR. BREWER: Wyckoff. My group has cultivated this throughout the community quite a bit. In other words, I can go down the street and I can name kids, and I know families. So they come to me because there is a personal attachment there. It is not a contractor; it is not a governmental agency, which automatically kind of turns people off. It is a local thing; it is a personal thing.

Right now I have a contractor looking at coming into our town, which the township committee seems very favorable to.

SENATOR CONTILLO: There is nothing to prevent your town's plan, being that you continue to collect paper. In other words, each municipality will have the right to set its own plan. Nothing automatically excludes you from continuing to do what you are doing. That's why--

MR. BREWER: Yes, I understand.

SENATOR CONTILLO: There is no grand brush here that says the State says--

MR. BREWER: The only problem is that as the market becomes more inundated with the product--

SENATOR CONTILLO: Which is going to happen to us, but that is going to happen anyhow, you know. As time goes on, more and more paper will be recycled. You know, it is going to happen throughout the entire State, more so in New Jersey than in any other state because we are the most populated state in the Union. But it is going to continue to happen.

MR. BREWER: Right. What I wish to express, as I say, is my concern, because I am representing the volunteer groups. I notice there was no one here. Most everyone is from the industries and that type of thing. I think I am the only one here who is representing the groups, which in the past have done this work, and cultivated the groundwork for it. In the process, they are being eliminated between big government and the people who are going to handle this material. We are being almost squeezed out of the picture. This represents--

For instance, in our youth group, we have had better than 1,000 young people of high school age come through our group. It has basically been-- We haven't had a dollar of taxpayers' money used to

support this. We have run an active program. We have had equipment purchased. We have had all types of activities involved and, as I say, we have never once touched public moneys. And here we are-- I have to explain to my kids that we are being pushed out of the market and that our group is going by the wayside.

SENATOR CONTILLO: It doesn't have to happen. That is what I am trying to say. Your town fathers are also responsive to the taxpayers of that town, and if they develop a plan that appears foolish, I would think it quite certain that you will be the first one to point it out to them, and so will their political opponents.

MR. BREWER: Well, at the current time what they are looking for, for instance in negotiating with the contractors -- curbside service, where they can provide that-- In my case, with my contractor, they found it was not feasible financially to have that type of system.

SENATOR CONTILLO: Excuse me. You said your contractor. You mean that the boys don't collect the paper themselves?

MR. BREWER: We are in the process of collecting it, stacking it, unloading it from vehicles, and placing it in containers. The contractor then picks up the dumpster that we have prepared for him. So we are involved in preparing this for the recycling contractor. At this time, though, within the area, as I said, we have had the most precipitous fall in the rate we get from it. Once it falls below a certain point, it becomes economically infeasible for even us to do it.

SENATOR CONTILLO: See, let me tell you what I envision. I envision a time when there will be very little price paid for paper, that eventually, within the next five years or so, I don't see anyone paying to receive paper. The impetus for this is going to come from the municipalities saving \$40.00 a ton, when it leaves it at the resource recovery plant. They will be looking, hopefully, for someone -- maybe they can leave it somewhere and only pay \$5.00 a ton.

Now, it is a reversal of thinking, but it-- This is what I see is going to happen. You may eventually have no price paid for that product. It may simply be a question of time before there is no reason for Boy Scouts or charitable groups to collect paper and sell the product, because the cost avoidance that municipalities are going to

have to deal with-- When they are going to have to quadruple and use the taxpayer, they are going to want to know why they are paying so much money to go to the dump. Why can't we at least sell it or pay to have it left at a paper or the homosite manufacturer, whoever will use the material?

So, you know, I don't see a rosy picture down the line with charitable institutions collecting that particular item of paper, and then getting money and reselling it. That is going to diminish. Regardless of what we do, more and more paper is going to come on-line because less and less municipalities are going to want to send it to the dump or to the resource recovery units.

MR. BREWER: The point I did want to address, as I say-- Everyone here is representing someone, so I felt I wanted to come down because I am representing the element which has handled that in the past, and the way it concerns them.

SENATOR CONTILLO: You may have a usefulness to your municipality as a collection agency. I mean, the boys themselves work the trucks, and you may be able to collect the paper for less money, you know, that any other contractor can.

MR. BREWER: I think they are leaning more toward using contractors on that because of insurance purposes. That is my own feeling at this time. I work on a committee that is with the township.

The other thing I wish to ask is if there is any chance in legislation where they can give the rebate actually to the group that runs it?

SENATOR CONTILLO: That is worth discussing.

SENATOR COSTA: Yes. We are pleased that you brought this to our attention, because it is not only your own group, as you state, but many churches presently are using that as a source of income. Parishioners will bring their paper to them in their dumpster.

MR. BREWER: I have to explain to my kids why we are being forced out. That is why I came here, because I wanted to hear it from my legislative people. I felt that economically that would be coming, but I wanted to hear it from you.

SENATOR COSTA: Right.

SENATOR CONTILLO: But you make a good point when you talk about if you are doing it, why should the credit go to the municipality, and not to the charitable--

SENATOR COSTA: That's a good point.

SENATOR CONTILLO: That is something that the Committee can do.

MR. BREWER: That is all I have. Do you have any questions?

SENATOR COSTA: No. Thank you very much.

MS. SHEIL: Madam Chairman?

SENATOR COSTA: Yes.

MS. SHEIL: May I just address that. That problem has come up before with the Tonnage Grant Program. I think there might be something you may want to put in the bill that would allow-- We would not, as a State agency, want to have to issue grants to every charitable organization in the State. That would be horrendous and would take forever to do. As it is, we now handle almost 350 municipal grants just in the Tonnage Grant Program every year. But I think that if we could put something in that would give municipalities the authority to give their share-- If they recycled 450 tons and the municipality got \$8.00 for every ton recycled, then they should give them \$2,400. If we could put something in that would give the municipalities the authority to turn that money over to them.

SENATOR CONTILLO: I'm sure the average man or the average town would be delighted to turn a check over to the Boy Scouts or a local church group.

SENATOR COSTA: Right. Thank you. John Edgar of Howell Township, please. (Mr. Edgar not present.) John Edgar not being here, Frank Brill, New Jersey Milk Industry.

FRANK J. BRILL: Thank you, Senators Costa and Contillo, and venerable staff members. My name is Frank Brill. I am representing the New Jersey Milk Industry Association.

SENATOR COSTA: May I ask something of you, Frank, before you start, and all of the rest, because the hour is getting late, and I know you are all tired? If you could not be repetitious, if we have heard something before--

MR. BRILL: I don't think any of this is going to be repetitious -- very little.

SENATOR COSTA: Okay, go ahead.

MR. BRILL: And I will talk very quickly. Our Association represents the State's major dairies. We are both concerned and confused as to the intended and possibly unintended effects of the mandatory recycling bill, S-2820, on the sale and price of milk in New Jersey.

Specifically, we are not sure whether the sponsor intended to include milk containers under the mandatory deposit and recycling provisions of the bill.

On the one hand, the bill's definition of "beverage" does not seem to include milk, and yet it's fairly clear that gallon and half-gallon polyethelene milk containers -- which constitute about 60% of all milk sales volume in New Jersey -- would be subject to a deposit of up to \$.25 per container. That's because the bill requires deposits on all plastic containers over 12 ounces, not just beverage containers.

In addition, the bill's definition of "plastic container" can be read to subject the common half-gallon, quart, and pint "paper" milk cartons to the same deposit, since plastic coatings are used for these containers. These constitute about 38% of the remaining milk volume sold here, with probably less than 2% represented by glass bottles.

If milk containers are subject to mandatory deposits, then members of this Committee should be aware that they are being asked to endorse legislation which will raise the cost of 98% of all milk sold in New Jersey. This is especially disturbing in light of the fact that the bill is absolutely silent on the question of how a consumer would redeem any portion of that deposit.

Finally, we wonder how these containers are to be recycled. If there is an existing market, we're not aware of it.

We heard at the recent hearing on the Assembly version of this bill that the plastics industry and the State's Office of Recycling are cooperating in research ventures to develop new markets for used plastic cartons.

This is encouraging. Perhaps a new use for used milk containers will be found and a market will be created.

Meanwhile, a "deposit" on milk containers which can't be redeemed could mean extreme hardship for consumers. More than 98% of the milk sold in New Jersey -- as I said -- is packaged in either plastic or plastic-coated containers. Thus, the consumer price for virtually all milk sold here would be increased substantially by the "deposit."

This will hurt families with children the most, and would be a serious obstacle to good nutrition. We urge you to amend or reject the legislation. Thank you.

SENATOR COSTA: Thank you, Frank. Senator Contillo, do you have something to say? (no response)

MR. BRILL: They're not going to answer the question.

SENATOR COSTA: They're not going to answer. Thank you very much.

MR. BRILL: Thank you.

SENATOR COSTA: I would like to call William Bertera, National Solid Waste Association. (Mr. Bertera not present.) Not being here, Barbara McConnell, New Jersey Food Council. Hi, Barbara.

BARBARA McCONNELL: Madam Chairman and members of the Committee: My name is Barbara McConnell. I'm President of the New Jersey Food Council, and I appreciate the opportunity to speak to you on Senate Bill 2820 and the issue of mandatory recycling on behalf of the retail food industry and its members.

First I would like to outline some of the reasons why our industry endorses the concept of mandatory recycling, but why we cannot support this legislation as presently written.

It has been said, and I will repeat, that there is no more critical issue facing our State than that of solid waste and our diminishing landfills, and the solution to these problems is a responsibility that we all must share. That's why our industry speaks out and why we have been so involved.

The New Jersey Food Council and its members have been one of the leading industries in the area of recycling -- receiving two years ago the State's Outstanding Industry Award for recycling efforts. And, for the past two years, I have served as a member of the New Jersey

Recycling Forum, which, as you know, is a group made up of representatives from the environmental community, business and industry, towns and municipalities, and municipal recycling coordinators from across the State. The Forum has served as an example of how different groups, with diverse points of view, can work together towards a common goal. One of our goals has been to carefully review the concept of mandatory recycling and to make recommendations to the Department of Environmental Protection, and to the Assembly and Senate Committees which would be considering this legislation.

At the request of the Commissioner of the Department of Environmental Protection and the Office of Recycling, the Forum carefully reviewed the draft legislation that's before you, drawing on the knowledge and expertise of its members in the area of municipal recycling, market development of materials, and collection and disposal systems, and in February made several recommendations to be incorporated into this legislation. However, when the bills were introduced, many of the Forum's recommendations were ignored.

As a result of our industry's involvement, our position on this legislation coincides with that of the New Jersey Recycling Forum, which I am sure has been presented to you. Therefore, we urge your consideration of the following recommendations:

First, amend Section 3 to provide protection to existing recycling programs. The purpose of this bill should be to stimulate new and additional collection and reuse of recyclable materials. It should not encourage or permit new municipal programs to divert recyclable materials from existing private or volunteer recycling organizations.

Second, delete Sections 10 through 15, which give the Commissioner of Environmental Protection unprecedented power to impose mandatory deposits on all plastic containers, bimetal containers, and tires. It is a well-known fact that the food industry is opposed to deposit legislation, but the scope of the deposit system under this legislation is mind-boggling because it includes not only beverage and food containers, but literally thousands of other products sold in this State -- including such items as cosmetics, drugs, medical supplies,

household cleaning agents, baby powder, hair products, antifreeze, cryovac meat packaging, and the list goes on. Under this bill, the Commissioner of DEP, if after 18 months of enactment, determines that less than 55% of these materials cannot be recycled, then he has the authority to set in motion a deposit system. Not only would retail stores have to collect these deposits, but the public would have to take the materials either back to our stores or to a redemption center. If you think we get upset over bottles and cans, you can imagine how our objection extends to having these materials -- all of these materials -- brought back to our stores.

And, even after a deposit is placed on these materials, and you collect them, what then will you do with them?

Until markets are developed and research and technology devised to recycle these materials, they will end up in our landfills. And in the meantime, you will have allowed one department of government to impose a multi-million dollar program on the people of this State. I would suggest instead that the Commissioner of DEP be required, after 18 months or two years, to recommend to the Legislature a course of action for the recycling of plastic materials, in order that the Legislature can fully consider all of the economic and environmental ramifications of such a proposal.

Third, we are opposed to Sections 16 and 17, which would ban the sale of certain products sold in New Jersey, such as the Brik Paks, simple because they are not recyclable. Not only is this unreasonable, but it is not realistic. There are many products or packaging materials, such as Hefty Garbage Bags or the plastic wrap around chicken, that might not be recyclable. To ban products for that reason alone is tantamount to legislative book burning. We believe that alternative methods can be developed so that these materials can be reused or disposed of effectively, such as in waste-to-energy facilities.

In closing, I would like to emphasize again our industry's commitment to recycling and our desire to work with the State and local municipalities in finding a solution to New Jersey's solid waste problem. We believe this legislation is a step in the right direction,

and with some amendments can put in place a necessary program to begin to deal with the critical issues of garbage. We also feel that the ultimate solution will include not only mandatory recycling, but resource recovery, and limited use of landfills.

Thank you.

SENATOR COSTA: Thank you very much, Barbara. Senator Contillo?

SENATOR CONTILLO: I just want to respond to the first point you made. It was about encouraging municipalities to be in conflict with private enterprise. The bill does not encourage it. It permits it, but it does not encourage it.

Secondly, I would say to you that you probably have a very strong vested interest in seeing this bill passed, because as I repeated before, I will sponsor deposit legislation -- bottle bills -- if recycling does not work. We have a problem, and whatever solution we choose is going to be tough. But I say to you, as I said to you before, I am willing to try the recycling approach first. But, if it doesn't work, and doesn't work within a short period of time, I, personally, will either co-author or privately sponsor deposit legislation.

MS. McCONNELL: I appreciate those remarks, and I hope you clearly understand what our industry's position is, that we are very supportive of the concept of mandatory recycling. I believe this legislation is a step in the right direction. There are several sections that we called to your attention that we are opposed to. One is giving the Commissioner of DEP -- as I said -- unprecedented power to impose a deposit system on certain plastic containers that goes far beyond the scope of just beverage containers -- soft drinks and beer -- which are commonly found in your general deposit kind of legislation.

I think if after 18 months or two years recycling is not working under this kind of concept, that you are not recovering the kind of materials, then let the Department recommend down to the Legislature a system for recovering more materials. Our objection is that you put the power in the hands of the Commissioner to impose a deposit system, not just on soft drinks and beer, but on a much broader

scope of the materials, that have far-reaching environmental and economic ramifications. And, I don't think the Legislature wants to give away that kind of authority.

Our other objection was to carefully consider the language that bans certain plastic products. It is not just Brik Paks, but goes far beyond. I did a survey in one of our food stores to determine how extensive the ban on products would be under this legislation as presently written, and you're talking about literally hundreds of products and packaging materials.

SENATOR CONTILLO: We don't have the luxury to talk theories. I mean, we are literally drowning in our garbage. The best we can hope for is that it will be 1990 before we will be able to start burning it. So, we have two problems. The problem in 1990 may be different. We may be able to deal easily with these products in 1990, but for the next four or five years, they are going to be a bane to our landfills. Parts of our State-- Oops, they leak (referring to drink in a carton). Well, a defective product. (laughter)

MS. McCONNELL: I see you have gotten lots of samples, including, probably, a 12-ounce container of oranges in a plastic bag. Right?

SENATOR CONTILLO: I just tested the product, and then I read on it January, 1985. That means that it is about five months old, isn't it?

MS. McCONNELL: That's probably why it is in that kind of a container, because it has a longer shelf life, and it's more nutritious.

SENATOR CONTILLO: Is that the end of the shelf life?

SENATOR COSTA: You should tell Joe Katz about that.

SENATOR CONTILLO: It says right here, "January, 1985." Does that mean that I drank something that is five months overdue? Is he trying to destroy the sponsor--

MS. McCONNELL: You'll be fine, Senator. As long as you don't ban certain packaging on the market, you'll be just fine.

SENATOR COSTA: Thank you, Barbara.

MS. McCONNELL: Thank you.

SENATOR COSTA: Last, but not least, David Lloyd, New Jersey Business and Industry Association.

If there is anyone here who didn't have their name on the list -- Mr. Lloyd is the last one we do have -- please let us know if you would like to testify.

DAVID LLOYD: Good afternoon, Madam Chairman, venerable staff -- is that the term that was used before -- and Senator Contillo, as well. I am going to take heed of your suggestion that the hour is late. I have no plans to read the five pages of material that you have before you, but I would like to just mention a couple of the highlights.

My name is David Lloyd. I am Vice President of New Jersey Business and Industry Association. On behalf of the Association's 11,000 member companies, I thank you for this opportunity to express our views.

I believe that most members of our Association support the concept of a statewide recycling program, and would do their share to try to make whatever system is developed work. However, I believe we are being naive if we think we can build a workable recycling system without first establishing adequate markets for the material that we recycle. You can recycle material if you can't sell it or give it away, as somebody else already said. There is an old saw that says, "Scrap isn't bought, it's sold."

The Recycling Forum -- and, again, you'll see that I'm skipping around -- which was mentioned before, has recommended that Sections 10 through 15 and Section 17 be deleted from the bill, and we concur with that recommendation. The plastic sections, in particular, may be the best example of the conflicting nature of the legislation.

At the present time, we are rushing to design and build resource recovery plants. The engineering standards, as developed by DEP for those plants, require acid scrubbers. These scrubbers, which are costly to build and operate, are designed to take the harmful gases out of the exhaust flume. It would appear that Section 13, in particular, I believe, as it deals with plastics and PVC material, is designed to prevent these materials from getting to the resource recovery plants in the first place. Question: Are we spending our

valuable resources for nothing? If we are over-designing plants and then we are not going to permit certain substances to be put into them, why bother designing them for that purpose in the first place?

If we look -- and I know this received extensive comment, so this will be brief -- at the paper recycling market in New Jersey, we will see that S-2820 would create several problems. At present, 56% of all newspapers and 52% of corrugate paperboard is being recycled. This is an example of recycling that is working. Unfortunately, the proposed new system may well disrupt the existing system and drive out the loose collection of profit and nonprofit entrepreneurs that keep the system working. Paper companies are concerned that these private suppliers may be replaced with governmental systems that may double or triple the cost of collecting paper, while at the same time lowering the quality of the product. There is a real danger of flooding the existing markets with inferior material. Paper recyclers would worry about the lack of quality control on municipal operations. Contaminated newsprint, so we are told, does not have a market. Over the years, bales of recycled paper have been dropped in garbage dumps because of a lack of quality or markets.

What may happen is that transporters and warehousemen of recycled material will have a booming business without producing any noticeable gain in achieving the goals of this legislation. I can envision a scenario that has a homeowner sorting his trash, which is picked up by collectors in separate containers or trucks. It would then be taken to a collection point, where the trash would be resorted and checked. It would then be taken to an interim storage facility pending sale to a recycler. If the storage facility reaches its capacity and there is no buyer, the recycled material could be, once again, transported to a landfill or resource recovery facility for disposal. An example of paper shuffling on a grand scale.

Incidentally, I would call to your attention that the new fire safety law is presenting tremendous problems for the paper recycling industry with its excessive and costly over-regulation of storage facilities.

Other concerns include the elimination of pressure tape from cans. Apparently the legislation would equate this material with ring tops. I'm not sure that we are convinced that that should be the case.

In Sections 19 and 20 we appear to be holding solid waste landfills and resource recovery facilities hostage to recycling programs and plans. Given the problems involved with the mere siting of these facilities, do we want to impose additional administrative restrictions?

In conclusion, S-2820 is an attempt to define and implement a comprehensive recycling system for the State. Certainly, it has generated a good deal of discussion, which is really the first step that has to take place. It would appear, however, that the interrelationship of the various regulatory, market, and political components needs more work. The bill places requirements on existing county solid waste management systems that may be counterproductive. The result is a noncohesive program.

We urge that this bill be substantially reworked. The New Jersey Business and Industry Association would like to work with you in developing a workable program which would have realistic short- and long-term objectives.

Thank you.

SENATOR COSTA: Senator Contillo, any questions? (no response) If not, thank you very much.

MR. LLOYD: Thank you.

SENATOR COSTA: And, thank you for your patience.

SENATOR CONTILLO: I would like to thank everyone.

SENATOR COSTA: I would like to thank everyone who has been here, and for staying this long. It has been a long day. I would like to thank both Senators, as well as our staff members, and the ladies here who are working on the transcription. Ms. Sheil, thank you very much.

SENATOR CONTILLO: I, too, would like to thank everyone who came to testify today. Even though we sort of abused them a little bit, we took, very seriously, everything everyone had to say.

(HEARING CONCLUDED)

APPENDIX

SENATE ENERGY AND ENVIRONMENT COMMITTEE

Public Hearing, May 22, 1985

A-3382

STATEMENT OF THE SPONSOR

Assemblyman Arthur R. Albohn

I first want to thank Senator Dalton and the members of the Committee for their recognition of what A-3382 can do toward resolving New Jersey's solid waste crisis, and scheduling it at this early date, less than three months after its introduction. Your interest and concern are very much appreciated.

Secondly, I want to make it clear that this is not the work of one person, but of a large group of people from a wide variety of backgrounds. They have put in such a large number of hours of effort that it must amount to a substantial number of man-years. The Recycling Forum in particular, along with interested environmentalists, recycling professionals, representatives of business interests, representatives of solid waste trade associations, and others, have all played a part. Major input was provided by the Office of Recycling, the Department of Environmental Protection, and the Division of Taxation. Finally, it was all pulled together by the members of the Office of Legislative Services. We owe each of these contributors a debt of gratitude for their Herculean effort in producing what is bound to be landmark legislation,

(continued)

not only for New Jersey, but for the entire country.

Recycling has now come of age. It is no longer a tool of hobbyists, lay environmental enthusiasts, or for the casual attention of home-makers, Scout troops, etc. On the other hand, we owe such individuals our gratitude for laying the groundwork for recycling on a far more extensive scale. They persisted in spite of a variety of obstacles, the major one of which was disinterest on the part of the public in general.

But the problems faced in our State with the disposal of solid waste have now forced recycling into the center stage limelight, and we are about to embark on a program more ambitious in its scope than anyone dreamed possible a few years ago. We can no longer tolerate disinterest, apathy, or annoyance at minor inconveniences that may have to be tolerated in reducing the magnitude of our solid waste disposal problem.

As a result, this bill is a hard-hitting, tough bill. It pulls no punches. It calls for commitment and involvement on the part of everyone, every citizen, every industry, every business operation, every level of government. Such commitment is absolutely necessary if we are to resolve the problems the state and the nation face, not simply with hazardous waste, industrial waste, toxic waste, sewage wastes--but with the everyday product of our everyday lives--the waste from our homes and our style of living,

(continued)

whether it be humble or grand.

It is said that the elephant is an example of an animal designed by a Committee. It has certain incongruities, perhaps certain weaknesses. This bill is of the same nature. It, too, was designed by a Committee, and it has certain weaknesses, some of which I will point out in a moment or two. But Hannibal would never have crossed the Alps without his elephants, and we will never resolve our solid waste crisis without a bill like this one.

I urge it to you for careful consideration, but I ask also that not too much major surgery be done on it. For the most part, it simply needs some fine tuning, and I would be delighted to participate with you in your efforts to that end.

I must, however, recommend deletion or modification of several sections, which seem to have little scientific basis for their inclusion. They seem to be based primarily on emotional impressions or opinions, and not up-to-date science.

With regard to Section 13 on the recycling of plastic containers, I urge that it be broadened and made more specific so that each type of plastic container can be considered separately, and judgment on its recyclability made separately. Plastics are not a family of materials that can be mixed and matched. For the

(continued)

most part, they are incompatible with one another, and have to be processed separately. If a method cannot be developed for recycling one particular plastic material, that does not mean it cannot be developed for others. Each must be taken on its own, whether it be polyethylene, polypropylene, polyethylene terephthalate, polyvinyl chloride, or a host of other materials, whether now in existence or to be developed in our scientific laboratories in years to come.

With the broadening of Section 13, Section 16 becomes unnecessary, since PVC and polyvinylidene chloride and their mixtures would come under the purview of Section 13.

I also ask that Section 15, prohibiting acceptance of PVC containers at waste to energy facilities, be deleted in its entirety, since it is not based on anything scientific but simply on someone's opinion that is not borne out by scientific fact.

Prohibition of PVC containers from being processed at waste to energy facilities does not remove PVC from that stream. PVC is one of the most versatile plastic materials we have. If we aim to drive it off the market, then we must drive out PVC flooring, shower curtains, table cloths, shoe materials, piping, wire insulation, and a host of other useful products. The sad part of any such effort is that it is unnecessary, because it has been

(continued)

thoroughly demonstrated that well designed incinerators readily decompose, virtually without a trace, any toxic materials that might be given off by their combustion. This is as true of PVC as it is of a myriad of other materials, all of which give off toxic materials improperly burned, including even paper.

As a final point, I recommend the deletion of Section 17, which would ban the laminated packages known as "brick-packs." Brick packs are essentially no different than a host of other packaging composites, which are laminations of a variety of materials, the exact composition and arrangement depending on the requirements of their contents. To ban brick packs would also warrant banning of life-saver packages, Velomint packages, boilable pouches, cigarette packages, and a multitude of useful items in the retail and commercial packaging field.

It should not be our task to ban anything--this is the equivalent of environmental book-burning--but to learn how to handle the materials and to encourage others to put their shoulders to the wheel and assist in this effort. Much of this legislation is based on such a requirement--forcing people, under threat of deposit legislation, to develop means for recycling.

Solution of our solid waste problem is going to have to be a cooperative effort. Let us approach it in that spirit, by developing solutions to any problems that exist, and not by trying

(continued)

to make problems go away by ignorantly placing broad bans on useful materials.

I look forward to working with you on refinement of this bill, and will be happy to cooperate with you in any way you deem desirable.

Arthur R. Albohn
Assemblyman, District 25

Board of Chosen Freeholders

Morris County, New Jersey

May 22, 1985

Additional testimony of Morris County Freeholder Carol J. Murphy to the Senate Energy and Environment Committee.

Currently, 37 of Morris County's 39 municipalities have some type of recycling program. These programs operate on a variety of levels, from small volunteer drives to mandatory multi-material curbside collections. Overall, there are 13 mandatory curbside programs and 39 depot operations. These numbers continue to increase.

According to 1984 tonnage grant applications, Morris County municipalities, volunteer groups and businesses recycled 82,991 tons of material. This is an increase of over 13,000 tons of recycled material reported in 1983.

When approved, Morris County's updated Solid Waste Management Plan will require all municipalities to implement mandatory recycling programs. This will occur independent of a state-level mandate.

The Morris County Board of Chosen Freeholders, The Solid Waste Advisory Council and the Solid Waste staff have reviewed the proposed Statewide mandatory recycling bill in depth. While the concept of mandatory recycling is unanimously supported, we have recommendations for changes in the legislation proposed. Our municipalities have also been apprised of the impending legislation, and have provided us with comments which we have incorporated into our recommendations.

I will now briefly address five major issues which have been raised, and attempt to provide suggestions for workable alternate actions.

1. The establishment of mandatory 15% and 25% recycling goals will create a number of problems.

Fifteen or 25% of an unknown number cannot be calculated. Counties project municipal waste generation rates using a variety of formulas. Only when scales are in operation at all waste disposal facilities will a uniform accounting system be possible.

In addition, achievement of these rates in municipalities without high population densities will, in effect, mandate curbside collection. New Jersey has rural municipalities of almost 100 square miles. A "convenient means" for these residents to recycle will only mean curbside service, which is economically forbidding to many municipalities. It is these same municipalities which will become ineligible for Tonnage Grant monies when they don't achieve the 15% and 25% goals.

We recommend that recycling goals and programs be established by each county, in consultation with its municipalities, and pending DEP approval.

2. The proposed Bill defines MSW to include residential, commercial and institutional. Inclusion of commercial recycling in the definition will allow commercially active municipalities to meet established goals and requirements while expending little energy on residential waste stream reduction efforts.

Tonnage figures from 1984 show that when using Morris County solid waste projections for each municipality, the commercial recycling tonnage is so high that some commercially active municipalities are reporting waste stream reduction rates of up to 70%. In one of these municipalities, residential waste stream reduction efforts accounted for only .4% of a reported 56% reduction in MSW. (see appendix A).

It is our recommendation that commercial recycling be eliminated from the definition of MSW in order to direct energy toward residential waste stream reduction efforts instead of toward "finding" more existing commercial recycling. Commercial recycling should be defined and addressed independently.

3. The market development strategies incorporated into this Bill and proposed as amendments to a number of other existing bills are fundamentally essential to increasing recycling in New Jersey.

However, in order to cushion the impact of the increased volume of materials on the markets, it is recommended that these strategies be implemented and allowed to become effective before the mandatory recycling requirements for municipalities are enforced.

4. It is apparent that although the Bill is a mandatory recycling bill, it lacks comprehensive enforcement strategies. If commercial and institutional recycling are included in the mandate, who will be responsible for enforcement on those levels? Certainly, municipalities can not monitor commercial and institutional waste streams.

5. Our final recommendation re-emphasizes a position that the County of Morris has taken for a number of years. A comprehensive Statewide recycling program must include the implementation of container deposit legislation not just for certain plastic containers as proposed in this Bill but for all beverage containers.

Simultaneous implementation of Statewide mandatory recycling legislation and container deposit legislation will deliver the highest recycling rates while significantly reducing the economic burden placed on every municipality in the State.

In regard to Assembly Bill 3398, however, we feel that by combining Mandatory Recycling and Bottle Bill legislation in this way eliminates the effectiveness they otherwise could achieve independently.

The County of Morris commends the recycling initiatives taken by the State of New Jersey. We are now and will continue to work toward achievement of our highest possible recycling goals. I thank you for your time, and hope that our recommendations will be utilized toward development of an effective and comprehensive recycling plan for the State of New Jersey.

SOLID WASTE REDUCTION *

MUNICIPALITY	RESIDENTIAL %	IND. & COMM. %	TOTAL %
BOONTON	5.4	7.8	9.7
BOONTON TWP.	6.45	0.0	3.12
BUTLER	3.8	3.4	3.7
CHATHAM	8.0	10.7	9.1
CHATHAM TWP.	8.4	42.4	14.5
CHESTER	NA	NA	NA
CHESTER TWP.	NA	NA	NA
DENVILLE	NA	NA	2.6
DOVER	3.3	8.0	5.7
EAST HANOVER	2.9	15.0	9.9
FLORHAM PARK	3.0	.46	1.0
HANOVER	5.4	9.9	8.5
HARDING	9.0	6.6	8.2
JEFFERSON	2.4	84.6	9.3
KINNELON	10.4	49.3	17.7
LINCOLN PARK	6.1	23.0	11.7
MADISON	1.2	11.3	4.7
MENDHAM	3.0	20.36	6.9
MENDHAM TWP.	NA	NA	NA
MINE HILL	NA	NA	NA
MONTVILLE	2.7	158.6	65.2
MORRIS PLAINS	7.2	63.2	50.4
MORRISTOWN	1.14	2.43	2.08
MORRIS TWP.	.02	1.8	.6
MOUNTAIN LAKES	5.9	19.5	9.9
MT. ARLINGTON	NA	NA	NA
MT. OLIVE	3.5	68.1	13.8
NETCONG	NA	NA	NA
PAR-TROY	.0009	12.9	6.1
PASSAIC	6.62	NA	4.67
PEQUANNOCK	1.7	6.5	3.3
RANDOLPH	.38	209.0	56.1
RIVERDALE	NA	NA	NA
ROCKAWAY	NA	NA	NA
ROCKAWAY TWP.	3.1	21.5	10.8
ROXBURY	9.4	179.1	69.0
VICTORY GARDENS	NA	NA	NA
WASHINGTON	0.4	209.0	26.5
WHARTON	8.3	18.2	17.1

*Information compiled from 1984 Tonnage Grant Reports and 1984 Morris County solid waste projections.



Thomas H. Kean
Governor

NEW JERSEY DEPARTMENT OF ENERGY
101 Commerce Street
Newark, New Jersey 07102

Leonard S. Coleman, Jr.
Commissioner

March 12, 1985

Mr. Frank Ryan, Vice President
Government Relations
Rubber Manufacturers Association
1400 K Street, N.W.
Washington, D.C. 20005

Dear Frank:

Attached is the final draft of the proposed Plan of Action based on the revisions discussed between you and Roger M. Guttentag by telephone on March 8, 1985. If this final draft is acceptable to your Association, then I would like to begin working out with you the specific details for each of the five major tasks described in the Plan of Action. This could be accomplished through an initial series of meetings to discuss:

1. Tasks I and II.
2. Task III, A - C.
3. Task IV.

I am recommending that discussions on Tasks III.D and V be held later since their development seems contingent on the completion of the above tasks. The agenda for each meeting could be as follows:

- A. Task Scope.
- B. Identification of Required Information.
- C. Estimate of Time Needed.
- D. Determination of Lead Responsibility for Joint DOE/RMA Subtasks.

Please contact me or Roger, at your earliest convenience to discuss the above proposal.

Sincerely,

Mary L. Sheil

Administrator

Office of Recycling



Thomas H. Kean
Governor

NEW JERSEY DEPARTMENT OF ENERGY
101 Commerce Street
Newark, New Jersey 07102

Leonard S. Coleman, Jr.
Commissioner

OUTLINE OF AGENDA FOR DEVELOPING PLAN OF ACTION
BETWEEN RMA AND NJDOE
March 8, 1985

<u>TASK</u>	<u>AGENCY</u>
<u>I. Definition of Problems</u>	
A. Estimate of quantity of tires disposed in New Jersey (including existing stockpiles).	DOE/DEP/RMA
B. Describe existing collection and disposal system for whole tires.	DOE/DEP
C. Diminishing NJ landfill capacity.	DOE/DEP
D. Estimate of cost to landfill all scrap tires annually. DOE/DEP	
<u>II. Preliminary Assessment of Market Demand for Scrap Rubber</u>	
A. Using Whole Tires:	
1. Retreading	RMA/ARA
2. Tire Reefing	DOE/DEP
3. Incineration	RMA
B. Using Shredded or Crumb Rubber:	
1. Rubberized Asphalt	DOE/RMA
2. Sludge Composting	DOE/DEP
3. Energy Products	RMA
4. Other Uses	RMA
C. Description of State Role in Market Development.	DOE

12X

III. Development of Tire Shredding Capacity
within New Jersey

A. Facility Siting

1. Technical Requirements: RMA
 - a. Acreage needed for receiving, processing and storage.
 - b. Utilities.
 - c. Transportation access.
 - d. Site Preparation.
 - e. Physical facilities.
 - f. Permitting Requirements.

B. Recommended Technology RMA

C. Economic Issues RMA

1. Costs:
 - a. Estimated capital costs at different Tires Per Day (TPD) capacities.
 - b. Estimated operating costs at different TPD processing rates.
 - c. Estimated revenues from product sales at different TPD's.
 - d. Estimated net value of Tire Shredding Facility given a, b, c.

D. Preliminary Recommendations of Potential Sites with respect to: DOE/DEP

1. Proximity to tire sources
 - a. existing.
 - b. potential.
2. Proximity to markets for shredded product.
3. Availability of publicly-owned property which is suitable for industrial uses.

4. Evidence of local support.
5. Need for economic development.

IV. Development of Reliable and Economical
Tire Collection System

- | | |
|---|-------------------|
| A. Sources of scrap tires | DOE/DEP/NJTDA |
| B. Appropriate intermediate collection and transfer sites. | RMA/NJTDA |
| C. Methods for storing and transferring collected scrap tires to central processing facilities (for retreading or shredding). | RMA/NJTDA |
| D. Estimated collection and transfer costs. | RMA/NJTDA |
| E. Voluntary or mandatory designation of intermediate collection sites. | DOE/DEP/RMA/NJTDA |
| F. Regulatory issues affecting scrap tire collection and transfer. | DOE/DEP |

V. Financing, Regulatory and Political
Issues.

- | | |
|---|-------------|
| A. Financing Options: | |
| 1. Private financing options. | RMA |
| 2. Joint public/private financing options. | DOE/RMA |
| 3. Other options | DOE/RMA |
| B. Regulatory Issues | DOE/DEP |
| 1. DEP: | |
| a. Division of Waste Management | |
| b. Air Resources | |
| c. Water Resources | |
| 2. Board of Public Utilities. | |
| C. Discussion of Tire Recycling Plan Within the Context of Past and Present State Solid Waste Policies. | DOE/DEP/RMA |

PAPER RECYCLING IN NEW JERSEY

Prepared by
American Paper Institute
May 1985

PAPER RECYCLING IN NEW JERSEY

The paper recycling industry is a highly efficient, successful industry, made up of 19 paper and paperboard mills that use waste paper as their raw material. In addition, there are over 75 waste paper dealers and brokers. The collection system for recyclable paper involves millions of New Jersey residents whose voluntary efforts see to it that 50% of New Jersey's recoverable paper is collected for recycling. Over 50% of New Jersey's residents who have old newspapers to be discarded, place the newspapers into the collection system for recycling rather than disposing of them in the state's landfills.

In addition, there are thousands of workers in New Jersey who include paper recycling as a part of their jobs. They separate old corrugated containers from other waste to be collected by private haulers, and in some cases, individuals collect used cardboard boxes and sell them to dealers to make an income. Office workers also separate computer printout papers, tabulating cards and assorted white papers for recycling where they work.

The New Jersey collection rate for recyclable paper is close to if not the highest in the United States, according to a survey conducted by the American Paper Institute.

New Jersey's 19 recycling mills consumed about 850,000 tons in 1983, and in that year, 768,000 tons were collected in New Jersey. Waste paper for recycling moves back and forth across state borders. About 375,000 of the 850,000 consumed in New Jersey comes to New Jersey from neighboring states. Also, of the 768,000 tons collected in New Jersey, about 293,000 were shipped to neighboring states and some of the tonnage collected in New Jersey was exported to paper recyclers overseas.

In New Jersey, the collection rate of all paper consumed in the state is about 33% compared to a national average of 27%. Discounting paper that is not available for collection, such as panelboard in permanent construction, gypsum wallboard, toilet tissue, permanent records and paper burned in fireplaces, New Jersey's collection rate is 50% compared to a national average of 36%.

New Jersey's rate of collection for old newspapers is 56%. Probably no other state has a collection rate this high. The national average for collecting old newspapers is 29%.

Collection of old corrugated containers is 53%, which is very high compared to the national average of 46%. The collection rate for mixed office papers is 33% compared to the national average of 20%.

The actual data collected in the survey are shown in Tables I and II.

In 1984, the total collection of recyclable paper in the United States was approaching 21 million tons. About 17.6 million tons were utilized in domestic mills, and about 3.4 million tons were exported.

In the future, two recycling mills that are now shut down, one in New Jersey and one in Pennsylvania, are scheduled to be reopened. Both will depend upon waste paper, much of which will probably be collected in New Jersey, by the private collection system now operating.

Also, as export demand increases, it is quite possible that more waste paper will be collected in New Jersey and shipped from the ports of New York, New Jersey and Pennsylvania.

Paper recycling in New Jersey is a large, prosperous and growing business. To meet total demand, now and in the future, will require the continued participation of New Jersey's residents and business operators. The free market collection system which has provided an adequate supply of recyclable paper in the past will most certainly provide an increasing supply to mills located in the State, to mills located in neighboring states and to export customers.

NOTE: The above information is provided by The American Paper Institute (API), the paper industry's national trade association. Twenty-two of its member companies operate thirty manufacturing facilities in New Jersey. API's Paper Recycling Committee conducts an extensive public relations program to encourage additional collection of recyclable newspaper.

TABLE I**NEW JERSEY WASTE PAPER SURVEY - 1983**

	<u>Corrugated</u>	<u>News</u>	<u>Mixed</u>	<u>High Grades</u>	<u>Totals</u>
Mill Capacity to Consume Waste Papers	199,054	347,876	142,170	160,931	850,031
Purchased by Mills from New Jersey Sources	131,765	186,584	115,767	41,473	475,589
Purchased from Out of State	67,289	161,292	26,403	19,458	374,442
Shipped Out of New Jersey by Dealers	180,469	20,550	31,673	59,820	292,512
Total Recovered from New Jersey	312,234	207,134	147,440	101,293	768,101

Paper Recycling Committee
American Paper Institute

U.S. AND NEW JERSEY WASTE PAPER RECOVERY RATES - 1983
(Short Tons)

	Total U.S.			New Jersey		
	<u>Consumption (1)</u>	<u>Waste Paper Collected (2)</u>	<u>Collection Rate</u>	<u>Consumption (3)</u>	<u>Waste Paper Collected (4)</u>	<u>Collection Rate</u>
Total Paper and Paperboard	71,100,000	19,100,000	27%	2,300,000	767,000	33%
Old Corrugated Containers	18,400,000	8,400,000	46	583,000	312,000	53
Old Newspapers	11,700,000	3,500,000	29	370,000	207,000	56
Mixed Papers	14,300,000	2,800,000	20	451,000	147,000	33
High Grades	4,400,000	4,400,000	99	141,000	101,000	72

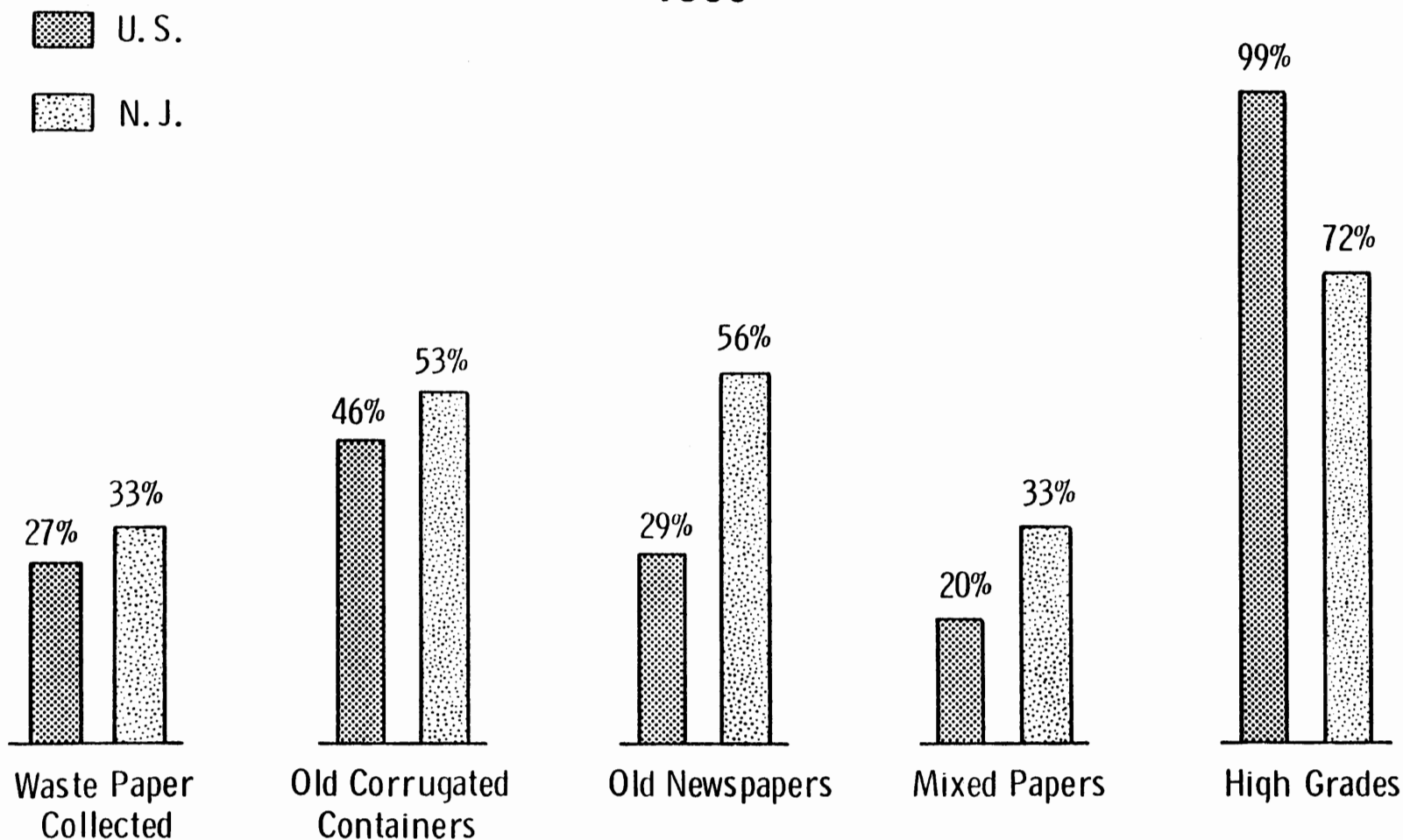
-
- (1) Consumption for total U.S. represents new supply; production plus imports minus exports.
 - Corrugated - consumption represents production of containerboard (linerboard, corrugating medium and filler chip board) minus box plant clippings.
 - Old newspapers - production at U.S. newsprint mills plus imports minus exports.
 - Mixed papers - consumption is an estimate of office papers used in offices in the U.S.
 - (2) Waste paper collected in total U.S. is based on actual data of waste paper consumed at U.S. paper mills based upon API 1983 capacity survey plus 1983 U.S. exports compiled by U.S. Bureau of Census.
 - (3) Consumption in New Jersey for total paper and paperboard, old newspapers, old corrugated containers and mixed papers is estimated by per capita consumption.
 - (4) Waste paper collected in New Jersey is based upon API survey of waste paper dealers and consuming mills operating in New Jersey.

NOTE: Consumption of old corrugated containers, old newspaper, mixed papers and high grades does not equal total U.S. consumption due to the exclusion of many paper products which do not become discarded after use such as books, permanent records, building products, and papers that are discarded after use but are not collectible such as toilet tissue, papers burned in fireplaces, etc.

1961

TABLE II
CHART

U.S. AND NEW JERSEY WASTE PAPER RECOVERY RATES 1983



Note: While the chart shows only 72% high grades collected in N.J. actual rate in N.J. is probably 99%. The 72% was reported by N.J. waste paper dealers, however, a considerable tonnage of high grade waste paper moves directly from paper converting plants to recycling mills thus by passing dealers.

April 24, 1985

API'S POSITION ON NEW JERSEY'S MANDATORY RECYCLING BILL

The American Paper Institute (API), which represents companies producing over 90% of the nation's paper and paperboard, wishes to take this opportunity to comment on proposed bills A-3382 and S-2820 which would mandate statewide source separation and collection of recyclable materials in New Jersey. The API is vitally interested in New Jersey because 22 of its members operate 30 manufacturing facilities in the state.

* * *

New Jersey has a success story - a highly efficient paper recycling system, operating through the cooperation of enlightened local governments, voluntary efforts of New Jersey residents and private enterprise. This network of paper recycling services consists of 75 dealers and 19 paper mills that are already recycling more than 50% of New Jersey's recoverable waste paper, believed to be close to, if not the highest collection rate in the nation. Continuation and expansion of this existing, successful cooperative effort should be encouraged.

New Jersey also has a problem. The American Paper Institute recognizes that the disposal of municipal solid waste is becoming increasingly difficult for many local governments in New Jersey. It is more and more difficult to site new landfills, and recent Federal legislation will make land disposal of municipal solid waste even more difficult and costly.

We recognize that the proposed legislation, which would establish mandatory statewide recycling, is an effort to ameliorate this problem. While we are sympathetic with the goal of achieving more effective solid waste management, the paper industry has the following grave concerns with this bill:

1. The existing successful paper recycling network is endangered by this bill. Although this proposed bill requires each district recycling plan to "give due consideration" to existing recycling services, this language is next to meaningless. The existing networks of separation, collection, transportation and sale of recyclable waste paper must not be disrupted.

About 768,000 tons of paper were recovered in 1983. New Jersey's recovery rates of commercially viable grades of waste paper are well above the national average (old corrugated containers - 53% as against 46%; old newspapers - 56% as against 29%; mixed office waste - 33% as against 20%; high grades - 97% - equal to the national rate). Keeping in mind that large amounts of the paper and paper products in municipal solid waste cannot be recovered for recycling because of today's technology and fundamental economics, the above figures truly reflect a success story.

2. Markets should be secured. Any effort, whether by public or private entities, to further increase the source separation and collection of recyclable paper should be accompanied by purchase agreements. A sensible balance between added supply and demand must be maintained over time in order to preserve a healthy collection system.

The sale and utilization of paper and paper products are determined by national and international markets. It is the overall requirements of these markets which drive the paper recycling system, not the available supply of waste paper in a single state.

Because of the complex market forces of this national and international business, a state mandated increase in the available supply of waste paper in New Jersey may not be matched by a comparable increase in demand. Unless markets have been secured in advance by contract, the state would be left with mandated excess supplies that would just be another pile of waste in a different place that must be disposed of somehow. These excess supplies could also: (1) seriously damage the dealer network, resulting in lost jobs and the weakening of the collection network that has served the State so well; and (2) reduce the market value of generated waste paper resulting in a loss of revenue to the municipality.

3. State purchasing preference program. The proposed bill would require that by January 1, 1988, not less than 60% of paper products purchased by the State and by local governmental entities within the State shall be made from recycled paper. We believe that the State of New Jersey purchases about 1,700 tons of printing and writing papers and 1,300 tons of sanitary tissue products. The tissue products purchased have a high recycled fiber content. If the State were able to obtain all of its printing and writing papers as required by the new bill, the additional waste paper used would equal 500 tons a year, or less than one-tenth of one percent of what is now recycled in New Jersey. Inasmuch as there are no printing and writing paper mills in New Jersey with deinking capacity, all of the recycled printing and writing paper which New Jersey would purchase would come from out-of-state mills. Therefore, there would be no lessening of New Jersey's solid waste stream.

Another result of such a mandated purchasing preference program would be a substantial reduction in the number of potential bidders for government contracts on printing and writing papers. Out of 174 paper mills in the United States which produce printing and writing papers, only 12 have the necessary equipment to deink waste paper and produce recycled printing and writing papers.

4. A ban on packaging could hurt New Jersey consumers. We note that the proposed legislation would ban the sale of aseptic packaging (commonly referred to as "brickpack") on the basis that this package, composed of laminated paper, aluminium and plastic, is non-recyclable. This packaging meets an important need for preserving flavor without refrigeration, thereby offering energy savings. The proposed ban would deprive New Jersey consumers of the advantages of this packaging system.

We acknowledge that New Jersey faces a very real and imminent problem as to how to dispose of its solid wastes. The New Jersey mandatory recycling bill as presently drafted will not resolve the problem. We believe that the solution lies in a balanced approach to solid waste management. Such a balanced approach should combine materials recovery programs with strategically located waste-to-energy facilities and adequate landfills. Recently enacted legislation in the State has already established these priorities.

Paper recycling in New Jersey is already a success story as we have noted above. While we are concerned that a government-imposed, government-run paper separation and collection program would prove disruptive to the present well-working recycling system in New Jersey, there are steps that the State could take, working with representatives of the New Jersey recycling industry, to encourage increased paper recycling. To be sure that the costs do not outweigh the benefits, however, two points should be kept in mind:

1. Existing networks of separation, collection, transportation and sale of recyclable materials should be preserved.
2. Market studies should be conducted of the availability of clean homogeneous waste paper and the markets for same - present and future - both within and outside New Jersey. Prior to the collection of significant additional quantities of recyclable waste paper, markets for that paper should be secured by contract.

The American Paper Institute appreciates this opportunity to express its concerns with the proposed mandatory recycling legislation. We recognize the seriousness of the solid waste disposal problem facing many municipalities within New Jersey and we would be pleased to work with designated officials in New Jersey in developing a feasible solution.



Sierra Club

NEW JERSEY CHAPTER
360 Nassau Street, Princeton, N.J. 08540
(609) 924-3141

TESTIMONY ON THE MANDATORY RECYCLING ACT, S-2820, BEFORE THE SENATE ENERGY
AND ENVIRONMENT COMMITTEE, May 22, 1985

Presented by Albert Kent

The recent hearing in the Assembly Agriculture and Environment Committee on the Assembly companion bill to S-2820 suggested that there are many extremely difficult problems associated with increasing the recycling rates for almost all components of the waste stream. Obviously, getting a mandatory recycling bill into shape where it can be widely supported is going to be a long, tough job.

The only things that seem to be ready to move ahead are yard waste by means of composting and beverage containers providing a container deposit law is adopted.

The Sierra Club urges that in addition to holding hearings on S-2820, this committee also begin hearings on S-2247, Senator Pallone's beverage container deposit bill to see whether we can at least get that bill enacted while we continue to work on other fractions of the waste stream under S-2820.

As a less desirable alternative to the above or perhaps in addition, we urge that a deposit component be built into S-2820 in place of present sections 13 and 14.

In 1981, the Sierra Club endorsed then Assemblyman Dalton's Recycling Act, A-2283, but we did so with considerable reluctance because we felt that a large part of the support for that legislation was coming from the beverage and grocery interests for the purpose of diverting the state away from passage

of a beverage container deposit law. To us, a deposit law was basic to a sound recycling program.

Interestingly, beverage containers, which form some 5% to 6% of the municipal waste stream, were a major target of the original State Recycling Plan developed in 1980 by the State Advisory Committee on Recycling. The goal for beverage containers was some 200,000 tons per year of glass and aluminum beverage containers.

Sadly, the records indicate that we are currently recycling less than 10% of that goal and less, apparently, than was recycled in 1980.

If S-2820 as written were put into effect tomorrow, aluminum recycling would undoubtedly increase substantially since it is mandated in all communities, is easy to collect, and a healthy market is at hand. Still, it is most unlikely to reach the 85% to 90% level typical of deposit law states.

The story is worse for glass. Given low market prices (due to the great success of the New York and New England deposit laws), difficulties and hazards of handling and the lack of a specific mandate for recycling this material, glass beverage containers promise little in the way of increased recovery.

Plastic beverage bottles and bi-metal cans, of course, offer the least promise for beverage container recycling. With their low marketability, they will contribute little to recycling under the present S-2820.

By way of contrast, we can look at figures published for New York State in the recent report of the Rockefeller Institute of Government published on March 15. After less than one year of operation of the New York deposit law,

the following recycling rates had been achieved:

77% of beverage container glass:

(vs. 5% for New Jersey)

59% of aluminum and bi-metal cans combined

(vs. 20% for aluminum and zero for
bi-metal cans in New Jersey)

33% of plastic PET bottles

(vs. zero for New Jersey)

Sections 13 and 14 of S-2820 move us in the direction of a deposit system for bi-metal cans and plastic beverage bottles if certain goals are not met after eighteen months.

We believe this is much too long, the process should cover all beverage containers and that the goal of a 55% recycling rate is too low. We urge, as indicated earlier, that hearings on the deposit bill, S-2247, be begun now (or combined with the S-2820 hearings) or that deposit provisions comparable to those in S-2247 be incorporated into S-2820. We must no longer sit by while literally hundreds of thousands of tons of beverage container material of all kinds from New York and New England deposit states pour into recycling markets - much of them right here in New Jersey - and while our own beverage containers continue to be jammed into our fast diminishing landfills. New Jersey is closer to the markets. We should come first, but it will only happen with a deposit system because industry is then mandated to collect the material. Rather than pay to have it landfilled, they will sell it for recycling no matter what the market price.

Finally, we wish to note that we are working with other environmental and public interest groups, recyclers and public works officials in an attempt to assist in the process of arriving at workable mandatory recycling legislation with as wide a range of acceptance as possible.

Thank you very much.



At the Third National Recycling Congress held in New Brunswick, Mr. "R. E. Cycle" from the New Jersey Office of Recycling congratulates Albert Kent of West Orange at the display booth of the Can and Bottle Bill Coalition. The Coalition supports increased recycling through passage of a mandatory beverage container deposit law or "bottle bill" which would require a ten cent deposit and refund value on beer and soft drink containers. Kent claims the return of deposit containers to stores for recycling would cause a five percent reduction in municipal solid waste and an 85% decrease in container litter.

Can & Bottle Bill Coalition

S U M M A R Y

Container Deposit Legislation

Can & Bottle Bill A-2606, S-2247

The purpose of this bill is to reduce energy and raw material consumption, reduce solid waste going to landfills, and to achieve an 85% reduction in can, bottle and broken glass litter.

The bill provides that:

1. A minimum refund value of ten cents shall be placed on all glass, metal and plastic beer and carbonated soft drink cans and bottles.
2. Beverage manufacturers are permitted to use either refillable glass bottles or single use metal, glass or plastic containers.
3. Every dealer shall pay the refund value for the return of containers of the kind he sells.
4. Every distributor shall pay dealers such refunds for the kind the distributor sells.
5. In addition, distributors shall pay dealers a handling fee of 1½ cents per container returned.
6. Redemption centers may be established as alternative locations for the return of containers for refunds.
7. Snapoff tabs on cans and non-degradable plastic carrier rings are prohibited.
8. A tax of \$.0002 per 12 ounces of beverage sold is levied on distributors to fund the administration and enforcement of the law.

Note: Because of labor requirements for receiving, handling and recycling empty containers, an increase of nearly 4000 jobs is expected.

New Jersey State Library

A DEPOSIT LAW WILL HELP NEW JERSEY MEET ITS RECYCLING GOALS

The New Jersey recycling program was developed to conserve diminishing landfill space and control solid waste disposal costs by removing as much reusable material from the solid waste stream as possible.

In the recent report of the Assembly Energy and Natural Resources Committee, RECYCLING, RESOURCE RECOVERY AND EFFECTIVE SOLID WASTE MANAGEMENT, the Committee found that a beverage container deposit law would complement the recycling program by substantially increasing the volume of beverage container material recycled and be a "useful component of effective solid waste management in New Jersey." It found no merit in the claim that a deposit law would jeopardize achievement of recycling goals by diverting income producing material away from local recycling centers.

The following items support the Committee's conclusions:

Only 25,000 tons per year of glass are being recycled in New Jersey. This amounts to a mere 5% of all glass in the waste stream and 10% of all beverage glass.

The amount of recycled glass is only about 4% of all material recovered under the state grant program in 1983.

While 95% of New Jersey's waste glass is still going to the state's overburdened landfills, 200,000 to 300,000 tons per year of scrap glass generated by deposit laws in New York and New England are being shipped into our state. This scrap is processed for use in New Jersey glass furnaces or for transshipment to Pennsylvania, Virginia and other states to the west and south.

Material	In Waste Stream (tons)	1983 Grant Program Recycled (tons)
Total Glass	500,000	25,000
Bev. Glass	250,000	12,500
Non-Bev. Glass	250,000	12,500
Bev. Plastic	10,000	Negligible
Bev. Aluminum	20,000	2,000

A deposit law would increase glass recycling from 25,000 tons to at least 200,000 tons per year. This scrap would be in a preferred position to be marketed in New Jersey or to the west and south.

Future prospects are for sharply climbing waste disposal costs, while prices for scrap glass are likely to decline as bottle bills in New York and other states create greater supplies. Cost avoidance - not recycling income - will be the dominant consideration of municipalities in looking at recycling.

Virtually all plastic beverage containers are going to landfills. With deposits, plastic containers would be concentrated in dependable quantities sufficient to attract potential users of PET plastic scrap. Plastic recycling is now still in its infancy.

The amount of aluminum containers recycled is so small in tonnage as to achieve little landfill conservation. Recycling income from aluminum is far less than from glass. With deposits, aluminum container recycling should reach a 90% recovery rate.

Total net income to New Jersey centers from present recycling of beverage containers is negligible compared to the value of the increased landfill conservation and disposal cost avoidances which would be achieved under a deposit law.

Under the deposit system, overall municipal waste would be reduced in the order of 5%.

While reduction of container litter remains the primary goal of most groups in seeking a deposit law, a significant added benefit lies in the law's contribution to solid waste reduction. This will ease the burden on shrinking landfills and help minimize the amount of glass and metal going to future energy recovery plants, a necessary step in reducing plant size and insuring trouble free operation.

Objections that the deposit system will be an impediment to recycling are patently false. To the contrary, a deposit law will clearly help New Jersey achieve its recycling goals.

League of Women Voters of N.J. • N.J. Chapter, Sierra Club
N.J. Environmental Lobby • Recreation and Park Association
Public Interest Research Group • Trout Unlimited • Roadside Council
Appalachian Mountain Club • N.Y. • N.J. Trail Conference

Glass, Pottery, Plastics & Allied Workers

(AFL-CIO, CLC)



PRESIDENT

SECRETARY

ADDRESS

ADDRESS

LOCAL UNION NO. 9

Millville, New Jersey 08332

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5-843

My name is Lawrence D. Levy and I am a member of Local #9, G.P.P.A.W, and an officer of that Local. I am here today representing not only that Local, but also the International G.P.P.A.W. and the rest of the glass workers in the State of New Jersey.

Labor has consistently opposed any type of forced deposit and we continue to do so. We have endorsed the Clean Communities and Recycling Act which is being sponsored by Senator James R. Hurley and, in the Assembly, by Assemblyman Marcella. This particular bill has been passed out of Committee and should be voted on in the near future. Basically, this is the type of legislation that is needed. The greater Northeast has lost, in the last four years, almost nine thousand members, which doesn't include the thousands of people who have lost jobs that depended on the glass industry. Just last month, in New York State, Allied Corp. announced plans to close its upstate New York manufacturing operations which had employed 1,400 workers. This was a direct loss of jobs from the bottle bill legislation. The glass companies now will have to get this needed material all the way from Green Creek Wyoming. x

In 1975 we had 14,277 members in New Jersey. Presently, we have 6,718. In five years, between 1975 and 1980, we lost 2,517 members in New Jersey. Between 1980 and 1985 we lost 4,992 additional members. We lost 400 members in the plastic industry in New Jersey, with the greater number of jobs lost being in the glass industry, for a total of 7,509 jobs lost. Those jobs were in the \$17,500 to \$30,000 wage bracket. Those figures do not include the excellent fringe benefits enjoyed under the negotiated contracts.

A few items that should be and must be considered are:

1. The State is losing well-paying, tax-producing jobs in New Jersey.
2. For every glass job there are three industry support jobs lost.
3. Bottle Bill proponents claim that deposit laws create jobs for unskilled workers and their claim is not unfounded. However, those jobs are created at the expense of eliminating higher paying, skilled jobs in the container manufacturing industry.

Glass, Pottery, Plastics & Allied Workers

(AFL-CIO, CLC)

PRESIDENT

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LOCAL UNION NO. 9

Millville, New Jersey 08332

 S-843

_____, 19____

Already, as a result of deposit legislation in New York State, manufacturers in northern New Jersey have ceased operations. Cumberland and Salem counties would also suffer a severe job loss as well. When the bottle bill was passed in New York, the O-I plant in Bridgeton was closed. At one time, this was the largest glass producing factory in the world. When this plant closed, a local trucking company, one of many, laid off one hundred and forty truck drivers. The glass workers in the southern part of New Jersey have two choices in seeking new employment -- the casino industry or the State Correctional Institution in Leesburg, New Jersey.

When you have any type of forced programs, one must take into consideration who is going to handle all the glass and how far it is going to have to be transported. We, in the local Foster Forbes plant, buy direct from our local recycling company in Vineland, but on occasion, we also buy glass transported from the New England States. If the glass industry closes its factories in New Jersey, where do you think your glass is going to go and how much do you think it will cost you to store it for shipment and to ship it?

Just last week the New York Legislature had a special meeting with people from the different committees, distributors, the people who collect the glass and others, including our Legislative Director, Arnetta McKeever. After many hours of discussion it was finally admitted that they had created a monster and no one knows how to get out of the mess that was started by the environmentalists. Glass makes up a small percentage of litter, but the Clean Communities and Recycling Act takes care of all types of litter and will, if properly managed, give money back to the cities so that the cities can employ people to pick up the litter. This type of litter pickup has been in effect in Washington State with great results.

I would like to remind all of our Legislatures that we have laws prohibiting alcoholic beverages in our parks, the new and very strong laws against drunken driving and the law which focuses on the people who operate boats. We need only to enforce these laws and we would have cleaner parks and recreation areas in our state. Remember, tourism is still our number one industry.

Glass, Pottery, Plastics & Allied Workers

(AFL-CIO, CLC)



PRESIDENT _____

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SECRETARY _____

ADDRESS _____

LOCAL UNION NO. 9

Millville, New Jersey 08332

_____, 19____

 S-843

I have included with my statement to you, copies of articles from the New York Times. If you take the time to read these articles, you will see the type of problems that New York State is having. Don't compare us to the New England States. This State is one of the most populated states per square mile. New York didn't know what it was getting into -- now it doesn't know how to get out.

**Glass Container Industry
North Eastern States
(N.J., PA., N.Y., Conn., R.I., Mass.)**

<u>Glass Container Plants In Operation - 1980</u>	<u>TOTAL</u>	<u>Peak Employment Last 5 Years</u>	<u>Present Employment</u>
<u>NEW JERSEY</u>			
	TOTAL	<u>6,149</u>	<u>3,473</u>
Anchor, Salem		746	582
Anchor, Cliffwood		507	460
Ball, Carteret		420	350
Ball, Jersey City		400	(Shut Down)
* Brockway, Freehold		737	728
Foster Forbes, Millville		1,030	430
Leone, Bridgeton		100 (est.)	100 (est.)
Owens-Illinois, Bridgeton		850	(Shut Down)
Owens-Illinois, North Bergen		528	(Shut Down)
** Thatcher, Wharton		831	823
<hr/>			
<u>NEW YORK</u>			
	TOTAL	<u>3,606</u>	<u>1,235</u>
Central New York Bottle Co., Auburn		406	385
Glenshaw, Orangeburg		600	(Shut Down)
Leone, Rochester		100 (est.)	(Shut Down)
Owens-Illinois, Brockport		650	(Shut Down)
Owens-Illinois, Volney		350	350
** Thatcher, Elmira		1,500	500
<hr/>			
<u>CONNECTICUT</u>			
	TOTAL	<u>1,100</u>	<u>700</u>
*** Containers General, Dayville		1,100	700
<hr/>			
<u>RHODE ISLAND</u>			
	TOTAL	<u>600</u>	<u>-0-</u>
National Glass, Coventry		600	(Shut Down)
<hr/>			
<u>MASSACHUSETTS</u>			
	TOTAL	<u>750</u>	<u>200</u>
Foster Forbes, Milford		400	200
Owens-Illinois, Mansfield		350	(Shut Down)
<hr/>			
<u>PENNSYLVANIA</u>			
	TOTAL	<u>1,700</u>	<u>-0-</u>
* Brockway, Washington (2)		1,300	(Shut Down)
*** Glass Cont. Corp., Marionville		500	(Shut Down)
*** Glass Cont. Corp., Parker		500	(Shut Down)
<hr/>			
	TOTAL	<u>14,505</u>	<u>5,608</u>

- * Brockway shut down Washington, Pennsylvania plant and consolidated operations at Freehold, New Jersey plant, with no increase in employment at Freehold. previous Pa. Plant shut down in 1979 due in part to Mich. 1a
- ** Thatcher-Glass filed Chapter 11 January 1985.
- *** Glass Container Corp. shut down two Pennsylvania plants and consolidate operations in Dayville, Connecticut plant with no increase in employment at Dayville; now Containers General Co.

RCD 2/13/85

STATEMENT BEFORE THE
NEW JERSEY SENATE ENERGY & ENVIRONMENT COMMITTEE
ON S.B.2820
STATEWIDE RECYCLING PROGRAM

BY

EVERETT E. FULLER
Director, Government Relations
American Can Company
Greenwich, CT 06830

May 22, 1985

On behalf of the CAN MANUFACTURERS INSTITUTE including:

American Can Company - South Brunswick
Continental Can Company - Wayne
Crown Cork & Seal Company - North Bergen
National Can Corporation - Edison and Piscataway

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

THE CAN INDUSTRY IS AN IMPORTANT PART OF THE NEW JERSEY ECONOMY, MANUFACTURING MANY TYPES OF BEVERAGE, FOOD, AEROSOL AND GENERAL PURPOSE CONTAINERS.

THE BEVERAGE CAN SEGMENT PRESENTLY CONSISTS OF FIVE PLANTS EMPLOYING OVER 1200 PEOPLE. TWO OTHER PLANTS WERE CLOSED IN THE PAST TWO YEARS DUE IN LARGE MEASURE TO REDUCED SALES OF BEVERAGE CONTAINERS IN THE DEPOSIT LAW STATES OF CONNECTICUT, MASSACHUSETTS AND NEW YORK.

OUR INDUSTRY HAS SUPPORTED FOR MANY YEARS THE CONCEPT OF VOLUNTARY RECYCLING AS A MORE PRODUCTIVE ALTERNATIVE TO A FORCED DEPOSIT/RETURN SYSTEM. IN FACT, WE AND OUR SUPPLIERS, THE ALUMINUM AND STEEL INDUSTRIES, ARE IN THE FOREFRONT IN FOSTERING THE RETURN AND RECYCLING OF METAL PACKAGING. BECAUSE OF A STRONG MARKET AND EXTENSIVE RECYCLING PROGRAMS BY OUR INDUSTRY, ALUMINUM CANS HAVE ACHIEVED A NATIONAL RETURN RATE OF OVER 55 PERCENT.

OTHER TYPES OF PACKAGING PRESENT MORE DIFFICULT PROBLEMS FOR DIRECT RECYCLING BUT WITH A CONSTRUCTIVE APPROACH BY GOVERNMENT AND INDUSTRY SIGNIFICANT REDUCTIONS IN SOLID WASTE GOING TO LANDFILLS CAN BE ACHIEVED BY SEPARATING OUT THOSE MATERIALS FOR WHICH USES AND MARKETS CAN BE FOUND OR DEVELOPED AND USING THE OTHER MATERIALS TO CREATE ENERGY.

WE COULD SUPPORT LEGISLATION WHICH APPROACHES THE SOLID WASTE PROBLEM IN SUCH A CONSTRUCTIVE WAY, AND IF S.B.2820 WERE AMENDED TO ELIMINATE SEVERAL NEGATIVE AND REGRESSIVE ASPECTS REGARDING PACKAGING, WE BELIEVE ITS PASSAGE WOULD FURTHER THE DEVELOPMENT OF RECYCLING IN NEW JERSEY. TO THAT END, WE HAVE BEEN WORKING CLOSELY WITH THE NEW JERSEY RECYCLING FORUM TO HELP DEVELOP SUGGESTED AMENDMENTS TO S.B.2820. IF YOUR COMMITTEE AND THE BILL SPONSORS ADOPT THESE AMENDMENTS, WE WOULD SUPPORT IT AND WORK FOR ITS PASSAGE.

OUR OVERRIDING CONCERNS WITH S.B.2820 ARE WITH THOSE SECTIONS IMPOSING UNREALISTIC RECYCLING RATES TO BE ACHIEVED IN THE NEAR TERM AND GIVING AUTHORITY TO THE COMMISSIONER OF ENVIRONMENTAL PROTECTION TO ARBITRARILY IMPOSE DEPOSITS ON PACKAGING BASED SOLELY ON THE ACHIEVEMENT OF THESE RATES. ANY DEPOSIT SCHEME HAS COMPLEX RAMIFICATIONS WHICH SHOULD BE FULLY DEBATED IN THE LEGISLATIVE PROCESS ONLY. RECYCLABILITY OF A PACKAGE IS ONLY ONE OF MANY CRITERIA WHICH MUST BE CONSIDERED IN DESIGNING AND PRODUCING A PACKAGE USED TO DELIVER A PRODUCT TO THE CONSUMER.

AMERICAN CAN IS A MANUFACTURER OF A WIDE RANGE OF METAL CONTAINERS AND PLASTIC PACKAGING INCLUDING FLEXIBLE PLASTIC FILM, FILM LAMINATES AND PLASTIC TUBES AND BOTTLES. IN FACT, WE HAVE A PLANT IN WASHINGTON, NEW JERSEY, EMPLOYING OVER 350 PEOPLE MAKING TOOTHPASTE TUBES FROM PLASTIC LAMINATES. WE, TOO, ARE CONCERNED WITH THE PROBLEMS SOCIETY FACES IN DEALING WITH SOLID WASTE AND THE PACKAGING COMPONENT OF THAT WASTE.

OUR COMPANY HAS BEEN ACTIVELY INVOLVED IN DEALING WITH SCRAP AND WASTE GENERATED IN OUR MANUFACTURING PLANTS AND HAS MANY YEARS OF EXPERIENCE IN RECYCLING AND RESOURCE RECOVERY. WE RECYCLE ALL WASTE MATERIAL WHEN IT IS PRACTICAL AND ECONOMICALLY POSSIBLE TO DO SO. IN ADDITION, THE RECYCLABILITY AND VALUE OF PLANT-GENERATED SCRAP IS ONE OF THE CONSIDERATIONS USED IN THE DESIGN AND MANUFACTURE OF OUR PACKAGES.

HOWEVER, IT IS IMPORTANT TO RECOGNIZE THE PRIORITIES REQUIRED OF ALL THE PACKAGES WE MAKE AND RECOGNIZE THE ROLE OF PACKAGING IN OUR SOCIETY FROM RAW MATERIALS TO ULTIMATE DISPOSAL AFTER USE BY THE CONSUMER.

I SUBMIT THAT IN DEALING WITH PACKAGING AS A SOLID WASTE PROBLEM, WE MUST RECOGNIZE WHAT IT DOES FOR US IN MINIMIZING THE AMOUNT OF WASTE REACHING THE CONSUMER LEVEL AS WELL AS CONSIDER THE OTHER IMPORTANT FACTORS WHICH DETERMINE WHAT FORM EACH PACKAGE MUST TAKE TO FULFILL ITS PURPOSE OF HOLDING AND CONVEYING THE PRODUCT INSIDE IT SAFELY AND ECONOMICALLY FROM PRODUCER TO CONSUMER.

PACKAGING IS MORE THAN THE CONTAINER WHICH ENDS UP IN SOLID WASTE. IT IS A SYSTEM OF CONVERTING RAW MATERIALS INTO A PACKAGE, FILLING IT WITH A PRODUCT, CLOSING IT, PROCESSING IT TO PREVENT SPOILAGE OR DETERIORATION, UNITIZING IT FOR SHIPMENT, DISTRIBUTION, DE-UNITIZING, SALE TO THE ULTIMATE CONSUMER, AND DISPOSAL. IN THIS CHAIN, WHAT INFLUENCES ONE LINK CAN HAVE AN EFFECT ON EVERY OTHER.

IN ITS PASSAGE THRU THIS CHAIN, IT MUST PROTECT THE PRODUCT, REDUCE WASTE, IMPROVE NUTRITION, PROVIDE CONVENIENCE, SAVE TIME, PREVENT PILFERAGE, CONVEY INFORMATION, PREVENT ADULTERATION AND CONTAMINATION AND DO ALL OF THIS AT THE LOWEST POSSIBLE COST.

A FEW EXAMPLES TO ILLUSTRATE THESE FUNCTIONS:

- 1) SIX OUNCES OF FROZEN ORANGE JUICE CONCENTRATE COMES IN A PAPER AND METAL CAN WEIGHING LESS THAN AN OUNCE. IT CONTAINS THE JUICE FROM EIGHT ORANGES WHICH WERE SQUEEZED IN FLORIDA OR CALIFORNIA SO THE PULP AND PEELS STAYED THERE FOR RECYCLING INTO CATTLE FEED. THESE PEELS, WEIGHING AN AVERAGE OF 26 OUNCES, DID NOT BECOME PART OF THE SOLID WASTE IN THE TOWN WHERE THE ORANGE JUICE WAS CONSUMED.

- 2) AMERICAN CAN MAKES A PLASTIC FILM TO WRAP LETTUCE. PREVIOUSLY, LETTUCE WAS PICKED, PACKED IN BOXES, AND SHIPPED FROM CALIFORNIA TO SUPERMARKETS ALL ACROSS THE COUNTRY. TWENTY PERCENT OF THAT SHIPPED WAS LOST TO SPOILAGE. IN THE GROCERY STORE, THE OUTER LEAVES, REPRESENTING 10-15 PERCENT OF THE HEAD, WAS STRIPPED OFF AND DISCARDED BEFORE SALE TO THE CONSUMER. ALL OF THIS ENDED UP IN THE LOCAL GARBAGE. NOW, FILM WRAP, WEIGHING A FRACTION OF AN OUNCE, IS WRAPPED AROUND THE LETTUCE HEAD IN THE FIELD. IT HAS REDUCED SHIPPING SPOILAGE LOSS TO TWO PERCENT AND ALL THE OUTER LEAVES ARE STRIPPED OFF WHERE IT IS GROWN, SAVING IN SHIPPING WEIGHT AND VOLUME AND REDUCING WASTE WHERE IT IS CONSUMED.

- 4) IN RETAILING, ONE OF THE BIGGEST PROBLEMS IS PILFERAGE OF SMALL PRODUCTS SUCH AS HEALTH AND BEAUTY AIDS, SOME OF THEM WITH A HIGH VALUE. ALSO LABOR COSTS, STORAGE SPACE AND SHRINKAGE ARE IMPORTANT TO CONTROL. ALL OF THESE PROBLEMS HAVE BEEN HELPED BY THE USE OF BLISTER PAKS. AGAIN, JUST LOOKING AT THIS ELABORATE PACKAGE IN TERMS OF SOLID WASTE CAN BE MISLEADING BECAUSE IT LOWERS THE TOTAL PACKAGING SYSTEM COST WITH MINIMAL INCREASE IN DISPOSAL COSTS.

- 5) ANOTHER DRAMATIC EXAMPLE IS PROTECTION FROM CONTAMINATION THROUGH TAMPERING. YOU ARE ALL FAMILIAR WITH BREAK-OPEN SEALS BUT AFTER THE TYLENOL TAMPERING DISASTER, ONE OF OUR CUSTOMERS CAME TO US TO MAKE THE ULTIMATE IN TAMPER-PROOF PACKAGING, A METAL CAN INTO WHICH WAS PUT A BOTTLE OF DATRIL. OVER PACKAGING? NOT IN TERMS OF MAKING SURE THAT PRODUCT REACHED THE CONSUMER IN A WAY THAT PREVENTED THE POSSIBILITY OF SOMEONE ADULTERATING IT.

MY POINT IS, YOU CAN'T JUST LOOK AT THE EMPTY CONTAINER AS IT IS THROWN AWAY, WITHOUT TAKING INTO ACCOUNT WHAT FUNCTION IT HAS PERFORMED AND WHAT IT HAS KEPT FROM BECOMING PART OF THAT WASTE. LEGISLATION WHICH PROPOSES TO REGULATE PACKAGING ONLY ON THE BASIS OF ITS PRESENCE IN SOLID WASTE COULD VERY WELL BE COUNTERPRODUCTIVE OR VERY COSTLY TO CONSUMERS.

HOWEVER, LOOKING AT THE CONTAINER DIRECTLY, THERE ARE NUMEROUS EXAMPLES WHERE ECONOMICS HAS BROUGHT ABOUT REDUCTIONS IN THE AMOUNT OF MATERIALS USED IN THEM.

IN THE LAST 20 YEARS, TOTAL SALES OF METAL CANS HAS INCREASED BY 30 PERCENT BUT THE TONS OF METAL USED HAS REMAINED THE SAME THROUGH DEVELOPMENT OF EQUIPMENT AND PROCESSES TO USE THINNER GAUGE PLATE. ONE THOUSAND THREE-PIECE CORN CANS IN 1952 USED 177 POUNDS OF STEEL AND 1.1 POUNDS OF TIN. IN 1980, THE SAME ONE THOUSAND CANS, NOW TWO-PIECE, USED 119 POUNDS OF STEEL (A 33 PERCENT REDUCTION) AND NO TIN AT ALL. IN 1955, ONE THOUSAND BEER CANS USED 139 POUNDS OF STEEL AND IN 1980, ONLY 71 POUNDS (A 49 PERCENT REDUCTION). AND IN 1965, ONE THOUSAND ALUMINUM BEER CANS USED 56 POUNDS OF METAL AND IN 1980 ONLY 30 POUNDS (A 46 PERCENT REDUCTION).

THE PACKAGING INDUSTRY, IN A FREE, COMPETITIVE ENVIRONMENT, WILL CONTINUE TO REDUCE THE AMOUNT OF MATERIALS USED IN EACH PACKAGE AND LOOK FOR LOWER COST ALTERNATE MATERIALS OR PACKAGING.

WELL, YOU SAY, THAT'S ALL WELL AND GOOD, BUT WE STILL HAVE A PROBLEM IN DISPOSING OUR SOLID WASTE! WHAT DO WE DO ABOUT THAT?

LET ME GIVE YOU SOME OF OUR THOUGHTS. OUR COMPANY HAS BEEN VERY ACTIVE IN THE PAST 15 YEARS IN THIS AREA. WE HAVE HELPED TO FUND SEVERAL STUDIES TO ASSESS WHAT THE REAL PROBLEMS ARE AND WHAT WERE THE MOST COST EFFECTIVE METHODS TO DEAL WITH THEM. WE WERE A MAJOR CONTRIBUTOR TO THE NATIONAL CENTER FOR RESOURCE RECOVERY WHICH PLOWED NEW GROUND IN DEVELOPING RELIABLE INFORMATION ABOUT WHAT WAS IN SOLID WASTE, HOW MUCH THERE WAS AND DOING BASIC RESEARCH ABOUT WHAT COULD BE RECOVERED FROM IT IN A COST EFFECTIVE MANNER.

IN ADDITION, MY COMPANY SPENT MILLIONS OF DOLLARS IN DESIGNING AND BUILDING A RESOURCE RECOVERY PLANT TO PROCESS AN ENTIRE CITY'S POST CONSUMER GARBAGE, RECOVER RECYCLABLE MATERIALS AND FROM WHAT WAS LEFT PRODUCE A FUEL WHICH COULD BE BURNED TO GENERATE ELECTRICITY.

WHAT HAVE WE LEARNED FROM ALL THIS EFFORT AND MONEY. FIRST, THE SOLUTIONS ARE NOT EASY. SECOND, THAT THERE ARE ECONOMIC, STRUCTURAL AND INSTITUTIONAL FACTORS WHICH MUST CHANGE TO MAKE RECYCLING AND RESOURCE RECOVERY POSSIBLE. THIRD, THAT DOING SOMETHING TO BRING OUR DISPOSAL SYSTEMS INTO THE 20TH CENTURY IS THE MOST COST EFFECTIVE WAY, IN THE LONG RUN, TO DEAL WITH THE PROBLEM.

THE SOLUTION WHICH EVENTUALLY WILL COST SOCIETY THE LEAST, ATTACKS THE PROBLEM DIRECTLY WHERE IT WILL HAVE THE MOST IMMEDIATE IMPACT, AND DOES NOT BRING ABOUT UNDESIRABLE, UNFORESEEN OR COUNTERPRODUCTIVE SIDE EFFECTS ON A PACKAGING AND DISTRIBUTION SYSTEM THAT IS SAFE AND COST EFFECTIVE IS TO SEPARATE OUT THOSE MATERIALS WHICH ARE RECYCLABLE AND HAVE VIABLE MARKETS, BURN THE REMAINDER FOR STEAM TO HEAT OR PRODUCE ELECTRICITY, AND LANDFILL THE FINAL RESIDUE.

THE ULTIMATE SYSTEM, IN MY OPINION, WILL BE MADE UP OF EACH OF THESE ELEMENTS IN VARYING FORMS AND DEGREE DEPENDING ON LOCALITY AND QUANTITIES.

- 1) A TWO OR THREE CONTAINER SYSTEM FOR COLLECTION OF HOUSEHOLD WASTE:
CONTAINER 1 FOR METAL, GLASS AND RECYCLABLE PLASTICS
CONTAINER 2 FOR NEWSPRINT AND CORRUGATED (COULD BE BUNDLED)
CONTAINER 3 FOR ALL OTHER PACKAGING AND GARBAGE.
- 2) A RECYCLING PLANT TO PROCESS MATERIALS COLLECTED IN CONTAINERS 1 AND 2.
- 3) A MASS-BURNING PLANT TO PRODUCE STEAM FROM MATERIALS IN CONTAINER 3.
- 4) A SOLID WASTE DISPOSAL LANDFILL FOR THE FINAL RESIDUE FROM THE BURNED MATERIAL.

MEANWHILE, OUR INDUSTRIES ARE DOING AS MUCH AS WE CAN TO PROMOTE VOLUN-
TARY RECYCLING, DEVELOP TECHNOLOGY TO RECYCLE MORE MATERIAL, AND PROVIDE
MARKETS FOR THOSE MATERIALS.

I URGE YOUR COMMITTEE TO ADOPT THE AMENDMENTS PROPOSED BY THE RECYCLING
FORUM.

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STATEMENT OF RICHARD A. LILLQUIST,
PRESIDENT, FLEXIBLE PACKAGING ASSOCIATION
ON SB 2820
BEFORE THE SENATE ENERGY AND ENVIRONMENT COMMITTEE
NEW JERSEY STATE LEGISLATURE

MAY 22, 1985

I am Richard A. Lillquist, President of the Flexible Packaging Association (FPA). I am pleased to present our Association's views on SB 2820, the bill that would require mandatory statewide recycling.

FPA is the national trade association representing firms that produce flexible packaging or supply materials used in the production of such packaging. Flexible packaging, as the name implies, is nonrigid packaging that is constructed of one or more kinds of plastic film, aluminum foil, paper or a combination of such materials. The variety of flexible packaging is almost endless; however, a common example of such packaging is a bag, constructed of one or more kinds of plastic materials, that is used to contain food or non-food products. FPA's members produce over 75% of all flexible packaging sold nationally. There are approximately 90 flexible packaging plants located in the state of New Jersey and they employ over 8,000 people.

FPA has worked closely and constructively with federal and state governments in seeking solutions to many complex environmental problems. We fully recognize the

serious problem in New Jersey of overburdened landfills and the need to remedy that problem. Accordingly, we commend the sponsors of SB 2820 because we believe the measure represents an important first step in addressing this serious issue.

However, for a number of reasons the measure in its present form should not be enacted. In our view, the provisions dealing with plastic containers, and in particular those that would affect flexible packaging, would be unworkable, costly and undesirable to New Jersey consumers. I shall elaborate on these concerns in this statement.

Section 2 of the bill defines a plastic container to include ". . . any container having a capacity of 12 ounces or more composed of plastic, containing a food or non-food product." Under this definition, virtually all flexible packaging products having a capacity of 12 ounces or more would be covered by the mandatory recycling provisions of the bill. As a result, under section 11(a) a determination would have to be made of whether "a convenient and economically feasible" method existed for recycling 55% of plastic materials. With respect to most flexible packaging products, there is no such method since most such products are combinations of materials including different

kinds of plastic, aluminum foil and paper. Separating these various products would be difficult and expensive, not "convenient and economically feasible." Moreover, cleaning such products for reuse, particularly with respect to food packaging, would present serious and, in many cases, insurmountable problems.

In most cases, therefore, flexible packaging containers would be subject to the mandatory deposit provisions. This means that on virtually every package of meat, cheese and other dairy products, fresh fruit and vegetables, a consumer would have to pay a deposit. Needless to say, this would significantly increase the cost of hundreds if not thousands of basic food products as well as many other products. Presumably, the plastic bags available in grocery stores for consumers to insert bulk produce items would also be subject to a 10 to 25¢ deposit, as would the plastic grocery bags at the supermarket checkout stands. Clearly, such deposits would be undesirable to New Jersey citizens.

Moreover, the problems created by SB 2820 would not end upon payment of the deposit. What would the supermarket or other store do with the mountains of used plastic bags and other containers returned for deposit? At

the present time there is no viable market for these plastic waste products and thus little likelihood that they will be recycled and reused. In the absence of market incentives for such resale and reuse it is virtually certain that the products would be disposed of in a landfill or other disposal facility, just as they are now. It appears that the main purpose of the deposit would be to fund a "Plastics Recycling Fund" to develop a system for the proper disposal of plastic and plastic containers. We submit, however, that this would be a costly and grossly inefficient way to collect what amounts to a special purpose tax.

We also believe that the provisions in SB 2820 regarding polyvinyl chloride (PVC) and aseptic packaging should be eliminated. Inasmuch as PVC could not meet the 55% recyclability test, these provisions would amount to a ban on the products. We submit, however, that imposing such a ban would be far too drastic. PVC packaging provides innumerable benefits to consumers, including low cost and the protection of health. To cite just one of many examples, bags used for intravenous feeding in hospitals are constructed of PVC. It should also be noted that post-consumer PVC products can be disposed of through

incineration under controlled conditions with the recovery of heat.

In pointing out these problems with SB 2820, we do not ignore the pressing solid waste problem faced by the state of New Jersey. We believe, however, that the solution to the problem will require new and continuing studies of all the various techniques of handling solid waste, not just recycling. In this respect there is a clear need for a joint industry-government approach. Industry has already begun to attack the recycling problem with the establishment of the Plastics Recycling Foundation at Rutgers University, an organization which FPA supports. This non-profit entity has received \$1 million in initial funding and will sponsor recycling research for all types of post-consumer plastic materials. We believe that further efforts of this nature, in cooperation with the state of New Jersey, should be undertaken to seek viable solutions to this problem. FPA gladly would support such efforts in any way it can.

