

PUBLIC HEARING

before

THE SENATE ENERGY AND
ENVIRONMENT COMMITTEE

on

S-1478
(Statewide Mandatory Recycling)

February 13, 1986
Freeholder Meeting Room
Bergen County
Administration Building
Hackensack, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Senator Daniel J. Dalton, Chairman.
Senator Paul Contillo, Vice Chairman

ALSO PRESENT:

Algis P. Matioska
Mark T. Connelly
Office of Legislative Services
Aides, Senate Energy and
Environment Committee

New Jersey State Library

* * * * *

Public Hearing Recorded and Transcribed by
Office of Legislative Services
Public Information Office
Hearing Unit
State House Annex
CN 068
Trenton, New Jersey 08625

P U B L I C H E A R I N G

before

THE SENATE ENERGY AND
ENVIRONMENT COMMITTEE

on

S-1478
(Statewide Mandatory Recycling)

February 13, 1986
Freeholder Meeting Room
Bergen County
Administration Building
Hackensack, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Senator Daniel J. Dalton, Chairman.
Senator Paul Contillo, Vice Chairman

ALSO PRESENT:

Algis P. Matioska
Mark T. Connelly
Office of Legislative Services
Aides, Senate Energy and
Environment Committee

New Jersey State Library

* * * * *

Public Hearing Recorded and Transcribed by
Office of Legislative Services
Public Information Office
Hearing Unit
State House Annex
CN 068
Trenton, New Jersey 08625

TABLE OF CONTENTS

	<u>Page</u>
Richard Salkie Division of Waste Management State Department of Environmental Protection	4
Mary T. Sheil, Administrator Office of Recycling State Department of Energy	5
Freeholder Carol Rufener Morris County	14
Lori Scozzafava Recycling Coordinator Morris County	16
Margo Lane Communications Manager, Eastern Region Garden State Paper Co., Inc.	20
William Comery Superintendent, Shade Tree and Parks Commission Borough of Paramus	26
Roger Bernstein Society of Plastics	28
Carl Kamena Dow Chemical	39
Peter Shapiro Essex County Executive	42
Robert Coleman President Oxford Energy Inc.	53
Andrew Vaccaro Recycling Coordinator Bergen County	62

TABLE OF CONTENTS (continued)

Terry A. Gray Waste Recovery Inc.	63
Frank Ryan Rubber Manufacturers Association	78
Jim Brennan Private citizen Paramus, New Jersey	82

APPENDIX

Statement of the Rubber Manufacturers Association	1x
Statement of Terry A. Gray	9x
Statement of Donald Thomas Wilson Director, Government Relations National Tire Dealers and Retreaders Association	14x
Letter from John N. Gilvey Execute Director, and John Nacco, President New Jersey State Tire Dealers Association	19x
Statement of the League of Women Voters of New Jersey	20x
Statement of James Lanard on behalf of the American Lung Association of New Jersey; New Jersey Chapter of the Sierra Club; and New Jersey Environmental Lobby	22x

* * * * *

sk:1-28
mjz:28-57
sk:58-84

SENATE, No. 1478

STATE OF NEW JERSEY

INTRODUCED JANUARY 21, 1986

By Senators CONTILLO, DALTON, COSTA, LASKIN,
GARIBALDI and STOCKMAN

Referred to Committee on Energy and Environment

AN ACT concerning mandatory Statewide recycling, and amend-
ing and supplementing 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 of 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
19 interest to mandate the recycling of marketable waste materials
20 on a Statewide basis so that reusable materials may be returned
21 to the economic mainstream in the form of raw materials or

**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.

22 products rather than disposed of at the State's overburdened
 23 landfills, and that the recycling of marketable materials by every
 24 municipality in this State and the development of public and
 25 private sector recycling activities on an orderly and incremental
 26 basis shall further demonstrate the State's long-term commit-
 27 ment to solving its solid waste problems.

1 2. (New section) As used in this amendatory and supple-
 2 mentary act:

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

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

11 c. "Chemical name" means the scientific designation of a chem-
 12 ical in accordance with the nomenclature system developed by
 13 the International Union of Pure and Applied Chemistry or the
 14 Chemical Abstracts Service rules of nomenclature;

15 d. "County" means any county of this State of whatever class:

16 e. "Department" means the Department of Environmental
 17 Protection;

18 f. "Designated recyclable materials" means those recyclable
 19 materials, including but not limited to, metal, glass, or paper,
 20 plastic containers, food waste, corrugated and other cardboard,
 21 newspaper, magazines, or high-grade office paper designated in
 22 a district recycling plan to be source separated in a municipality
 23 as required by section 3 of this amendatory and supplementary
 24 act;

25 g. "Disposition" or "disposition of designated recyclable ma-
 26 terials" means the transportation, placement, or arrangement of
 27 designated recyclable materials for all possible uses except for
 28 disposal as solid waste;

29 h. "District" means a solid waste management district as
 30 designated by section 10 of P. L. 1975, c. 326 (C. 13:1E-19), ex-
 31 cept that, as used in the provisions of this amendatory and sup-
 32 plementary act, "district" shall not include the Hackensack Mea-
 33 dowlands District;

34 i. "District recycling plan" means the plan prepared and
 35 adopted by the governing body of a county and approved by the
 36 department to implement the State Recycling Plan goals as re-
 37 quired by section 3 of this amendatory and supplementary act:

38 j. "Market" or "markets" means the disposition of desig-
39 nated recyclable materials through use, reuse, or sale, as well as
40 any method of disposal, except landfilling or incineration, which
41 entails a transportation and disposition cost less than the costs
42 of transporting the recyclable materials to solid waste disposal
43 facilities and disposing of them as municipal solid waste at the
44 facility utilized by the municipality;

45 k. "Municipality" means any city, borough, town, township or
46 village situated within the boundaries of this State;

47 l. "Municipal solid waste stream" means all residential, com-
48 mercial and institutional solid waste generated within the bound-
49 aries of any municipality;

50 m. "Paper" means and includes all newspaper, highgrade
51 office paper, fine paper, bond paper, offset paper, xerographic
52 paper, mimeo paper, duplicator paper, and related types of cel-
53 lulosic material containing not more than 10% by weight or
54 volume of non-cellulosic material such as laminates, binders,
55 coatings, or saturants;

56 n. "Paper product" means any paper items or commodities,
57 including but not limited to, paper napkins, towels, corrugated
58 and other cardboard, construction material, toilet tissue, high-
59 grade office paper, fine paper, bond paper, offset paper, xero-
60 graphic paper, mimeo paper, duplicator paper, and related types
61 of cellulosic material containing not more than 10% by weight
62 or volume of non-cellulosic material such as laminates, binders,
63 coatings, or saturants;

64 o. "Plastic container" means any container having a capacity
65 of 12 ounces or more and a minimum wall thickness of not less
66 than 0.01 inches, used to contain beverages, foods or nonfood
67 products, and composed of thermoplastic synthetic polymeric
68 material;

69 p. "Post-consumer waste material" means any product gene-
70 rated by a business or consumer which has served its intended
71 end use, and which has been separated from solid waste for the
72 purposes of collection, recycling and disposition and which does
73 not include secondary waste material or demolition waste;

74 q. "Recyclable material" means those materials which would
75 otherwise become municipal solid waste, which may be collected,
76 separated or processed and returned to the economic mainstream
77 in the form of raw materials or products;

78 r. "Recycled paper product" means any product having a total
79 weight consisting of not less than 50% secondary waste paper
80 material and not less than 10% post-consumer waste material

81 for high-grade office paper, fine, bond and offset paper products
 82 and not less than 25% post-consumer waste material for all other
 83 paper products;

84 s. "Recycling" means any process by which materials which
 85 would otherwise become solid waste are collected, separated or
 86 processed and returned to the economic mainstream in the form
 87 of raw materials or products;

88 t. "Recycling center" means any facility designed and operated
 89 solely for receiving, storing, processing and transferring source
 90 separated, nonputrescible or source separated commingled non-
 91 putrescible metal, glass, paper, plastic containers, and corrugated
 92 and other cardboard, or other recyclable materials approved by
 93 the department, or for the provision of recycling services;

94 u. "Recycling services" means the services provided by per-
 95 sons engaging in the business of recycling, including the col-
 96 lection, processing, storage, or purchase, sale or disposition, or
 97 any combination thereof, of recyclable materials;

98 v. "Secondary waste material" means waste material gene-
 99 rated after the completion of a manufacturing process;

100 w. "Secondary waste paper material" means paper waste gene-
 101 rated after the completion of a paper making process, including but
 102 not limited to, envelope cuttings, bindery trimmings, printing
 103 waste, cutting and other converting waste, butt rolls and mill
 104 wrappers; except that secondary waste paper material shall not
 105 include fibrous waste generated during the manufacturing process,
 106 such as fibers recovered from waste water or trimmings of paper
 107 machine rolls, fibrous byproducts of harvesting, extractive or
 108 woodcutting processes, or forest residue such as bark;

109 x. "Source separated recyclable materials" means recyclable
 110 materials, including but not limited to, paper, metal, glass, food
 111 waste, office paper and plastic which are kept separate and apart
 112 from residential, commercial and institutional solid waste by the
 113 generator thereof for the purposes of collection, disposition and
 114 recycling.

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

9 b. Each district recycling plan required pursuant to this sec-
10 tion 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 sepa-
13 rated in each municipality which shall include, at a minimum,
14 aluminum beverage containers, and at least two other recyclable
15 materials separated from the municipal solid waste stream;

16 (3) Designation of the strategy for the collection and disposi-
17 tion of source separated recyclable materials in each munic-
18 ipality; and

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

23 (a) The recycling each month of at least 15% of the prior
24 year's monthly municipal solid waste stream for that month
25 by the end of the first full year succeeding the adoption and
26 approval by the department of the district recycling plan; and

27 (b) The recycling each month of at least 25% of the prior
28 year's monthly municipal solid waste stream for that month
29 by the end of the second full year succeeding the adoption
30 and approval by the department of the district recycling plan.

31 c. Each district recycling plan, in designating the strategy for
32 the collection and disposition of recyclable materials in each mu-
33 nicipality, shall accord priority consideration to persons engag-
34 ing in the business of recycling or otherwise lawfully providing
35 recycling services on behalf of the municipality on January 1,
36 1986, if that person continues to provide recycling services prior
37 to the adoption of the plan and that person has not discontinued
38 these services for a period of 90 days or more between January 1,
39 1986, and the date the plan is adopted.

40 d. Notwithstanding the provisions of the "Solid Waste Man-
41 agement Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.), each district
42 recycling plan may be modified after adoption pursuant to a
43 procedure set forth in the adopted plans as approved by the
44 department.

1 4. (New section) a. Each county shall, within six months of the
2 adoption and approval by the department of the district recycling
3 plan required pursuant to section 3 of this amendatory and sup-
4 plementary act, solicit proposals from, review the qualifications
5 of, and enter into contracts on behalf of municipalities with
6 persons providing recycling services or operating recycling centers

7 for the collection, storage, processing, and disposition of recy-
8 clable materials designated in the district recycling plan in those
9 instances where these services are not otherwise provided by the
10 municipality, interlocal service agreement or joint service pro-
11 gram, or other private or public recycling program operator.

12 b. In the event that a county is unable to enter into contracts
13 or otherwise execute agreements to market specific designated
14 recyclable materials in order to achieve the designated recovery
15 targets set forth in the district recycling plan, the county may
16 petition the department for a temporary extension from the pro-
17 visions of subsection a. of this section for these specified ma-
18 terials. The department is authorized to grant, deny or condi-
19 tionally grant the extension, and shall advise the county as to
20 the steps that may be taken to identify and secure markets for
21 the recyclable materials designated in the district recycling plan.
22 Any extension granted by the department shall not exceed one
23 year in duration, and shall be granted or renewed only upon a
24 finding that the county has made a good faith effort to identify
25 and secure markets for its recyclable materials. Each county shall
26 continue to solicit those recycling services necessary to achieve
27 the maximum feasible recovery targets in each municipality as
28 set forth in the district recycling plan.

1 5. (New section) Each municipality in this State shall, within
2 30 days of the effective date of this amendatory and supplemen-
3 tary 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 by the county and ap-
8 proval by the department of the district recycling plan required
9 pursuant to section 3 of this amendatory and supplementary act,
10 each municipality shall provide for a collection system for the
11 recycling of the recyclable materials designated in the district
12 recycling plan as may be necessary to achieve the designated
13 recovery targets set forth in the plan in those instances where a
14 recycling collection system is not otherwise provided for by the
15 generator or by the county, interlocal service agreement or joint
16 service program, or other private or public recycling program
17 operator.

18 b. The governing body of each municipality shall, if it has
19 not already done so, within 30 days of the effective date of any
20 contracts or agreements entered into between the county or other

21 local government unit to market the designated recyclable ma-
22 terials as required pursuant to section 4 of this amendatory and
23 supplementary act, adopt an ordinance which requires persons
24 generating municipal solid waste within its municipal boundaries
25 to source separate aluminum beverage containers and at least
26 two other recyclable materials, as designated in the district re-
27 cycling plan, from the municipal solid waste stream and, unless
28 recycling is otherwise provided for by the generator, place the
29 recyclable materials for collection in the manner provided by the
30 ordinance.

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

40 The revised master plan shall include provisions for the col-
41 lection, disposition and recycling of recyclable materials desig-
42 nated in the municipal recycling ordinance adopted pursuant to
43 subsection b. of this section, and for the collection, disposition
44 and recycling of designated recyclable materials within any de-
45 velopment proposal for the construction of 50 or more units of
46 single-family residential housing or 25 or more units of multi-
47 family residential housing and any commercial or industrial de-
48 velopment proposal for the utilization of 1,000 square feet or
49 more or land.

50 d. The governing body of a municipality may exempt persons
51 occupying commercial and institutional premises within its mu-
52 nicipal boundaries from the source separation requirements of the
53 ordinance adopted pursuant to subsection b. of this section if those
54 persons have otherwise provided for the recycling of the recyclable
55 materials designated in the district recycling plan from solid
56 waste generated at those premises. To be eligible for an exemption
57 pursuant to this subsection, a commercial or institutional solid
58 waste generator annually shall provide written documentation to
59 the municipality of the total number of tons recycled.

60 e. The governing body of each municipality shall, on July 1,
61 1987 and on July 1 of each year thereafter, submit a recycling
62 tonnage report to the New Jersey Office of Recycling in accord-

63 ance with rules and regulations adopted by the department
64 therefor.

65 f. The governing body of each municipality shall, within six
66 months of the effective date of the ordinance adopted pursuant to
67 subsection b. of this section and at least once every six months
68 thereafter, notify all persons occupying residential, commercial,
69 and institutional premises within its municipal boundaries of local
70 recycling opportunities, and the source separation requirements
71 of the ordinance. In order to fulfill the notification requirements
72 of this subsection, the governing body of a municipality may,
73 in its discretion, place an advertisement in a newspaper circulat-
74 ing in the municipality, post a notice in a public place where
75 public notices are customarily posted, include a notice with other
76 official notifications periodically mailed to residential taxpayers,
77 or any combination thereof, as the municipality deems necessary
78 and appropriate.

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
5 pending before the Legislature as this bill) shall, for the pur-
6 poses of P. L. 1976, c. 68 (C. 40A:4-45.1 et seq.), be considered
7 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
4 a result of the provisions of P. L., c. . . . (C.)
5 (now pending before the Legislature as this bill) shall, for the
6 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 8. (New section) Every solid waste collector or solid waste
2 transporter registered pursuant to sections 4 and 5 of P. L. 1970,
3 c. 39 (C. 13:1E-4 and 13:1E-5) and holding a certificate of public
4 convenience and necessity pursuant to sections 7 and 10 of P. L.
5 1970, c. 40 (C. 48:13A-6 and 48:13A-9) shall provide for the
6 collection or disposition of recyclable materials, or otherwise
7 provide recycling services, if required to do so by the district
8 recycling plan of the county in which the collector or transporter
9 engages in solid waste collection or transportation services.

1 9. (New section) Every contract for the provision of solid
2 waste collection or transportation services subject to bid pur-
3 suant to the "Local Public Contracts Law," P. L. 1971, c. 198

4 (C. 40A:11-1 et seq.) shall, unless otherwise provided for by
5 municipal ordinance, include within it provision for the collection
6 or disposition of recyclable materials, or for the provision of
7 of recycling services.

1 10. (New section) a. Within 12 months of the effective date
2 of this amendatory and supplementary act, every metal beverage
3 container and plastic container sold or offered for sale in this
4 State shall be clearly marked with a code on each container in-
5 dicating its composition or chemical name, as the case may be,
6 and identifying it as a nonrecyclable or recyclable material. No
7 type of metal beverage container or plastic container shall be
8 identified as a recyclable container without the prior approval
9 of the department.

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

22 c. The department shall adopt, upon consultation with the ap-
23 propriate industries and pursuant to the provisions of the "Ad-
24 ministrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1
25 et seq.), any rules and regulations necessary to implement the
26 provisions of this section.

1 11. (New section) a. Within 18 months of the effective date of
2 this amendatory and supplementary act, and at least annually
3 thereafter, the department shall make a written determination
4 as to whether a convenient and economically feasible mechanism
5 for the collection, recycling, and marketing of plastic containers
6 is available to counties and municipalities in this State. A de-
7 termination by the department that such a mechanism is available
8 shall be based upon a finding that the appropriate industries
9 have achieved, at a minimum, the following statewide recovery
10 targets and schedule:

11 (1) The recycling of at least 25% of the plastic containers
12 annually sold in this State composed of polyethylene terephtha-
13 late, commonly referred to as "PET bottles," as measured in

14 tons, by the end of the previous 12 months, and that at least
15 50% can be reasonably expected to be recycled annually there-
16 after;

17 (2) The recycling of at least 25% of the plastic containers
18 annually sold in this State composed of high-density polyethylene
19 (HDPE), as measured in tons, by the end of the previous 12
20 months, and that at least 50% can be reasonably expected to
21 be recycled annually thereafter;

22 (3) The recycling of at least 25% of the plastic containers
23 annually sold in this State composed of polyvinyl chloride or poly-
24 vinylidene chloride, commonly referred to as "PVC" or "PVC
25 packaging," as measured in tons, within 36 months of the effec-
26 tive date of this amendatory and supplementary act, and that
27 at least 50% can be reasonably expected to be recycled annually
28 thereafter; and

29 (4) The recycling of at least 25% of the plastic containers
30 annually sold in this State composed of polypropylene or poly-
31 styrene, as measured in tons, within 48 months of the effective
32 date of this amendatory and supplementary act, and that at
33 least 50% can be reasonably expected to be recycled annually
34 thereafter.

35 In the event that the department determines that such a mech-
36 anism is not available, the department shall hold a public hear-
37 ing thereon within 30 days of making the determination. At the
38 public hearing, the manufacturers of plastic containers shall have
39 the burden to show that a convenient and economically feasible
40 mechanism is available for the type of plastic container under
41 consideration and that the determination of the department is un-
42 warranted. Within 45 days of the conclusion of the hearing, the
43 department shall make a final determination, which action shall
44 be considered to be final agency action thereon for the purposes
45 of the "Administrative Procedure Act," P. L. 1968, c. 410
46 (C. 52:14B-1 et seq.), and shall be subject only to judicial review
47 as provided in the Rules of Court.

48 b. In the event that the department makes a final determination
49 after the public hearing that a convenient and economically
50 feasible method for the collection, recycling, and marketing of
51 the type of plastic container under consideration is not available,
52 there is imposed on this item, by rule or regulation adopted by
53 the department therefor pursuant to subsection d. of this section,
54 a deposit, not less than \$0.10 nor more than \$0.25 per container,
55 and a refund value, not less than \$0.05 nor more than \$0.15 per
56 container, when empty, depending on size.

57 Any deposit imposed pursuant to this subsection shall take
58 effect on the first day of the third month following its imposition
59 and shall be due and payable, and shall remain in effect, until
60 any State of New Jersey or federal law, or any rule or regulation
61 adopted pursuant thereto, prohibiting a deposit on, or estab-
62 lishing an alternative deposit and refund value system for, plastic
63 containers may take effect.

64 c. The "Plastic Container Recycling Fund," hereinafter re-
65 ferred to as the "fund," is established in the department as a
66 nonlapsing, revolving fund as the depository for any revenues
67 to be generated as the result of a deposit imposed pursuant to
68 subsection b. of this section. The fund shall be administered by
69 the New Jersey Office of Recycling, and shall be credited with
70 a sum equal to not more than \$0.10 per plastic container sold
71 within this State during the previous calendar year following
72 the imposition of a deposit on these containers. The monies in
73 the fund shall be used solely for the development of mechanisms
74 for the proper disposition and recycling of plastic containers.

75 d. The department shall adopt, within 18 months of the effective
76 date of this amendatory and supplementary act and pursuant
77 to the provisions of the "Administrative Procedure Act," P. L.
78 1968, c. 410 (C. 52:14B-1 et seq.), any rules and regulations con-
79 ditioning and controlling the sale of plastic containers which shall
80 be designed to implement the purpose and provisions of sub-
81 section b. of this section.

1 12. (New section) a. Within 18 months of the effective date of
2 this amendatory and supplementary act, the department shall
3 make a written determination as to whether a convenient and
4 economically feasible mechanism for the collection, recycling and
5 marketing of at least 55% of the metal beverage containers com-
6 posed of more than one alloy and commonly referred to as "bi-
7 metal containers" annually sold in this State is available to
8 counties and municipalities in this State. In the event that the
9 department determines that such a mechanism is not available,
10 the department shall hold a public hearing thereon within 30 days
11 of making the determination. At the public hearing, the manu-
12 facturers of bimetal beverage containers shall have the burden
13 of proof to show that such a mechanism is available and the
14 determination of the department is unwarranted. Within 45 days
15 of the conclusion of the hearing, the department shall make a
16 final determination, which action shall be considered to be final
17 agency action thereon for the purposes of the "Administrative

18 Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.), and
19 shall be subject only to judicial review as provided in the Rules
20 of Court.

21 b. In the event that the department makes a final determina-
22 tion after the public hearing that a convenient and economically
23 feasible mechanism for the collection, recycling and marketing
24 of at least 55% of the bimetal beverage containers annually sold
25 in this State is not available, there is imposed on these items,
26 by rule or regulation adopted by the department therefor pur-
27 suant to subsection d. of this section, a deposit, not less than \$0.10
28 nor more than \$0.25 per container, and a refund value, not less
29 than \$0.05 nor more than \$0.15 per container, when empty, de-
30 pending on size.

31 Any deposit imposed pursuant to this subsection shall take
32 effect on the first day of the third month following its imposition
33 and shall be due and payable, and shall remain in effect, until
34 any State of New Jersey or federal law, or any rule or regula-
35 tion adopted pursuant thereto, prohibiting a deposit on, or estab-
36 lishing an alternative deposit and refund value system for, bi-
37 metal beverage containers may take effect.

38 c. The "Bimetal Beverage Container Recycling Fund," here-
39 inafter referred to as the "fund," is established in the department
40 as a nonlapsing, revolving fund. The fund shall be administered
41 by the New Jersey Office of Recycling, and shall be credited with
42 a sum equal to not more than \$0.10 per bimetal beverage con-
43 tainer sold within this State during the previous calendar year
44 following the imposition of a deposit on these containers. The
45 monies in the fund shall be used solely for the development of
46 systems for the proper disposition and recycling of bimetal
47 beverage containers.

48 d. The department shall adopt, within 18 months of the effective
49 date of this amendatory and supplementary act and pursuant
50 to the provisions of the "Administrative Procedure Act," P. L.
51 1968, c. 410 (C. 52:14B-1 et seq.), any rules and regulations con-
52 ditioning and controlling the sale of bimetal beverage containers
53 which shall be designed to implement the purpose and provisions
54 of subsection b. of this section.

1 13. (New section) Any owner or operator of a resource re-
2 covery facility may, after notifying the department and the
3 Board of Public Utilities, refuse to accept for processing or in-
4 cineration as solid waste at the facility any plastic containers
5 composed of polyvinyl chloride or polyvinylidene chloride, com-
6 monly referred to as "PVC" or "PVC packaging."

1 14. (New section) On or after September 1, 1986, and annually
2 thereafter, no sanitary landfill facility in this State shall accept
3 for final disposal any leaves generated from residential premises
4 which are suitable for composting, during the months of Septem-
5 ber through December. Leaves source separated from solid waste
6 may be accepted by a sanitary landfill facility in those instances
7 where the facility has provided and maintains for that purpose
8 separate leaf composting facilities, and the composted leaves are
9 utilized as part of the final vegetative cover for the landfill.

1 15. (New section) On or after September 1, 1986, each municipi-
2 pality in this State shall, by a duly adopted ordinance of its
3 governing body, provide for a collection system for leaves gen-
4 erated from residential premises, and require that persons occu-
5 pying residential premises within its municipal boundaries shall,
6 for the period from September 1 to December 31 of each year,
7 source separate leaves from solid waste generated at those pre-
8 mises and, unless leaves are stored or recycled for composting or
9 mulching by the generator, place the leaves for collection in the
10 manner provided by the ordinance.

1 16. (New section) All State and local agencies responsible for
2 the 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 17. (New section) a. Within 24 months of the effective date of
2 this amendatory and supplementary act, the department shall
3 make a written determination as to whether a convenient and
4 economically feasible mechanism for the collection, recycling and
5 marketing of at least 55% of the automobile tires annually sold in
6 this State is available to counties and municipalities in this State.
7 In the event that the department determines that such a mecha-
8 nism is not available, the department shall hold a public hearing
9 thereon within 30 days of making the determination. At the
10 public hearing, the manufacturers of automobile tires shall have
11 the burden of proof to show that such a mechanism is available
12 and that the determination of the department 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
18 Rules of Court.

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

33 Any deposit imposed pursuant to this subsection shall take
34 effect on the first day of the third month following its imposition
35 and shall be due and payable, and shall remain in effect, until any
36 State of New Jersey or federal law, or any rule or regulation
37 adopted pursuant thereto, prohibiting a deposit on, or establishing
38 an alternative deposit and refund value system for, automobile
39 tires may take effect.

40 c. The "Automobile Tire Recycling Fund," hereinafter re-
41 ferred to as the "fund," is established in the department as a
42 nonlapsing, revolving fund. The fund shall be administered by the
43 New Jersey Office of Recycling, and shall be credited with a sum
44 equal to not more than \$1.50 per automobile tire sold within this
45 State during the pervious calendar year following the imposition
46 of a deposit on this item. The monies in the fund shall be used
47 solely for the development of systems for the proper disposition
48 and recycling of tires.

49 d. The department shall adopt, within 24 months of the effective
50 date of this amendatory and supplementary act and pursuant to
51 the provisions of the "Administrative Procedure Act," P. L.
52 1968, c. 410 (C. 52:14B-1 et seq.), any rules and regulations
53 conditioning and controlling the sale of automobile tires which
54 shall be designed to implement the purpose and provisions of this
55 section.

1 18. (New section) The provisions of P. L. 1971, c. 257 (C.
2 52:34-21 et seq.) or any rules and regulations adopted pursuant
3 thereto to the contrary notwithstanding, the Director of the Divi-
4 sion of Purchase and Property in the Department of Treasury
5 shall, upon consultation with the department, review and modify

6 all bid and product specifications relating to the purchase of
7 recycled paper products utilizing not less than 50% post consumer
8 waste material so that the specifications do not discriminate
9 against, but encourage the maximum purchase of products made
10 from recycled materials and recycled paper products. For the
11 purposes of this section, "recycled materials" includes, but is not
12 limited to, retreaded automobile tires, asphalt, re-refined lubri-
13 cating oil, and compost materials.

1 19. (New section) In purchasing any products or paper products
2 as materials, supplies or equipment for any county, municipality
3 or school district pursuant to P. L. 1969, c. 104 (C. 52:27-16.1
4 et seq.), the Director of the Division of Purchase and Property,
5 whenever the price is competitive for the purpose intended, shall
6 purchase those items which are manufactured or produced from
7 recycled materials or recycled paper or paper products. For the
8 purposes of this section, "competitive" means a price within 10%
9 of the price of items which are manufactured or produced from
10 virgin materials or virgin paper products; and "recycled mate-
11 rials" includes, but is not limited to, retreaded automobile tires,
12 asphalt, re-refined lubricating oil, and compost materials.

1 20. (New section) In any contract or contracts on behalf of the
2 State in excess of \$7,500.00, 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
6 purchase of products made from recycled materials and recycled
7 paper products, and the recycling of materials during the duration
8 of the contract period. In the event that the price is competitive
9 for the purpose intended, the contracting agent shall purchase
10 those items which are manufactured or produced from recycled
11 materials or recycled paper products. For the purposes of this
12 section, "competitive" means a price within 10% of the price of
13 items which are manufactured or produced from virgin materials
14 or virgin paper products; and "recycled materials" includes, but
15 is not limited to, retreaded automobile tires, asphalt, re-refined
16 lubricating oil, and compost materials.

1 21. (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, munici-
4 palities, school districts and authorities to cooperatively purchase
5 products made from recycled materials and recycled paper pro-
6 ducts procured by the Division of Purchase and Property. For

7 the purposes of this section, "recycled materials" includes, but is
8 not limited to, retreaded automobile tires, asphalt, re-refined
9 lubricating oil, and compost materials.

1 22. (New section) The total dollar amount of products made
2 from recycled materials and recycled paper products purchased
3 by the State shall be as follows:

4 a. Not less than 5% of the nonpaper items purchased on or
5 after January 1, 1987 shall be manufactured or produced from
6 recycled materials, not less than 10% by January 1, 1988, and not
7 less than 25% by January 1, 1989; and

8 b. Not less than 10% of the paper products purchased on or
9 after January 1, 1987 shall be made from recycled paper or paper
10 products, not less than 30% by January 1, 1988, and not less than
11 60% by January 1, 1989.

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

1 23. (New section) The provisions of R. S. 27:2-1 et seq. or any
2 rules and regulations adopted pursuant thereto to the contrary
3 notwithstanding, the Commissioner of Transportation shall, upon
4 consultation with the department, review and modify all bid and
5 paving material specifications relating to the purchase of recycled
6 asphalt pavement and paving materials utilizing recycled mate-
7 rials, including, but not limited to, crumb rubber from automobile
8 tires, ash, glass and glassy aggregates, to provide that the specifi-
9 cations do not discriminate against but encourage the maximum
10 purchase of recycled asphalt pavement and paving materials
11 utilizing recycled materials.

1 24. (New section) The provisions of R. S. 27:2-1 et seq. or any
2 rules and regulations adopted pursuant thereto to the contrary
3 notwithstanding, the Commissioner of Transportation shall, upon
4 consultation with the department, review and modify if necessary
5 all bid specifications relating to the purchase of asphalt or recycled
6 asphalt pavement to provide that the specifications do not discri-
7 minate against but encourage the use of waste derived fuel as a
8 furnace or boiler fuel by manufacturers of asphalt or recycled
9 asphalt pavement.

1 25. (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 issue a registration statement or
 5 engineering design approval for any new or expanded solid waste
 6 facility in any county unless the person or party proposing to con-
 7 struct or operate the facility submits written documentation and
 8 any other evidence the department may require demonstrating to
 9 the department's satisfaction that the goals of the relevant district
 10 recycling plan required by section 3 of this amendatory and
 11 supplementary act have been incorporated into the plans for the
 12 proposed facility.

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

1 26. (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
 6 to construct or operate the facility submits written documentation
 7 and any other evidence the board may require demonstrating to
 8 the satisfaction of the board that the goals of the relevant district
 9 recycling plan required by section 3 of this amendatory and
 10 supplementary act have been incorporated into the plans for the
 11 proposed facility.

12 b. The board 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
 15 provisions of this section.

1 27. Sections 1 through 27 inclusive of this act shall be known
 2 and may be cited as the "New Jersey Statewide Recycling Act."

1 28. 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. To 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 den-
 14 sities 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~~【.】~~;
 46 *and*

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

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

3 Preparation; contents; modification.

4 a. The planning board may prepare and, after public hearing,

5 adopt or amend a master plan or component parts thereof, to guide
6 the use of lands within the municipality in a manner which protects
7 public health and 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
15 based;

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

30 (3) A housing plan element pursuant to section 10 of P. L. 1985,
31 c. 222 (C. 52:27D-310), including [.] but not limited to, residential
32 standards and proposals for the construction and improvement of
33 housing;

34 (4) A circulation plan element showing the location and types of
35 facilities for all modes of transportation required for the efficient
36 movement of people and goods into, about, and through the munic-
37 ipality:

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

43 (6) A community facilities plan element showing the location
44 and type of educational or cultural facilities, historic sites, librar-
45 ies, hospitals, firehouses, police stations and other related facilities,
46 including their relation to the surrounding areas:

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

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

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

62 *(10) A recycling plan element which incorporates the State*
63 *Recycling Plan goals, including provisions for the collection,*
64 *disposition, and recycling of recyclable materials designated in the*
65 *municipal recycling ordinance, and for the collection, disposition*
66 *and recycling of recyclable materials within any development*
67 *proposal for the construction of 50 or more units of single-family*
68 *residential housing or 25 or more units of multi-family residential*
69 *housing and any commercial or industrial development proposal*
70 *for the utilization of 1,000 square feet or more of land; and*

71 **[(10)]** (11) Appendices or separate reports containing the
72 technical foundation for the master plan and its constituent
73 elements.

74 c. The master plan and its plan elements may be divided into
75 subplans and subplan elements projected according to periods of
76 time or staging sequences.

77 d. The master plan shall include a specific policy statement in-
78 dicating the relationship of the proposed development of the mu-
79 nicipality, as developed in the master plan to (1) the master plans
80 of contiguous municipalities, (2) the master plan of the county in
81 which the municipality is located, (3) *the district solid waste*
82 *management plan required pursuant to the provisions of the*
83 *“Solid Waste Management Act,” P. L. 1970, c. 39 (C. 13:1E-1*
84 *et seq.) of the county in which the municipality is located and*
85 **[(3)]** (4) the State Development and Redevelopment Plan adop-
86 ted pursuant to the “State Planning Act,” P. L. 1985, c. 398.

1 30. 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 ordi-
14 nance;

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

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

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

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

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

40 (7) Protection and conservation of soil from erosion by wind
41 or water or from excavation or grading: **[and]**

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

46 (9) *Conformity with a municipal recycling ordinance required*
 47 *pursuant to section 5 of P. L. , c. (C.), (now*
 48 *pending before the Legislature as this bill).*

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

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

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

1 31. 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
 14 sources**[.]**; and

15 f. *Recycling of designated recyclable materials.*

1 32. 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
 10 last general reexamination of such plan and regulations. The
 11 first such reexamination shall be completed within six years after
 12 the 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
 21 such plan or regulations as last revised, with particular regard to
 22 the density and distribution of population and land uses, housing
 23 conditions, circulation, conservation of natural resources, energy
 24 conservation, *collection, disposition, and recycling of designated*
 25 *recyclable 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 stan-
 29 dards, or whether a new plan or regulations should be prepared.

1 33. 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
 16 power to make purchases and enter into contracts or agree-
 17 ments for the performance of any work or the furnishing or
 18 hiring of any materials or supplies usually required, the cost

- 19 or contract price of which is to be paid with or out of public
20 funds.
- 21 (2) "Governing body" means:
- 22 (a) The governing body of the county, when the purchase
23 is to be made or the contract or agreement is to be entered
24 into by, or in behalf of, a county; or
- 25 (b) The governing body of the municipality, when the pur-
26 chase is to be made or the contract or agreement is to be
27 entered into by, or on behalf of, a municipality; or
- 28 (c) Any board, commission, committee, authority or agency
29 of the character described in subsection (1) (c) of this section.
- 30 (3) "Contracting agent" means the governing body of a con-
31 tracting unit, or any board, commission, committee, officer, depart-
32 ment, branch or agency which has the power to prepare the
33 advertisements, to advertise for and receive bids and, as permitted
34 by this act, to make awards for the contracting unit in connection
35 with purchases, contracts or agreements.
- 36 (4) "Purchase" is a transaction, for a valuable consideration,
37 creating or acquiring an interest in goods, services and property,
38 except real property or any interest therein.
- 39 (5) "Materials" includes goods and property subject to chapter
40 2 of Title 12A of the New Jersey Statutes, apparatus, or any other
41 tangible thing, except real property or any interest therein.
- 42 (6) "Professional services" means services rendered or per-
43 formed by a person authorized by law to practice a recognized
44 profession, whose practice is regulated by law, and the perfor-
45 mance of which services requires knowledge of an advanced type
46 in a field of learning acquired by a prolonged formal course of
47 specialized instruction and study as distinguished from general
48 academic instruction or apprenticeship and training. Professional
49 services may also mean services rendered in the performance of
50 work that is original and creative in character in a recognized
51 field of artistic endeavor.
- 52 (7) "Extraordinary unspecifiable services" means services
53 which are specialized and qualitative in nature requiring expertise,
54 extensive training and proven reputation in the field of endeavor.
- 55 (8) "Project" means any work, undertaking, program, activity,
56 development, redevelopment, construction or reconstruction of any
57 area or areas.
- 58 (9) "Work" includes services and any other activity of a tangi-
59 ble or intangible nature performed or assumed pursuant to a con-
60 tract or agreement with a contracting unit.

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

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

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

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

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

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

25 **[Any]** c. Except as otherwise provided in section 15 of P. L.
 26 1971, c. 198 (C. 40A:11-15), any purchase, contract or agreement
 27 made pursuant to this section may be awarded for a period of 12
 28 consecutive months, notwithstanding that such 12-month period

29 does not coincide with the fiscal year. The Division of Local
 30 Government Services shall adopt and promulgate rules and regula-
 31 tions concerning the methods of accounting for all contracts that
 32 do not coincide with the fiscal year.

1 35. 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 ex-
 8 ceeds \$2,500.00 in any one sale and it is neither livestock nor
 9 perishable goods, it shall be sold at public sale to the highest
 10 bidder.

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

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

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

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

38 further that in no event shall the terms or conditions of sale be
39 changed or amended.

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

1 36. 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*
19 *nonprocessible materials at the source, recovers valuable re-*
20 *sources, conserves energy in the manufacturing process, and offers*
21 *a supply of domestic raw materials for the State's industries;*
22 *that a comprehensive recycling plan and program is necessary to*
23 *achieve the maximum practicable recovery of reusable materials*
24 *from solid waste in this State; and that such a plan will reduce*
25 *the amount of waste to landfills, result in significant cost savings*
26 *in the planning and construction of waste-to-energy resource*
27 *recovery facilities, conserve energy and resources, and recover*
28 *materials for industrial uses.*

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

1 37. 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 sani-

4 tary landfill facility a recycling tax of **[\$0.12]** \$2.00 per **[cubic**
5 **yard]** ton of all solid waste accepted for disposal at the facility
6 on or after **[January 1, 1982]** *July 1, 1986*. In the event that any
7 solid waste is measured upon acceptance for disposal by other than
8 **[cubic yards]** tons, the tax shall be levied on the equivalents
9 thereof as shall be determined by the director.

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

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

22 c. If a return required by this act is not filed, or if a return
23 when filed is incorrect or insufficient in the opinion of the director,
24 the amount of tax due shall be determined by the director from
25 such information as may be available. Notice of such determina-
26 tion shall be given to the taxpayer liable for the payment of the
27 tax. Such determination shall finally and irrevocably fix the tax
28 unless the person against whom it is assessed, within 30 days after
29 receiving notice of such determination, shall apply to the director
30 for a hearing, or unless the director on his own motion shall re-
31 determine the same. After such hearing the director shall give
32 notice of his determination to the person to whom the tax is
33 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**
38 **Revised Statutes]** *R. S. 54:48-1 et seq.* If the Division of Taxa-
39 tion determines that the failure to comply with any provision
40 of this section was excusable under the circumstances, it may
41 remit such part or all of the penalty as shall be appropriate
42 under such circumstances.

43 e. (1) Any person failing to file a return, failing to pay the tax,
44 or filing or causing to be filed, or making or causing to be made,
45 or giving or causing to be given any return, certificate, affidavit.

46 representation, information, testimony, or statement required or
 47 authorized by this act, or rules or regulations adopted hereunder
 48 which is willfully false, or failing to keep any records required by
 49 this act or rules and regulations adopted hereunder, shall, in addi-
 50 tion to any other penalites herein or elsewhere prescribed, be
 51 guilty of a crime of the fourth degree.

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

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

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

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

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

1 38. 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
 6 and the] Department of Environmental Protection, and shall be
 7 credited with all tax revenue collected by the division pursuant
 8 to section 4 of [this supplementary act] *P. L. 1981, c. 278*
 9 *(C. 13:1E-95)*. Interest received on moneys in the fund and sums
 10 received as repayment of principal and interest on outstanding
 11 loans made from the fund shall be credited to the fund. The
 12 [Department of Energy and the] Department of Environmental
 13 Protection, in [their] *the* administration of the fund, [are] is
 14 authorized to assign to the New Jersey Economic Development
 15 Authority the responsibility for making credit evaluations of
 16 applicants for loans, for servicing loans on behalf of the [two

17 departments] *department*, and, the provisions of any other law
 18 to the contrary notwithstanding, for making recommendations as
 19 to the approval or denial of loans pursuant to this section. The
 20 [departments are] *department* is further authorized to pay or
 21 reimburse the authority in the amounts as the [departments
 22 jointly agree are] *department agrees* is appropriate for all ser-
 23 vices rendered by the authority in connection with any assign-
 24 ment of responsibility under the terms of this section out of
 25 moneys held in the fund for loans and the loan guarantee
 26 program.

27 b. Moneys in the fund shall be allocated and used for the follow-
 28 ing purposes and no others:

29 (1) Not less than [45%] 35% of the estimated annual balance
 30 of the fund shall be used for the annual expenses of a [five-year]
 31 program for recycling grants *and bonuses* to municipalities. The
 32 amount of these grants shall be calculated on the basis of the
 33 total number of tons of materials annually recycled from resi-
 34 dential and commercial sources within that municipality, except
 35 that no such grant shall exceed \$25.00 per ton of materials re-
 36 cycled. The [departments] *department* may allocate a portion
 37 of these grant moneys as bonus grants to municipalities that
 38 demonstrate high recovery rates in their recycling programs.
 39 The [departments] *department* shall issue guidelines establish-
 40 ing a formula defining a high recovery rate and shall announce
 41 each year the total amount of moneys available in the bonus
 42 grant fund. *A municipality may distribute a portion of its grant*
 43 *moneys to nonprofit groups that are located within that munic-*
 44 *ipality and which have contributed to the receipt of the recycling*
 45 *grant, except that this distribution shall not exceed the value of*
 46 *approved documented tonnage contributed by a nonprofit group.*

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

52 [To be eligible for a subsequent annual grant pursuant to this
 53 subsection, a municipality shall demonstrate that at least two
 54 types of materials are currently recycled, or will be recycled
 55 in the succeeding grant year by the municipal recycling program.]
 56 No recycling grant to any municipality shall be used for construct-
 57 ing or operating any facility for the baling of wastepaper or
 58 for the shearing, baling or shredding of ferrous or nonferrous
 59 materials;

60 (2) Not less than **[20%]** 35% of the estimated annual balance
 61 of the fund shall be used to provide low interest loans or loan
 62 guarantees to recycling businesses and industries, and to provide
 63 moneys for research into collection, market stimulation and reuse
 64 techniques applicable to recycling or the disposition of recyclable
 65 materials, or to contract for market studies, and to establish a
 66 sufficient reserve for a loan guarantee program for recycling
 66A businesses and industries;

67 (3) Not more than **[10%]** 7% of the estimated annual balance
 68 of the fund shall be used for State recycling program planning
 69 and program funding, including the administrative expenses
 70 thereof;

71 (4) Not more than **[10%]** 8% of the estimated annual balance
 72 of the fund shall be used for county **[and municipal]** recycling
 73 program planning and program funding, including the adminis-
 74 trative expenses thereof; and

75 (5) Not less than 15% of the estimated annual balance of the
 76 fund shall be used for a public information and education pro-
 77 gram concerning recycling **[and anti-litter activities]**.

1 38.1 Section 6 of P. L. 1981, c. 278 (C. 13:1E-97) is amended
 2 to read as follows:

3 6. a. The **[Commissioners]** *Commissioner* of the **[Departments]**
 4 *Department* of **[Energy and]** Environmental Protection shall
 5 adopt, pursuant to the "Administrative Procedure Act", P. L.
 6 1968, c. 410 (C. 52:14B-1 et seq.), such rules and regulations as
 7 are necessary to effectuate this **[supplementary]** act. These rules
 8 and regulations shall be proposed within 90 days of the effective
 9 date of this section, and thereafter adopted as provided in the
 10 "Administrative Procedure Act."

11 b. The director shall adopt, pursuant to the "Administrative
 12 Procedure Act," such rules and regulations as are necessary to
 13 effectuate this **[supplementary]** act.

1 39. Section 7 of P. L. 1981, c. 278 (C. 13:1E-98) is amended
 2 to 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 sur-
 6 charge on any tariff established pursuant to law for the solid
 7 waste disposal 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
 13 subsection a. of this section. In issuing this order, the board shall
 14 be exempt from the provisions of [section 31 of P. L. 1962, c. 198
 15 (C. 48:2-21.2)] *R. S. 48:2-21.*

1 40. Section 8 of P. L. 1981, c. 278 (C. 13:1E-99) is amended
 2 to 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*
 6 *mandatory provision* imposed pursuant to this supplementary
 7 act and any expenditure of revenues received by a municipality
 8 pursuant to section 5 hereof shall, for the purposes of P. L.
 9 1976, c. 68 (C. 40A:4-45.1 et seq.), be considered an expenditure
 10 mandated by State law.

1 41. 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 42. Section 3 of P. L. 1970, c. 40 (C. 48:13A-3) is amended
 2 to 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
 10 incident thereto, except it shall not include solid animal and
 11 vegetable wastes collected by swine producers licensed by the
 12 State Department of Agriculture to collect, prepare and feed
 13 such wastes to 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
 16 to a disposal site, but does not include activity related to the
 17 pickup, 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

24 *30 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.*

31 *g. "Recyclable material" means those materials which would*
 32 *otherwise become municipal solid waste, which may be collected,*
 33 *separated or processed and returned to the economic mainstream*
 34 *in the form of raw materials or products.*

1 43. 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
 11 shall result in just and reasonable rates or charges.

12 *c. The board shall, within 120 days of the effective date of this*
 13 *amendatory and supplementary act, identify the variable cost*
 14 *elements in the solid waste collection business and shall adopt*
 15 *guidelines establishing a simplified procedure whereby any person*
 16 *engaging in the solid waste collection business may petition the*
 17 *board for a separate solid waste collection tariff based on the*
 18 *number, size, and type of solid waste receptacles processed per*
 19 *household. In establishing this procedure, the board shall be*
 20 *exempt from the provisions of R. S. 48:2-21.*

1 44. (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 or
 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 45. (New section) a. Notwithstanding the provisions of P. L.
2 1970, c. 39 (C. 13:1E-1 et seq.) or any other law, rule or regu-
3 lation to the contrary, no recycling center as defined by section 2
4 of P. L. , c. (C.) (now pending before the
5 Legislature as this bill) shall be required by the department
6 to obtain a registration statement, engineering design approval,
7 or approval of an environmental and health impact statement
8 prior to the commencement of operations.

9 b. No recycling center shall receive, store, process or transfer
10 any waste material other than source separated nonputrescible
11 or source separated commingled nonputrescible metal, glass,
12 paper, or plastic containers, and corrugated and other cardboard
13 without the prior approval of the department.

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
4 imposed 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
9 and compensating use taxes, *except as otherwise provided in sub-*
10 *section b. of this section*, whether or not the item is sold in liquid
11 form. The exemption in this section is not applicable to food and
12 drink subject to tax under subsection (c) of section 3 of the Sales
13 and 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 this bill), and sold by the vendor for human consumption off*
19 *the premises where sold. To be eligible for an exemption pursuant*
20 *to this subsection, a beverage container manufacturer shall cer-*
21 *tify to the Director of the Division of Taxation, on an annual*
22 *basis and in the form prescribed by the director, that the bev-*
23 *erage containers manufactured for the packaging of beverages*
24 *sold or offered for sale in this State will be manufactured from*
25 *not less than 50% post-consumer waste material during the cal-*
26 *endar year for which an exemption from the sales tax on receipts*
27 *from the sale of beverages packaged in these containers shall*

28 *apply. Upon receipt of a certification, the director shall issue*
 29 *the manufacturer an exempt beverage container permit for that*
 30 *calendar year under such conditions as the director may deem*
 31 *necessary to administer the provisions of this subsection. The*
 32 *manufacturer shall stamp, label, or otherwise mark each beverage*
 33 *container eligible for this exemption intended for sale or use in*
 34 *New Jersey with the State recycling logo or symbol and the in-*
 35 *scription "Exempt from New Jersey Sales Tax." Any person*
 36 *who misrepresents his qualification to receive an exempt beverage*
 37 *container permit under this subsection shall be personally liable*
 38 *for the tax that was otherwise due on the receipts from the sale*
 39 *of carbonated soft drinks and beverages packaged in beverage*
 40 *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 this bill), are exempt from
 5 the tax imposed under the "Sales and Use Tax Act," P. L. 1966,
 6 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
 13 which the exemption shall apply. Upon receipt of a certification,
 14 the 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 beverages,
13 including all dilutions and mixtures of one or more of the
14 foregoing, such as liqueurs, cordials, and similar compounds,
15 having 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 otherwise,
18 without any deduction for expenses or early payment discounts,
19 and excluding the cost of transportation where such cost
20 is 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
33 vermouth.

34 i. "Wines" means all wines whether known as "dry wines,"
35 "sweet wines," "still wines," or "forfeited wines" and any artificial
36 or imitation wine or compound sold as wine, and any fruit
37 juice containing $\frac{1}{2}$ of 1% or more of alcohol by volume, and any
38 other beverage containing alcohol produced by the fermentation
39 of the natural sugar content of fruits or other agricultural products
40 containing sugar, which beverage contains $\frac{1}{2}$ of 1% or more
41 of alcohol by volume, but shall not mean or include vermouth, or
42 cider containing less than $3\frac{2}{10}\%$ 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
2 read 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 pack-*
5 *aged 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 Leg-*
8 *islature as this bill), and draught beer sold by the barrel, by any*
9 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 "Ex-*
26 *empt from New Jersey Alcoholic Beverage Wholesale Sales Tax".*
27 *Any person who misrepresents his qualification to receive an*
28 *exempt alcoholic beverage container permit under this section*
29 *shall be personally liable for the tax that was otherwise due on*
30 *the receipts from the sale of alcoholic beverages packaged in*
31 *in beverage containers 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
3 against the tax imposed pursuant to section 5 of P. L. 1945, c. 162
4 (C. 54:10A-5) in an amount equal to 20% of the cost of the recycl-
5 ing equipment. For the purposes of this section, "recycling equip-
6 ment" means vehicles used exclusively for the transportation of
7 post-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,
10 the composition of which is at least 50% of post-consumer waste
11 materials, provided that this transportation, processing or manu-

12 **facturing activity** accounts for at least 50% of the taxpayer's
 13 production as measured by the taxpayer's net sales during the
 14 tax period for which the credit established pursuant to this sec-
 15 tion is claimed. "Post-consumer waste material" means any
 16 product generated by a business or consumer which has served
 17 its intended end use, and which has been separated from solid
 18 waste for the purposes of collection, recycling and disposition and
 19 which does not include secondary waste material or demolition
 20 waste; and "secondary waste material" means waste material
 21 generated after the completion of a manufacturing process. The
 22 Commissioner of the Department of Environmental Protection,
 23 in consultation with the Director of the Division of Taxation, shall
 24 adopt rules and regulations establishing technical specifications
 25 for eligibility for the credit established pursuant to this section.
 26 Any unused portion of the credit established pursuant to this
 27 section may be carried forward by the taxpayer for four subse-
 28 quent tax periods.

1 51. Section 4 of P. L. 1945, c. 162 (C. 54:10A-4) is amended
 2 to 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
 8 a 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
 21 foregoing, net worth shall not include any deduction for the amount
 22 of the excess depreciation described in paragraph (2) (F) of sub-
 23 section (k) of this section. The foregoing aggregate of values shall
 24 be 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 ownership
33 shall effect a like reduction of such investment from net worth of
34 the taxpayer, if the foreign entity is considered a corporation for
35 any purpose under the United States federal income tax laws,
36 such as (but not by way of sole examples) for the purpose of
37 supplying deemed paid foreign tax credits or for the purpose of
38 status as a controlled foreign corporation. In calculating the net
39 worth of a taxpayer entitled to reduction for investment in sub-
40 sidiaries, the amount of liabilities of the taxpayer shall be reduced
41 by such proportion of the liabilities as corresponds to the ratio
42 which the excluded portion of the subsidiary values bears to the
43 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 ag-
46 gregate 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 sonable 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 corpora-
56 tion, in accordance with sound accounting principles, and such de-
57 termination 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
75 period covered by its report; or (3) is a banking corporation or
76 a financial business corporation as defined in the Corporation
77 Business Tax 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
87 purposes.

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

91 (k) "Entire net income" shall mean total net income from all
92 sources, whether within or without the United States, and shall
93 include the gain derived from the employment of capital or labor,
94 or from both combined, as well as profit gained through a sale or
95 conversion of capital assets. For the purpose of this act, the
96 amount of a taxpayer's entire net income shall be deemed prima
97 facie to be equal in amount to the taxable income, before net oper-
98 ating loss deduction and special deductions, which the taxpayer is
99 required to report to the United States Treasury Department for
100 the purpose of computing its federal income tax; provided, how-
101 ever, that in the determination of such entire net income,

102 (1) Entire net income shall exclude for the periods set forth
103 in paragraph (2) (F) (i) of this subsection, any amount, except
104 with respect to qualified mass commuting vehicles as described
105 in section 168 (f) (8) (D) (v) of the Internal Revenue Code as
106 in effect immediately prior to January 1, 1984, which is included
107 in a taxpayer's federal taxable income solely as a result of an
108 election made pursuant to the provisions of paragraph (8) of
109 that section.

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

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

115 (B) Any part of any income from dividends or interest on any
116 kind of stock, securities or indebtedness, except as provided in
117 paragraph (5) of subsection (k) of this section;

118 (C) Taxes paid or accrued to the United States on or measured
119 by profits or income, or the tax imposed by this act, or any tax
120 paid or accrued with respect to subsidiary dividends excluded
121 from entire net income as provided in paragraph (5) of sub-
122 section (k) of this section;

123 (D) (Deleted by amendment, P. L. 1985; c. 143);

124 (E) 90% of interest on indebtedness owing directly or indi-
125 rectly to holders of 10% or more of the aggregate outstanding
126 shares of the taxpayer's capital stock of all classes; except that
127 such interest may, in any event, be deducted

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

129 (ii) In full to the extent that it relates to bonds or other
130 evidences of indebtedness issued, with stock, pursuant to a
131 bona fide plan of reorganization, to persons who, prior to
132 such reorganization, were bona fide creditors of the corpora-
133 tion or its predecessors, but were not stockholders or share-
134 holders thereof;

135 (iii) In full to the extent that it relates to debt of a financial
136 business corporation owed to an affiliate corporation; pro-
137 vided that such interest rate does not exceed 2% over prime
138 rate; the prime rate to be determined by the Commissioner
139 of Banking;

140 (iv) In full to the extent that it relates to financing of
141 motor vehicle inventory held for sale to customers; provided
142 said indebtedness is owed to a taxpayer customarily and
143 routinely providing this type of financing;

144 (v) In full to the extent it relates to debt of a banking
145 corporation to a bank holding company, as defined in 12
146 U. S. C. § 1841, of which the banking corporation is a sub-
147 sidiary;

148 (F) (i) The amount by which depreciation reported to the
149 United States Treasury Department for property placed in ser-
150 vice on and after January 1, 1981, for purposes of computing
151 federal taxable income in accordance with section 168 of the

152 Internal Revenue Code in effect after December 31, 1980, exceeds
153 the amount of depreciation determined in accordance with the
154 Internal Revenue Code provisions in effect prior to January 1,
155 1981, but only with respect to a taxpayer's accounting period
156 ending after December 31, 1981; provided, however, that where a
157 taxpayer's accounting period begins in 1981 and ends in 1982,
158 no modification shall be required with respect to this para-
159 graph (F) for the report filed for such period with respect to
160 property placed in service during that part of the accounting
161 period which occurs in 1981.

162 (ii) For the periods set forth in subparagraph (F) (i) of this
163 subsection, any amount, except with respect to qualified mass
164 commuting vehicles as described in section 168 (f) (8) (D) (v)
165 of the Internal Revenue Code as in effect immediately prior to
166 January 1, 1984, which the taxpayer claimed as a deduction in
167 computing federal income tax pursuant to a qualified lease agree-
168 ment under paragraph (8) of that section.

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

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

178 (4) There shall be allowed as a deduction from entire net income
179 of a banking corporation, to the extent not deductible in deter-
180 mining federal taxable income, the eligible net income of an inter-
181 national banking facility determined as follows:

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

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

188 (i) Making, arranging for, placing or carrying loans to
189 foreign persons, provided, however, that in the case of a
190 foreign person which is an individual, or which is a foreign
191 branch of a domestic corporation (other than a bank), or
192 which is a foreign corporation or foreign partnership which
193 is controlled by one or more domestic corporations (other

194 than banks), domestic partnerships or resident individuals,
195 all the proceeds of the loan are for use outside of the United
196 States;

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

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

204 (iv) Such other activities as an international banking
205 facility may, from time to time, be authorized to engage in;

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

209 (5) Entire net income shall exclude 100% of dividends which
210 were included in computing such taxable income for federal income
211 tax purposes, paid to the taxpayer by one or more subsidiaries
212 owned by the taxpayer to the extent of the 80% or more owner-
213 ship of investment described in subsection (d) of this section.
214 With respect to other dividends, entire net income shall not in-
215 clude 50% of the total included in computing such taxable income
216 for federal income tax purposes.

217 (6) (A) Net operating loss deduction. There shall be allowed
218 as a deduction for the taxable year the net operating loss carry-
219 over to that year.

220 (B) Net operating loss carryover. A net operating loss for any
221 taxable year ending after June 30, 1984 shall be a net operating
222 loss carryover to each of the seven years following the year of the
223 loss. The entire amount of the net operating loss for any taxable
224 year (the "loss year") shall be carried to the earliest of the tax-
225 able years to which the loss may be carried. The portion of the
226 loss which shall be carried to each of the other taxable years shall
227 be the excess, if any, of the amount of the loss over the sum of the
228 entire net income, computed without the exclusions permitted in
229 paragraphs (4) and (5) of this subsection or the net operating
230 loss deduction provided by subparagraph (A) of this paragraph,
231 for each of the prior taxable years to which the loss may be
232 carried.

233 (C) Net operating loss. For purposes of this paragraph the
234 term "net operating loss" means the excess of the deductions over
235 the gross income used in computing entire net income without the

236 net operating loss deduction provided for in subparagraph (A)
 237 of this paragraph and the exclusions in paragraphs (4) and (5)
 238 of this subsection.

239 (D) Change in ownership. Where there is a change in 50% or
 240 more of the ownership of a corporation because of redemption or
 241 sale of stock and the corporation changes the trade or business
 242 giving rise to the loss, no net operating loss sustained before the
 243 changes may be carried over to be deducted from income earned
 244 after such changes. In addition where the facts support the
 245 premise that the corporation was acquired under any circum-
 246 stances for the primary purpose of the use of its net operating
 247 loss carryover, the director may disallow the carryover.

248 (7) *There shall be allowed as a deduction from the entire net*
 249 *income of a taxpayer eligible for a credit established pursuant*
 250 *to section 50 of P. L. , c. (C.) (now pend-*
 251 *ing before the Legislature as this bill) against the tax imposed*
 252 *pursuant to section 5 of P. L. 1945, c. 162 (C. 54:10A-5), an*
 253 *amount equal to 100% of the taxpayer's energy costs incurred in*
 254 *manufacturing for sale products the composition of which is at*
 255 *least 50% post-consumer waste material. For the purpose of this*
 256 *paragraph, "post-consumer waste material" means any product*
 257 *generated by a business or consumer which has served its intended*
 258 *end use, and which has been separated from solid waste for the*
 259 *purposes of collection, recycling and disposition and which does*
 260 *not include secondary waste material or demolition waste; and*
 261 *"secondary waste material" means waste material generated*
 262 *after the completion of a manufacturing process. The Commis-*
 263 *sioner of the Department of Environmental Protection, in consul-*
 264 *tation with the Director of the Division of Taxation, shall adopt*
 265 *rules and regulations establishing technical specifications for*
 266 *the deduction established pursuant to this paragraph.*

267 (1) "Real estate investment trust" shall mean any unincorpo-
 268 rated trust or unincorporated association qualifying and electing
 269 to be taxed as a real estate investment trust under federal law.

270 (m) "Financial business corporation" shall mean any corporate
 271 enterprise which is (1) in substantial competition with the busi-
 272 ness of national banks and which (2) employs moneyed capital
 273 with the object of making profit by its use as money, through dis-
 274 counting and negotiating promissory notes, drafts, bills of ex-
 275 change and other evidences of debt; buying and selling exchange;
 276 making of or dealing in secured or unsecured loans and discounts;
 277 dealing in securities and shares of corporate stock by purchasing

278 and selling such securities and stock without recourse, solely
279 upon the order and for the account of customers; or investing
280 and reinvesting in marketable obligations evidencing indebtedness
281 of any person, copartnership, association or corporation in the
282 form of bonds, notes or debentures commonly known as invest-
283 ment securities; or dealing in or underwriting obligations of the
284 United States, any state or any political subdivision thereof, or
285 of a corporate instrumentality of any of them. This shall include,
286 without limitation of the foregoing, business commonly known as
287 industrial banks, dealers in commercial paper and acceptances,
288 sales finance, personal finance, small loan and mortgage financing
289 businesses, as well as any other enterprise employing moneyed
290 capital coming into competition with the business of national
291 banks; provided, that the holding of bonds, notes, or other evi-
292 dences of indebtedness by individual persons not employed or
293 engaged in the banking or investment business and representing
294 merely personal investments not made in competition with the
295 business of national banks, shall not be deemed financial business.
296 Nor shall "financial business" include national banks, production
297 credit associations organized under the Farm Credit Act of 1933
298 or the Farm Credit Act of 1971, Pub. L. 92-181 (12 U. S. C. § 2091
299 et seq.), stock and mutual insurance companies duly authorized
300 to transact business in this State, security brokers or dealers
301 or investment companies or bankers not employing moneyed
302 capital coming into competition with the business of national
303 banks, real estate investment trusts, or any of the following en-
304 titles organized under the laws of this State: credit unions,
305 savings banks, savings and loan and building and loan associa-
306 tions, pawnbrokers, and State banks and trust companies.

307 (n) "International banking facility" shall mean a set of asset
308 and liability accounts segregated on the books and records of a
309 depository institution, United States branch or agency of a foreign
310 bank, or an Edge or Agreement Corporation that includes only
311 international banking facility time deposits and international
312 banking facility extensions of credit as such terms are defined in
313 section 204.8 (a)(2) and section 204.8(a)(3) of Regulation D
314 of the board of governors of the Federal Reserve System, 12
315 CFR Part 204, effective December 3, 1981. In the event that the
316 United States enacts a law, or the board of governors of the
317 Federal Reserve System adopts a regulation which amends the
318 present definition of international banking facility or of such
319 facilities' time deposits or extensions of credit, the Commissioner

320 of Banking shall forthwith adopt regulations defining such terms
 321 in the same manner as such terms are set forth in the laws of
 322 the United States or the regulations of the board of governors
 323 of the Federal Reserve System. The regulations of the Commis-
 324 sioner of Banking shall thereafter provide the applicable defi-
 325 nitions.

1 52. (New section) A taxpayer who purchases recycling equip-
 2 ment to be used within this State shall be entitled to a credit
 3 against the tax imposed pursuant to section 5 of P. L. 1973, c. 170
 4 (C. 54:10E-5) in an amount equal to 20% of the cost of the
 5 recycling equipment. For the purposes of this section, "recycling
 6 equipment" means vehicles used exclusively for the transportation
 7 of post-consumer waste material, or machinery or apparatus used
 8 exclusively to process post-consumer waste material and manu-
 9 facturing machinery used exclusively to produce finished products,
 10 the composition of which is at least 50% post-consumer waste
 11 materials, provided that this transportation, processing or manu-
 12 facturing activity accounts for at least 50% of the taxpayer's
 13 production as measured by the taxpayer's net sales during the tax
 14 period for which the credit established pursuant to this section is
 15 claimed. "Post-consumer waste material" means any product
 16 generated by a business or consumer which has served its intended
 17 end use, and which has been separated from solid waste for the
 18 purposes of collection, recycling and disposition and which does
 19 not include secondary waste material or demolition waste; and
 20 "secondary waste material" means waste material generated after
 21 the completion of a manufacturing process. The Commissioner of
 22 the Department of Environmental Protection, in consultation with
 23 the Director of the Division of Taxation, shall adopt rules and
 24 regulations establishing technical specifications for eligibility for
 25 the credit established pursuant to this section. Any unused portion
 26 of the credit established pursuant to this section may be carried
 27 forward 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
 4 different 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
24 required 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
80 period in which any item of income or deduction shall be included,
81 without 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*
85 *to section 52 of P. L. . c. (C.) (now pending*
86 *before the Legislature as this bill) against the tax imposed pur-*
87 *suant to section 5 of P. L. 1973. c. 170 (C. 54:10E-5), an amount*
88 *equal to 100% of the taxpayer's energy costs incurred in manu-*
89 *facturing for sale products the composition of which is at least*
90 *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*

94 *purposes of collection, recycling and disposition and which does*
 95 *not include secondary waste material or demolition waste; and*
 96 *“secondary waste material” means waste material generated after*
 97 *the completion of a manufacturing process. The Commissioner of*
 98 *the Department of Environmental Protection, in consultation with*
 99 *the Director of the Division of Taxation, shall adopt rules and*
 100 *regulations establishing technical specifications for eligibility for*
 101 *the deduction established pursuant to this paragraph.*

1 54. (New section) a. On or after July 1, 1986, no person shall
 2 sell, or offer for sale, at retail or at wholesale for direct retail
 3 sale in this State any motor oil in containers for use off the
 4 premises unless:

5 (1) Every container of lubricating or other oil is clearly marked
 6 or labeled as containing a recyclable material which shall be
 7 disposed of after use only at a used oil collection center; and

8 (2) The motor oil retailer shall conspicuously post and maintain,
 9 at or near the point of sale, a durable and legible metal sign, not
 10 less than 11 inches by 15 inches in size, informing the public of
 11 the importance of the proper collection and disposal of used oil,
 12 and how and where used oil may be properly disposed. For the
 13 purposes of this section, “motor oil retailer” means any person
 14 who sells to consumers more than 500 gallons of lubricating or
 15 other oil annually in containers for use off the premises where
 16 sold.

17 b. The Department of Environmental Protection shall adopt,
 18 pursuant to the provisions of the “Administrative Procedure
 19 Act,” P. L. 1968, c. 410 (C. 52:14B-1 et seq.) any rules and
 20 regulations necessary to implement the provisions of this section.

1 55. (New section) a. On or after July 1, 1986, every owner or
 2 operator of a used oil collection center shall post and maintain a
 3 durable and legible metal sign, not less than 11 inches by 15 inches
 4 in size, in a prominent location, informing the public that it is a
 5 collection site for the disposal of used oil. For the purposes of
 6 this section, “used oil collection center” means any reinspection
 7 station permitted by the Division of Motor Vehicles in the Depart-
 8 ment of Law and Public Safety, or retail service station which has
 9 a used oil collection tank on the premises, or any site which accepts
 10 used oil for recycling.

11 b. The Department of Environmental Protection shall adopt,
 12 pursuant to the provisions of the “Administrative Procedure
 13 Act,” P. L. 1968, c. 410 (C. 52:14B-1 et seq.) any rules and
 14 regulations necessary to implement the provisions of this section.

1 56. (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-
 8 plementary 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 57. (New section) Any monies due a municipality pursuant to
 2 the provisions of section 56 of P. L. . . . , c. . . . (C.)
 3 (now pending before the Legislature as this bill) may be antici-
 4 pated by the municipality for the purposes of preparing its annual
 5 budget.

1 58. (New section) The receipt and expenditure by a municipality
 2 of the monies which a municipality receives under section 56 of
 3 P. L. . . . , c. . . . (C.) (now pending before the
 4 Legislature as this bill) shall be exempt from the limitations on
 5 municipal expenditures imposed pursuant to section 3 of P. L.
 6 1976, c. 68 (C. 40A:4-45.3).

1 59. (New section) a. All of the functions, powers and duties
 2 heretofore exercised by the Department of Energy and the com-
 3 missioner thereof pursuant to P. L. 1981, c. 278 (C. 13:1E-92
 4 et seq.) are transferred to and vested in the Department of
 5 Environmental Protection and the commissioner thereof.

6 b. There is established a New Jersey Office of Recycling in the
 7 Department of Environmental Protection. The New Jersey Office
 8 of Recycling shall be under the immediate supervision of the Ad-
 9 ministrator of the Office of Recycling. The administrator shall be
 10 appointed by the Commissioner of Environmental Protection and

11 shall receive a salary which shall be within a range established
 12 by the Department of Civil Service with the approval of the
 13 Director of the Division of Budget and Accounting.

14 The administrator shall administer the work of the New Jersey
 15 Office of Recycling under the direction of the Commissioner of
 16 Environmental Protection or his designee and shall perform any
 17 other functions of the department as the commissioner may
 18 prescribe.

19 c. All transfers directed by this section shall be made in
 20 accordance with the "State Agency Transfer Act," P. L. 1971,
 21 c. 375 (C. 52:14D-1 et seq.).

1 60. There is appropriated from the General Fund to the Office
 2 of Recycling in the Department of Environmental Protection the
 3 sum of \$500,000.00, to implement the provisions of this amendatory
 4 and supplementary act.

1 61. There is appropriated from the General Fund to the "Muni-
 2 cipal Recycling Program Fund" created pursuant to section 56
 3 of this amendatory and supplementary act the sum of \$8,000,000.00,
 4 to implement the provisions of sections 5 and 56 of this amenda-
 5 tory and supplementary act.

1 62. 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
 purpose of this bill is to establish a mandatory Statewide re-
 cycling program, to encourage the expansion of markets for
 recyclable materials, and to eliminate certain institutional, regula-
 tory and statutory impediments to the development of the State's
 commitment to recycling as manifested in the goals of the State
 Recycling Plan.

(Subject)

SOLID WASTE

(Description) Statewide recycling program — Establishes

(Synopsis) Establishes mandatory statewide recycling program
 to be administered by the Office of Recycling in the
 Department of Environmental Protection.

SENATOR DANIEL J. DALTON (Chairman): We'd like to get the hearing started, if we could. Today's public hearing is on S-1478, sponsored by Senator Paul Contillo, the New Jersey State Recycling Act.

My name is Dan Dalton, and I chair the Senate Energy and Environment Committee. Senator Contillo, the sponsor of the bill and Vice Chairperson of the Committee, has a statement to make. Senator Contillo?

SENATOR CONTILLO: Thank you, Senator Dalton. And thank you for coming all the way up from Camden this morning. Did you come up on the Turnpike?

SENATOR DALTON: Yes, I did.

SENATOR CONTILLO: Did you see our ski mountain in the Meadowlands, there?

SENATOR DALTON: Yes, I did.

SENATOR CONTILLO: That's our solid waste ski mountain.

SENATOR DALTON: It's always nice to come north.

SENATOR CONTILLO: It looks nice in the winter. It's tough in the summer.

Let me read a brief statement on what this bill does, so to set the ground rules.

This legislation will make recycling a major component of New Jersey's solid waste management strategy. The intent of the bill is to complement the development of high technology and resource recovery at the county level with mandatory municipal source separation and recycling programs, in order to solve the State's garbage disposal problem in a comprehensive manner.

There are five general points I'd like to make about the bill before we open the hearing. Number one, I would like to discuss the mandatory aspects of the bill. They're predicated upon a market's first implementation strategy, that no municipality will be required to adopt a mandatory source separation ordinance until the county has executed contracts or

agreements for the marketing of its designated recyclable materials.

The environmental and social cost of product containers and packaging must be recognized. Each item in the waste stream -- that is, beverage containers, metal, glass, paper, plastic containers, packaging, newspaper, used motor oil, automobile tires, and all the items found in household refuse must be looked at in terms of its recyclability.

In the present climate of increasing disposal costs and diminishing landfill space, we can no longer afford to ignore the disposal costs of supermarket food and non-food items wrapped in disposable or throwaway containers and packaging. Products and goods manufactured from, or packaged in recycled or recyclable materials, must receive favorable tax treatment to encourage their use.

Similarly, tax incentives must be provided to businesses and industries which utilize recycled materials in their manufacturing process, or which produce containers and products packaged -- composed of recycled material.

Statewide recycling must be compatible with, and in place, prior to the advent of operational resource recovery incineration facilities. If certain materials in our solid waste stream cannot be safely burned, then we must discourage the use of these materials. If certain recycled materials -- that is, glass and aluminum -- have a higher recycled value as reprocessed goods than as fuel, they should be recycled rather than burned. Similarly, if certain non- or poorly- combustible material would hinder the efficiency and environmental safety of these incinerators, they likewise would be removed prior to incineration and recycled, if possible.

The statewide solid waste management plan envisions a strategy comprising of 25% recycling, 50% resource recovery incineration, and landfilling the remainder of New Jersey's solid waste stream by the year 2000. The State's disposal

needs are thus predicated upon each county reducing its waste flow by 25% in this regard. We cannot afford to delay in the establishment of a workable and aggressive statewide recycling program. We must start somewhere. If we cannot agree on this legislation, perhaps beverage container deposit legislation should be considered as an alternative waste reduction strategy.

And I would just like to make the comment to those that are going to testify for the balance of the day, that we're here to hear what you have to say. We have had previous public hearings, and we know it's not an easy bill; we know it's a -- sort of on the cutting edge. It's the first time a mandatory recycling bill will be proposed in the country -- that we could keep this meeting, as best as we can, on a positive level; that is, if there's some things in the bill that your industry finds difficult to live with, I would appreciate, personally, that we have an alternative, a suggestion, an amendment -- whatever you think will make the bill work better. Because -- I'll say this to you: We're going to have a recycling bill of one sort or another. The bill has bipartisan support; it has legislative and executive support. So, I would say, we're going to have a recycling bill, and we're here today to listen to your suggestions on how we can improve it, or why you like it.

SENATOR DALTON: Thank you, Senator.

It should be noted that we will take testimony until approximately 12:30, quarter of one. At that time, we'll break for a half an hour lunch, and then come back and take the remainder of the testimony. Additionally, what we'd like to do is to ensure that each speaker makes his or her points as quickly as possible, and attempt, if you will, to avoid any redundancy. Be assured that if you say it once -- even if you say it twice -- it'll stick, and as a result, you don't need to be coming up and saying the same things over and over again.

What we'd like to do is start out with the Executive Branch first -- State Executive Branch, and I'd like to call up Richard Salkie, from the Division of Waste Management of the Department of Environmental Protection, who is here representing New Jersey Department of Environmental Protection Commissioner Dewling. Mr. Salkie?

R I C H A R D S A L K I E: Thank you.

The Department of Environmental Protection would like to thank this Committee for the opportunity to present testimony. I am testifying on behalf of Commissioner Dewling, who unfortunately was not able to attend this morning.

The Department fully supports passage of the statewide Recycling Act. We consider it to be an essential part of our statewide management strategy. It is no secret today that we are in the midst of the solid waste crisis. At present, there are some 12 landfills that are processing wastes, that represent 90% of all the municipal waste that is generated in this State. That is down from an excess of 200 landfills that were available 10 years ago. Those landfills have very limited remaining capacity; in fact, at the best estimate, there is less than two years of remaining capacity in the landfills today. The Recycling Act will significantly improve our position by reducing the waste flow by 25%.

In addition to reducing the waste flow, a very important factor is the cost of the disposal. The cost of solid waste disposal is increasing today to approximately \$20 a ton, and that's expected to go much higher in the future. Taking a look at the Recycling Act, if 25% of the waste is recycled, this can save the counties, municipalities, and their residents some \$50 million a year. The \$50 million a year figure would certainly increase in the future as we implement state-of-the-art landfills and resource recovery facilities.

The Recycling Act will, of course, provide the means to conserve our natural resources, in addition to significant

cost savings and to developing a greater capacity for New Jersey's solid waste disposal.

An added benefit of the Recycling Act is that it will essentially create a new industry, with added jobs to the New Jersey work force. And in addition to the significant cost savings that are anticipated, it will have significant beneficial impacts on resource recovery facilities that are constructed in the future. As an example, the Essex County resource recovery facility was downsized by 155 for very significant dollar savings, in anticipation of recycling. It will also remove difficult-to-incinerate materials, and corrosive and abrasive materials which will prolong the life of those very expensive facilities and also reduce the operation and maintenance costs.

As a final comment, we consider the total package -- we consider it essential that the total package be enacted essentially as presently developed, which is a very comprehensive and well thought-out package that addresses all the aspects of recycling. It addresses not only the mandatory need to develop recycling plants for our counties and municipalities, but it also encourages municipalities to provide for recycling, and encourages the development of new markets for recycled materials, and we are confident that once a steady stream of the recycled materials are available, that the markets will, in fact, respond; and it also encourages the development of new technologies -- state-of-the-art technologies that can be used to achieve comprehensive material management programs for New Jersey.

In summary, the Department fully supports the enactment of this legislation as a comprehensive package, and we consider that it will provide great benefits to the State of New Jersey and to all of our residents. Now, I believe that Mary Sheil, the administrator of our Office of Recycling, would like to offer a few additional comments, after which we'll be

happy to respond to any questions.

SENATOR DALTON: That will be fine, Mr. Salkie. Mary?
M A R Y T. S H E I L: Good morning, Senator Dalton, Senator Contillo.

S-1478 provides us with the resources, policies and mandate that we need to institutionalize recycling as part of the solid waste management program. Some of our counties, such as Camden, Somerset, and Burlington have already begun the process of mandating and regionalizing recycling activities. S-1478 lends support to those programs and provides the opportunity to expand recycling programs in other areas of the State, through market development incentives and policies that enhance the value of recyclable materials.

Since market development is a major issue in expanding the State recycling program, I would like to briefly list those sections that I believe enhance the marketing opportunities. Section 10 requires that certain containers be labeled as to their recyclability and content. This alerts and educates the consumer to the more desirable container, and helps to reduce contamination in the recycling process, thus improving the economics of that process.

Sections 11 and 12 provide disincentives in the marketplace for material packaging that is not recyclable. It helps to expand the market share of those packaging materials that are highly recyclable, and thereby provides a stronger recycling market.

Section 16 expands the market for compost material by requiring its use as a soil amendment product on publicly maintained lands.

Section 17 provides the resources to finally begin, in New Jersey, a viable tire recycling program.

Sections 18-23 establish State and local purchasing programs that will increase the demand for recycled products such as paper, rubber, asphalt, and oil. New Jersey's action

on this section will be followed by other states and will help to stimulate a demand nationwide.

Section 35 helps to simplify the sale or disposition of recyclable materials by allowing local governments to negotiate for the sale of materials.

Section 38 allocates 35% of the recycling fund to market development programs and recycling businesses. This will substantially increase the funds we now have available for that purpose, which I might add are totally spoken for at this point.

Section 45 recognizes recyclables as commodities, and enhances the economics for development and operation of recycling facilities by removing regulatory constraints.

Sections 46 through 53 provide sales tax incentives for recycled products, investment tax credits for purchase of recycling equipment, and deductions for manufacturing products made of recycled materials.

Essentially, 22 out of the 57 sections of S-1478 address the marketing of recyclable materials. In addition, the only materials mandated to be source-separated are those that we believe have a consistent and available market statewide. Although municipalities and counties must designate two other materials for recycling, this mandate is contingent on availability of markets.

S-1478 is an extremely detailed proposal, but developing a piece of legislation that will change solid waste management practices in this State is a very complex process. To achieve the goals set forth in S-1478, I recommend that it be released from Committee, and enacted as a comprehensive piece of legislation.

I'll be happy to answer any questions, or elaborate on any of those sections that I outlined.

SENATOR DALTON: Okay. Thank you, Mary.

Senator Contillo, any questions for the Department?

SENATOR CONTILLO: I have one question for the Department. I just wanted to see if he agrees with the Commissioner. At our meeting of our Energy and Environment Committee, Commissioner Dewling came there to discuss some of the problems he saw in his new office. And, he indicated to me that he felt that while the public perception is that hazardous waste and toxic waste is one of the major problems in the State, and without downplaying that, he said to me that he thought the major problem we have in the State of New Jersey was the solid waste problem, because so much of the solid waste landfills really have some toxic and hazardous waste materials mixed in with them. I was pleased to hear him say that he considered solid waste management one of his prime problems and responsibilities. Do you agree with that?

MR. SALKIE: I would fully agree with that, and further emphasize that in addition to the problems that we have with hazardous waste being associated with certain landfills. And we do have a comprehensive monitoring program that's presently underway that's addressing those landfills. But in addition to that aspect of the problem, there's a simply unimaginable problem that would occur within two years unless we are ready to dispose of all of our solid waste in a very comprehensive fashion. At such times, the landfills absolutely reach their capacity and can take no more -- as I say, that would be a crisis of unimaginable proportions.

SENATOR DALTON: Mary, the-- One of the items that I think has caused some controversy, with regard to the bill, is the whole issue of mandating recycling when, in fact, markets aren't available. How does the bill address that problem?

MS. SHEIL: Well, as I mentioned, first it only mandates essentially two materials: one is, it bans leaves from the landfills during the leaf season, and then it mandates the recycling of aluminum beverage cans. And the reason for that is, we feel that in terms of aluminum beverage cans, that

market is there, and is available on a statewide basis. Then, it requires that municipalities and counties come up with a plan on a county-wide basis, and designate two other materials. But these two materials are contingent on getting contracts or agreements. They can apply to the Department for an exemption from that provision, and the Department has the authority to grant that exemption for one year, at which time they continue to look, and they can come back for a renewal.

SENATOR DALTON: Okay. That issue of allowing you granting a dispensation, for lack of a better word, for one year to a county-- Do you foresee, in some areas such as plastics and other materials, the possibility of you and the Department having to continue to grant that exempt -- one-year exemption ad infinitum? In other words, what are we doing now, I guess, Mary, to assist the plastics industry, or what is the plastics industry doing as far as the whole issue of recycling? Right now, there's not--

MS. SHEIL: There are no plastic containers being recycled from--

SENATOR DALTON: That's correct.

MS. SHEIL: --our municipal programs in New Jersey. In fact, the only place where plastic containers are recycled in any quantity is in those states where there are deposits on those containers. Part of the reason for that is, it's very difficult to collect that material at the curbside. And I've asked a few of our towns to look at it. I've asked Somerset County, who's going into a program on a county-wide basis, and to look at the possibility of including plastic containers, starting with just the PET soda bottles. And the economics, the displacement of their other materials and the amount of room that those containers take up -- the low density and the value of that material and the fact that you're carrying around so much air, does not lend itself readily to the curbside collection type of program, as does other material such as

newspapers, cans and bottles do.

What is the plastics industry doing? Well, in New Jersey, they have-- Nationwide, they've established the Recycling Plastics Foundation. In New Jersey, that Foundation has sited, at Rutgers University, the Plastics Institute. They plan, or have already committed -- I'm not sure what stage they are in -- \$3 million to that facility to do research projects and to hopefully expand the use of recycled plastic material.

SENATOR DALTON: Is-- Even if you find a market for plastics, is it going to be a -- is it going to be practical to require curbside source separation?

MS. SHEIL: At this point, I would have to say we have not been able to find a practical method to collect it at the curbside, unless the industry's willing to subsidize somehow, that collection system.

SENATOR DALTON: What is the state of the recycling industry within the State? For instance, if we said -- if we said, tomorrow we want a mandatory -- we want to put in place a mandatory recycling bill, the markets now to do that-- Can the present recyclers of materials handle the amount of materials that would then be source-separated?

MS. SHEIL: There probably would be some problems with paper, though even in -- we've heard this for well over a year now -- but even in that period of time, the export market has been there, and that's where I really see paper expanding even more -- in the export market. The problem has been pricing. A lot of the people who handle paper for the export market are for-profit businesses, and therefore, they can't ship that paper and get a price for it in the export market that pays their cost and gives them a reasonable profit; then they're reluctant to do so.

So, I think that's an issue that we will have to address, and look at what can we do as a State of New Jersey, to help enhance the export market? I will mention, though,

that also, China just bought a recycling paper mill in New Jersey. It's an old mill that has been closed. And that does offer potential for expansion of shipping materials to the country of China, which, as it industrializes, will become a big market for paper.

So, I think the export market is there. The domestic market is a problem, in terms of flooding the market. Glass has taken a turnaround. For years, the glass industry has been in the doldrums. We've seen glass plants close in New Jersey. What has happened in the glass industry is that the plants, the companies that have remained in the business, have found that they have picked up the market share of those companies that went out, and for the first time last year, in many years, the glass industry showed a profit and they looked very good for this year. Their viability, of course, depends more on plastics, and if plastics continues to erode that market, then the glass industry will be in trouble.

SENATOR DALTON: Very good. I don't have any further questions. Paul?

SENATOR CONTILLO: Mary Sheil, would you discuss briefly with us the entire aspect, and why you think we can deal with the deposit?

MS. SHEIL: Well, the bill calls for up to, but not to exceed \$3 per tire at the point of purchase, which would be considered depositor surcharge. It also requires that tires, if it is considered a deposit in New Jersey, be labeled to that effect. And then it allows the State to -- if the deposit does end up being \$3, to keep \$1.50 of that, which would be put into a tire recycling fund.

Part of the problem with recycling tires is the economics of doing it. We have found that our tire reefing program essentially costs about \$1.50 a tire, which is probably where the \$1.50 number originated from. We have found the only viable process that's been offered to us to date has

been incineration of tires. The problem with that, of course, becomes the political problem of siting those facilities, because we know the problem when we want to site a resource-recovery facility for municipal solid waste. If we come in and say "Now we're going to site an additional facility just for burning of tires," it's going to be a long, drawn-out process.

But we think that we have to put some resources into that program, to look at other systems, to make that economically viable, because tires are a serious problem in disposal.

SENATOR CONTILLO: Particularly, the mountain behind my Chairman's district is a serious problem.

MS. SHEIL: Right.

SENATOR CONTILLO: I've been in contact with a firm that recycles the tires and generates oil, as opposed to just incineration, for energy.

MS. SHEIL: That's a pyrolysis process. The problem with that-- I've looked at a few of those systems. I have not seen any firm that has even brought that up to commercial viability. It's been done on a small-scale basis. And it may be a system, perhaps, that should be looked at, but it does not appear commercially viable at this time. Part of the problem is the price of virgin oil, as opposed to recycled oil. So, another viable product that can come out of that is called carbon black. And one of the systems that I looked at, the carbon black did not seem to compare economically and in quality with other sources of carbon black. But this is certainly a system that we should look at if we develop a research program for recycling tires.

SENATOR CONTILLO: Thank you.

SENATOR DALTON: Any problems, Mary, with the-- Any emissions problems with the incineration of tires?

MS. SHEIL: That-- I don't have all the figures on

it, because if we went into it-- Whenever these companies-- We've had about five companies, I guess, call us and we have called in our air people, and they would have to look at all the data that these companies provide.

There is a company that is about to open a facility in California, and they have about seven million cars, I think, sitting at a site, and they're going to just build this facility to incinerate these cars. They figure it will take them about seven years to get rid of all the tires, and then the energy generated will be sold to the local utility. We are looking at that company to see how well that process goes.

SENATOR DALTON: As far as the technology involved, is it much different than a resource recovery plant?

MS. SHEIL: I'm not an engineer, so I really couldn't comment. Maybe Dick knows more about that than I do, but the one thing I have discussed with resource recovery companies is the possibility of bringing the tires into the municipal solid waste plan, and what they have told me is that this is not -- this is all right if you have a tire that occasionally comes in a municipal waste truck, and you throw it in every now and then. But to handle tires on any volume basis, those facilities are not designed-- The BTU value of a tire is at least twice as much as the BTU value of municipal solid waste. So, your system is designed to generate that type of energy. The grates and so forth -- it's my understanding that the movement of tires along those grates would be different than municipal solid waste, but Dick may have more knowledge -- probably does have more knowledge than I do on that.

MR. SALKIE: In general, the technology wouldn't really be different. There would be some different configurations to account for the problem that Mary is referring to. We could, and of course, would insist on sufficient air pollution control devices to insure there would not be any contravention.

SENATOR CONTILLO: It's my understanding that there is not a air pollution problem when you recycle the tires, to generate the oil that those plants-- Those pilot plants that were only burning 20-30,000 tires a month did not have any problem because of the system that recycles the tires different from the one that purely incinerates it. I don't know whether that's accurate or not, though.

MR. SALKIE: That would generally be accurate. Pyrolysis involves a starved-oxygen combustion system, heating it up without air and under pressure so it would not, in fact, give off the emissions that would be expected from the normal incineration process.

SENATOR CONTILLO: So, if a way was found to truly recycle the tire into a saleable product, you don't, as a Department, see as many problems with the air emissions in that type as you would for pure incineration?

MR. SALKIE: I would say that if we can move towards a pyrolysis system, that the answer to that would definitely be yes. It would, of course, have to be demonstrated on a full-scale approach, that it could work. Pyrolysis was tried, for example, with sludge, and that was at one point the answer to our sludge problem, but it didn't really get off the ground. Now, I'm not saying that it wouldn't work, but I'm simply saying we would have to have it demonstrated.

We are, in fact, investigating that right now, along with all other possibilities for -- well, a fairly large catch of around two million tires in the Camden area, and we'll try to be handling that-- Yes, I know. (laughter)

UNIDENTIFIED AUDIENCE MEMBER: Mr. Chairman, could you ask the speakers to speak up? We can't hear them.

SENATOR DALTON: I have no further questions. (unidentified audience member asks if public address system is on) We'll take care of that right now. Is it on? (speaks to aide) Want to check that out? Oh, the mikes are not working.

That's a part of our strategy up here. (laughter)

Why don't we-- I have no further questions, but thank both of you very much, and we can continue on now. (short pause while public address system is switched on) I think that's-- Is everyone -- can hear now? (affirmative response)

The Department of Environmental Protection just spoke vehemently against Senator Contillo's bill -- I just wanted to inform everybody. (laughter) The next witness on the agenda-- Is Mr. Allen Sklar here, Bergen County Freeholder? Mr. Sklar? (no response) Okay. Freeholder Carol Rufener from Morris County?

F R E E H O L D E R C A R O L R U F E N E R: Good morning, gentlemen. Is this mike on? (audience responds, "no")

SENATOR DALTON: That is the public address one.

FREEHOLDER RUFENER: This is the mike?

SENATOR DALTON: Yes-- Is it on?

FREEHOLDER RUFENER: Now? (affirmative response from audience) Now. Okay.

Good morning, ladies and gentlemen. (stops due to feedback from public address system)

SENATOR CONTILLO: I did that.

FREEHOLDER RUFENER: My name is Carol Rufener. I'm a member of the Board of Chosen Freeholders of the County of Morris, and serve as Chairperson of the Freeholders Committee on Planning and Development.

SENATOR DALTON: Excuse me, Freeholder. You're not being heard, so we still have a little bit of a problem.

SENATOR CONTILLO: Our mikes are working.

SENATOR DALTON: Yeah, ours are working.

FREEHOLDER RUFENER: All right. We'll try it again.

I'm Carol Rufener, Morris County Freeholder. With me today is Lori Scozzafava, who is the County's Recycling Coordinator. My appearance is on behalf of my Board to convey our strong endorsement of the legislation you are considering

today, Senate Bill 1478.

Last year, we supported the parent legislation of this bill and we're really sorry that it -- that none of it passed, for we have no doubt that recycling must be made mandatory to reduce the size of the solid waste stream that has consumed all but a few of the landfills in our State. Morris County's government takes recycling seriously with its own internal program for County agencies, having saved more than eight tons of recyclable paper from the waste stream since the program was begun last April. And who said red tape was not productive?

The Board of Freeholders last year adopted an amended solid waste plan that mandates recycling for the County's 39 municipalities, and according to our records, our County ranks third in the State, behind Salem and Cumberland Counties, in the per capita amounts recycled. It is our wish that this effort be recognized and that the final legislation be amended to recognize that municipalities with successful recycling programs already in place should not be required to increase their recycling percentages beyond those that would be imposed on municipalities starting new programs.

We congratulate you, the directors of this legislation, for your understanding of the very real power of financial incentives, even though we worry about the continued marketability of large quantities of recyclable materials.

Morris County's latest recycling effort is not the first. Our previous attempt to recycle the government's usable waste fell victim to a market that just evaporated when we thought we had it under control. Unfortunately, county government has no mechanisms for doing the research on establishing, tracking, or supporting markets, and it is our belief that a statewide office should perform these overall support functions and supply the data to the counties and municipalities to aid their recycling efforts.

I again thank you for giving us this opportunity to be

heard. As part of my presentation, I'd like to introduce Lori, who has, as your earlier request, two specific issues that she'd like to share with you. Lori?

L O R I S C O Z Z A F A V A: Thank you, and good morning.

The two issues which I'd like to address on Senate Bill 1478 -- I'll take one at a time. But first, I would like to say that the establishment of 15% and 25% as goals for municipalities and not as standards for tonnage grant eligibilities is applauded.

I would like to preface my next comments and say that I believe the intent of the bill is to provide those 15 and 25% as goals. With the wording as such in the bill right now, I have a little bit of confusion about it. I feel the bill that now states that the amount of solid waste disposing in previous years will be used to determine the 15% reduction. Therefore, regardless of recycling, which reduced that year's tonnage, a municipality is required to reduce this waste stream by 15% more. An additional 25% will be expected the second year. And as an example, assume a municipality reduced last year's waste by 5% through recycling. This year's district plan, we use that tonnage grant figure as a base and require the reduction of 15%. If that goal is met, an additional reduction of 20% is achieved. Then, 25% will be expected the next year.

It is evident that this calculation is inequitable, especially for those municipalities already achieving high levels of recycling. To rectify this, a 15% reduction must be taken after a sum of the total municipal waste stream and recycling material is made. I recommend that the phrase "solid waste stream" as used in Section 4 -- excuse me, Section 3, paragraph 4 (a) and (b) be replaced by post-consumables or any other appropriate term defined as the sum of the total municipal solid waste and recyclable material.

Secondly, the proposed bill defines markets as the "disposition of recyclable materials which entail the

transportation and disposition costs less than the cost of transferring the recycled materials to a solid waste facility as municipal solid waste." This definition fails to cover all possible scenarios, and therefore, does not meet the needs of counties whose responsibility it is to locate markets for recalcitrant municipalities. For instance, those municipalities whose residents have private contracts for solid waste collection pay nothing for transportation and disposition of municipal solid waste to appropriate facilities. Therefore, all costs associated with the disposition and transportation of recycled materials will never be less than their cost of transporting recycled materials to a solid waste facility.

It follows that the county will also be unable to find a market, as defined in this bill, for these municipalities. I suggest that a list of available markets be established by each county for its individual municipalities, pending DEP approval.

The County of Morris commends the recycling initiatives taken by the State of New Jersey. We are now and will continue to work towards achievement of our highest possible recycling goal. I thank you for your time, and hope that our recommendations will be utilized towards development of an efficient and comprehensive recycling plan for the State of New Jersey.

SENATOR DALTON: Thank you. Could I ask you a question?

MS. SCOZZAFAVA: Sure.

SENATOR DALTON: The-- Your concern with the percentages -- will you go over that for the Committee?

MS. SCOZZAFAVA: Sure. I understand that the goals of 15 and 25% are admirable for establishing a district plan for municipalities. However, as it states in the bill right now, we're using figures from-- For instance, if we use last year's figures, assuming that we have tonnage figures, that totally ignores the fact that any recycling has been done, since a

reduction of that figure represents a reduction of solid waste already previously made through recycling. Therefore, if the recycling has already been done, then 15% more must be done, according to our district plans.

Also, then, according to the Section B, 25% on top of that year's figures must be accomplished. I believe it's accessible.

SENATOR CONTILLO: So you would prefer to see them cumulative?

MS. SCOZZAFAVA: Exactly.

SENATOR CONTILLO: You want to see-- Yeah. It's sort of like the problem well-run municipalities had when we imposed the caps. Those that ran a tight ship were really hurt by the caps, and those that were sloppy, and weren't doing their job, the caps were designed to work on.

Now, I understand it and I think it's-- Although we're really here just to take input, I can say to you that that's a very reasonable request.

SENATOR DALTON: What is the-- Presently, how many materials or-- What are you recycling presently in the County of Morris?

MS. SCOZZAFAVA: Under the amendment to our solid waste management plan, we've requested each municipality to recycle four materials.

SENATOR DALTON: Four materials.

MS. SCOZZAFAVA: Glass, aluminum, newspaper, and yard waste.

SENATOR DALTON: And how-- What has the success been with your, I think it's 39 municipalities?

MS. SCOZZAFAVA: Yes. At present, we now have 16 municipalities in full compliance with that, and we also have seven other municipalities which have at least mandated one material.

SENATOR CONTILLO: Are you not under a court order to

recycle in your County?

MS. SCOZZAFAVA: Yes, we are.

SENATOR CONTILLO: So, in effect you have a mandatory recycling. Has it created any problems?

MS. SCOZZAFAVA: We feel that recycling in Morris County is of utmost importance, and therefore, although we see that there will be an amount of time needed by municipalities to come up to these programs, we feel that it's very important. It must be done.

SENATOR CONTILLO: But it is proceeding -- it's going along?

MS. SCOZZAFAVA: Oh, yes. Yes.

SENATOR CONTILLO: You might say you're one of the few counties -- you're the only County in the State that has mandatory recycling?

MS. SCOZZAFAVA: No, that's not true. Mandatory recycling--

SENATOR CONTILLO: Mandatory, I'm saying.

MS. SCOZZAFAVA: County-wide--

SENATOR CONTILLO: The court order-- Morris County--

MS. SCOZZAFAVA: Salem and Cumberland Counties?

SENATOR CONTILLO: Salem-- Yeah?

SENATOR DALTON: Camden County.

MS. SCOZZAFAVA: Sorry. Camden County, as well.

SENATOR DALTON: Everyone under court order has mandate.

FREEHOLDER RUFENER: Coincidentally.

SENATOR DALTON: Excuse me?

FREEHOLDER RUFENER: Coincidentally.

SENATOR DALTON: Yes. Thank you very much.

FREEHOLDER RUFENER: Thank you.

MS. SCOZZAFAVA: Thank you.

SENATOR DALTON: Margo Lane from Garden State Paper?

M A R G O L A N E: Good morning. I am Margo Lane,

Communications Manager of the Eastern Region of Garden State Paper Company, Incorporated.

Garden State Paper Company is the largest paper company in the world, manufacturing new newsprint from old newspapers. In 1985, companies of which we're a part or sole owner consumed over 750,000 tons of old newspapers to make new newsprint. Our largest mill, which is wholly owned, is located in Garfield, New Jersey, and in 1985, this mill alone consumed over 250,000 tons of old newspapers. Most of the tonnage that was consumed at the Garfield mill was collected in the State of New Jersey.

I am here today to give the following testimony. Garden State Paper is not, and never has been, opposed to efforts by government at any and all levels to promote recycling as part of the wise use of resources and as part of the solid waste management solution. In the current consideration of mandatory recycling legislation, we believe that insofar as paper recycling is concerned, that the system of sorting, collecting, and marketing is working well. This system consists of a combination of operations involving nonprofit groups, private individuals, relatively small entrepreneurial businesses, and--

SENATOR DALTON: Excuse me, Miss Lane. Could you bring that a little closer -- the other mike? That is the public -- yeah. Even if you want to hold that -- whichever. I just want everyone to be able to hear.

MS. LANE: Okay. Is that better? (audience gives mixed response) How's that?

In the current consideration of mandatory recycling legislation, we believe that insofar as paper recycling is concerned, that the system of sorting, collecting, and marketing is working well. This system consists of a combination of operations involving nonprofit groups, private individuals, relatively small entrepreneurial businesses, and

cities and/or counties. It was built over many, many years and grew in response to the markets created by private businesses which convert the discarded paper into marketable end products, or who have responded to marketing opportunities to sell into markets outside New Jersey, both in North American and offshore.

The system now recovers over 55% of all the waste paper used in New Jersey. We believe it to be the highest level in the United States. There are 19 papers mills in New Jersey, which depend on recovered paper for some or all of their raw material supply. The supply system referred to earlier is the backbone of their supply, and is working well. Garden State Paper alone has, during its nearly 25 years of operation in New Jersey, used more than 4.5 million tons of old newspapers. This saved landfill space of more than 16 million cubic feet. If mandatory recycling of paper is enacted in its present form, there is a very real likelihood that the present system will collapse, or that the economic incentives built into the free enterprise system will be so affected as to discourage individual, nonprofit groups and waste paper dealers from operating as they have been.

This would come about for two fundamental reasons. The first is that the supply would exceed the demand at the paper mills, and/or the economically viable export markets. And the second is that the quality of the wastepaper would likely deteriorate.

Wastepaper must meet quality standards of the users, otherwise there is no point in saving it for re-use. Individuals and wastepaper dealers understand the quality needs, having learned over the years what is needed and how to carefully segregate from non-usable paper economically and profitably. Our experience is that city programs do not provide as high a quality wastepaper as privately-operated programs.

We believe that mandatory paper recycling legislation,

at the most, should recognize the effective working of the present system and should, at most, only augment the highly workable system rather than replace it. Our belief is that if the system is working, that the system is working.

Legislative language accomplishing that principle of augmenting was developed at the request of Commissioner Hughey over a year ago, through the combined thinking of knowledgeable people making up the New Jersey Recycling Forum. However, the language is not adequately included in the legislative drafts.

In order for recycling of any kind -- be it paper, metal, plastic or whatever -- to reduce the solid waste disposal problem, there must be economic markets for the products made from those recovered materials. This is not being adequately addressed in the mandatory recycling legislation. Mandating, by government offices, the use of paper products containing recycled fibers, for example, would only use, at most, less than 1000 tons per year of recycled paper, but that paper would be supplied -- if at all -- by mills in other parts of the U.S. Energy credits for recyclers, as has been proposed in one draft of the proposed law, would be attractive to manufacturers and might stimulate some additional use of wastepaper. Perhaps it would be appropriate to try such an incentive for some period of time, and then study the effect.

To cause a significant increase in recovered wastepaper requires substantial expansion and/or addition of new paper mills or new businesses that would use recovered paper. Factors necessary to cause that to happen include these critical considerations:

Is there a market for the end product or products? Markets for paper products follow population growth primarily, and the markets generally must be regional -- that is to say, economically reachable within a 300 to 400 mile radius of the mill.

Attractive growth markets are primarily in the Sunbelt

and far West. Companies must carefully consider labor supplies and the workforce climate; water supply, which I might add is limited in New Jersey; governmental requirements concerning effluent, noise, etcetera; special financing incentives, and land availability and cost. We believe that consideration of these conditions makes significant increased usage of recovered paper in New Jersey very unlikely.

It has been suggested that other products, new or existing but not now made in New Jersey, might be manufactured as inexpensive wastepaper became available. That, of course, is a possibility. Perhaps incentives could be built into legislation that would encourage research and investigation by both private businesses and/or universities. Obviously, this is a longer-term approach, and therefore, would not have the immediate impact that the Legislature seems to be seeking.

New Jersey Assemblyman Albohn has cited synthetic fireplace logs as one possibility of a product that could be made from wastepaper. A subsidiary of our company was engaged in that business several years ago, and found it uneconomical. Perhaps it could become viable under incentive conditions in New Jersey for some entrepreneur.

Garden State Paper has been in the forefront of recycling innovation, both in operation of collecting and processing systems as well as manufacturing for 25 years. As our name indicates, we were conceived and established here in New Jersey. Mr. Richard B. Scudder, as you no doubt know, was our founder. He is still a prominent citizen here in New Jersey and is today building a new coalition of newspaper publishing companies. Our innovative spirit still exists, and we are willing to join with legislators and others in sharing our experience and knowledge in helping solve New Jersey's solid waste problems. But we would remind everyone again that the present paper recovery and recycling system is working very, very well in New Jersey.

We have just received a copy of the new draft of this proposed legislation, which we have not had adequate time to digest for comment at this morning's hearings. We will, however, be studying the new language and be in touch with the Committee to discuss our views and also to offer input on ideas for helping solve this very complicated situation.

Thank you.

SENATOR DALTON: Thank you very much. Any questions?

SENATOR CONTILLO: I did go visit your plant, and I was really impressed with it. The one-- The only comment -- it's more in the form of a comment-- You said most of the paper comes from New Jersey. That means some of the paper you use does not come from New Jersey?

MS. LANE: That's correct.

SENATOR CONTILLO: Is that because we don't have-- Why would we be importing paper?

MS. LANE: Our system for the collection of wastepaper involves the fact that we deliver all of our newsprint that we manufacture in trucks. So, we send those trucks out over the road to where our various customers -- our publisher customers--

SENATOR CONTILLO: You pick up their residue?

MS. LANE: Yes, and also from communities in those areas.

SENATOR CONTILLO: Oh, okay. It's a part of your services.

MS. LANE: And that market is what we describe from Boston to Richmond. So, there are various stops on the way back, where those trucks are not coming back empty. They're stopping and picking up wastepaper from small recycling centers or communities along the way.

SENATOR CONTILLO: Could you have an idea of what percentage of the paper you use comes from out of the State?

MS. LANE: No, I do not. But I can find that out and advise you of it.

SENATOR CONTILLO: Because -- I guess the way -- where we are here in 1985, 1986, within another year or two or three, the cost of dumping at the landfill or the resource recovery unit is going to double or quadruple, to the point where municipalities are going to be paying anywhere up to \$30 or \$40 a ton to deposit the material at the resource recovery unit. And the discussion we had when I was at your plant was that having to pay people to bring you the paper, I envision within the decade that people will pay you to leave the paper there because it will be less costly than going to the dump with it, both from a transportation -- to some people, both from a transportation standpoint and to all people, from the cost of the tipping fee that will be in effect at the time. So, I don't know if you've taken those things into consideration, with the problems you've faced.

MS. LANE: We certainly will, and I appreciate your comment this morning. I'll be taking it back with me.

SENATOR DALTON: Thank you very much.

The next person to testify is William Comery from the Borough of Paramus.

W I L L I A M C O M E R Y: Thank you, gentlemen. My name is William Comery, and I am Superintendent of the Borough of Paramus Shade Tree and Parks Commission.

We in the Borough of Paramus endorse the mandatory recycling of leaves. We feel that they are a natural resource and should be protected. Bill 1478 puts a partial ban on leaves at the landfill between September and December. We would like to see this ban become a year-round ban, because improper and illegal dumping of leaves would cause a leachate problem which will affect the groundwater.

The New Jersey Department of Energy, Office of Recycling, estimates that 5-20% of the total waste of each municipality is leaves. They have developed a leaf composting manual for New Jersey municipalities. In this manual, various

levels of technology have been developed which make composting of leaves practical and profitable.

Local and regional composting sites must be developed. In Paramus, during the Fall of 1983, we spent \$25,000 in dumping fees and labor to take our excess leaves to the landfill. We have been composting leaves since 1971; however, we did not have adequate room for all of our leaves. We now have developed two sites, and compost 70,000 cubic yards of leaves annually.

The surplus and the generated compost from this program is given free of charge to the residents and also is used in municipal work, landscaping, and in tree planting programs. We estimated that in 1985, it would have cost us \$35,000 in dumping fees and labor to take the excess leaves to the landfill that -- if we did not have our second leaf site.

The end product of our composting is now processed through a shredder and becomes not only a usable product, but a saleable product. The sale of excess mulch to commercial contractors, builders, and landscapers began on January 1, 1986. Thus far, we have generated over \$2,000 in additional income to the Borough of Paramus.

Paramus, I believe, has proven that mandatory leaf recycling not only works, but can be profitable to the municipality. Thank you.

SENATOR DALTON: Thank you. Questions?

SENATOR CONTILLO: Yeah. The numbers you gave us -- are you including the money that you received back from the recycling program, or is this--

MR. COMERY: From the tenant grants?

SENATOR CONTILLO: Yes.

MR. COMERY: No.

SENATOR CONTILLO: So that would be in addition to that?

MR. COMERY: That is correct; yes. And it does not

take, for example, in 1986 the increase in the tipping fees.

SENATOR CONTILLO: Why do you feel that we should ban the leaves all year-round, as opposed to just those few months?

MR. COMERY: I think if it was just banned on a partial year-round basis, what would happen is, it would foster the improper dumping and storage of leaves until it becomes a more profitable time to take them to the landfill; whereas a total ban would really foster recycling.

SENATOR CONTILLO: Thank you.

SENATOR DALTON: Thank you.

The next person will be Mr. Roger -- I think it's Bernstein, from the Society of Plastics. Mr. Bernstein?

R O G E R B E R N S T E I N: Thank you, Chairman Dalton. I would like to make a brief statement, and I will pass around some written comments.

I want to start by saying that I compliment Senator Contillo on his basic thrust of S-1478. The plastics industry does support mandatory recycling legislation. We think that if there is a way that you can wring out what is recyclable in the waste stream and do it economically with the market's first mentality, that makes sense to us and we support it. We would like to figure out a way to be a part of that, actually, if we can.

A couple of messages I would just like to leave you with-- Going back to the point that Senator Contillo made in his opening -- are, recycling must complement waste to energy. We think that the plastics industry certainly has a home in waste-to-energy plants in terms of lending BTU value, and later, speaker Carl Kamena of Dow will get into some of the economics of how we contribute to that system. We think that we have a home there, and we will lend enormous BTU value to incineration and maybe, as a matter of fact, without plastics, those systems could not operate as efficiently. Health effects questions have been raised, usually by people trying to block

siting, but the preponderance of scientific evidence will support our contention that that is where plastic material can be recycled in the sense of recycling its value as raw material -- its fuel value.

So, the point I am trying to make is that there are now parts of the bill which wish to basically try to rid plastics of the marketplace by imposing absolutely unrealistic recycling thresholds, or else there would be deposits imposed, the stuff would be collected and eventually have to be landfilled anyway. It is a part of the bill that doesn't make a whole lot of sense to me. I feel that I'm hearing the Office of Recycling saying something to us that is a little bit new. We want to find a way to participate in a mandatory recycling program, and help the State identify what plastic containers we make that we know are being recycled, that we know have markets, and to figure out how to become a part of a curbside program in New Jersey.

The only container that we can identify, that we know could be a part of a curbside program, or has potential to be a part, is the soft drink container. It is identified by shape. It has the highest-- It is the container that is being recycled in the United States. There are markets for it. They are doing miracle kinds of things with the container. They're turning it back into bristles for paint brushes; they're turning it into inexpensive carpeting; they're turning it into fiber-fill; they're turning it into a number of other in uses. It is being done not far from here in Pennsylvania by entrepreneurs who are doing some pretty amazing stuff.

They've got markets that are growing. I have talked to them and they have said that they could take all the PET bottles that could come out of this State and do something with them. The question does boil down to economics. What are the economics for a municipality collecting them? What are the economics -- period. I don't think they look that terrible,

and I think there are ways to make it work if the State has a commitment to trying to recycle the plastic container which is the most viable for that purpose. It is a high turnover item. It's the most of what is out there in terms of beverages, along with milk containers. You don't have to identify it by esoteric labeling -- it's identified by shape -- and there have to be ways of making it work, if the State would want to take a serious look at it. We would be willing to work with the State of New Jersey to figure it out. If you would ask a municipality to predetermine a market for it, and then ask the homeowner to put it on the curbside along with aluminum, or glass, or whatever, I think that would be a possibility.

For the rest of plastics, though, we think that the answer is going to be in waste-to-energy plants. To ask that all plastic packaging fit a very restricted criteria that is met by aluminum cans is absolutely ridiculous. It is a different type of package. It has many more different utilities and uses, and to try to start putting impossible ultimatums on a package for which there are many uses -- no appropriate alternatives -- is, I think, doing a disservice to the marketplace, and to the 35,000 people employed by our industry in this State.

A couple of specific suggestions: One is a housekeeping item, and that is, the bill, as now written, would place a biodegradable ban on ring connectors and the detachable pull-tab provision, which was addressed in earlier legislation that was passed by the Legislature. So, that's still in the bill, but was dealt with in another piece of legislation -- the litter tax -- that went through. That is a housekeeping item.

The other is that we would like to change the definition of markets in the bill to be amended to include disposal to waste-to-energy facilities, when that disposal is in accordance with DEP regulations. It seems to me that if we

can demonstrate valuable BTU value from plastics, for example, and there is a market in that sense, then it should be included in that definition. It is also consistent with Senator Contillo's observation that recycling must complement waste to energy, which is the inevitable thing for getting us out of a garbage crisis. We are not going to recycle our way out of a garbage crisis; it's only a start.

Two, after the State would consider asking that you look seriously at soft drink containers for a curbside program, I would suggest that the next item in our product stream that has a chance of finding a market that would work economically, would be milk containers, and you may want to look at that eventually. That represents the tremendous-- That is the volume of what is out there in plastic containers, period. I mean, that is where the volume is, in those two items.

Now, there is a provision in the bill that would require mandatory coding of all plastic containers as to type, to facilitate recycling. Since milk containers and soft drink containers are the only ones that are viable for which there are known processes and quantity enough to justify activity, I would say that requiring coding of all of these containers and all plastic containers is meaningless. The two that have possibilities are identified by shape, and you don't need coding. It makes no sense to ask an industry to go through that expensive rigamarole when there is no purpose served by it.

Mary Sheil is challenging the viability of recycling just PET containers, which are the most viable, so I would really welcome what is the justification for identifying PVC, polypropylene, and a whole bunch of other plastic packaging out there, for which we have not even identified markets.

We would recommend the deletion of all quotas and threatened deposits in Section 11. If you really want to do something, take a look at PET and mandate it if a market can be established. We've talked to recyclers, by the way, who

indicated to us that they would be willing to come into New Jersey and set up satellite operations to capture the volume they need. They've got markets for this stuff. It's a question of price. Mary is right when she says that their supply right now is coming in from deposit law states, and they are holding their prices at, like, seven or eight cents a pound for PET. They can pay that to people who are collecting it in deposit law states. What we are trying to convince them of is, maybe if the price could go up just a little bit, you could capture the PET that would come out of New Jersey in a curbside program, and you could have satellite operations, and maybe we could work on systems to make it work. They are looking seriously at that with us.

If there is going to be anything coming out of our industry, I think that would have to be it, and I think there are opportunities. We would like to see Section 13 of the bill deleted. That is the language which says that an incinerator would have a right to refuse PVC from its flow. We would like to leave that up to the scientists in the Department of Environmental Protection to make those kinds of determinations. We believe it is absolutely safe material in the solid waste stream and can be burned safely. The evidence is overwhelming on that point.

I would be happy to answer any questions if you have any.

SENATOR CONTILLO: As to the idea of burning the plastic, we're really looking down the road to that. In other words, we have a problem now. I see the distinguished Peter Shapiro from Essex County sitting here. I am going to ask him, when he speaks, in what year -- 1990, possibly -- will we have, maybe, the State's first burner on line.

I think in the interim, in the next four or five years -- whatever it takes to fire up one of these plants -- we have a problem, and we can't burn the plastic. If it gets to

the landfill, it is going to stay there. It will be permanent in the existing materials we are dealing with now. So, we have two different levels we're dealing with. How do we deal with it in the '80s, which might be different than how we deal with it in the '90s? That is why we can't just accept the material now that goes to the landfill.

MR. BERNSTEIN: Yeah. I think that a later speaker will hit on this point with hard numbers. But, if you were to recycle all the plastic containers in the waste stream, hypothetically, it would probably buy the entire State of New Jersey one day of landfilling. So ultimately, you have to look at waste to energy as what is really going to solve the problem. I mean, there is an emotional argument. There is a political argument that recycling is great; recycling will save the day. But, if you were to recycle all plastic containers in the State of New Jersey, you aren't, in a sense, forestalling any impending decisions. You are not buying yourself the time.

All I am trying to do is help identify what material we have that is a good candidate for mandatory recycling activity. I think we've got one. We're spending \$3 million at Rutgers to try to seed this technology. The State of New Jersey -- I understand, Mary -- is going to be contributing mightily to that project, as well. So, I would hate to see us working this hard for answers, at the same time that there are provisions in the bill which would try to wipe out an industry in this State that has an answer in terms of waste to energy, employs those kinds of people, and is that much a part of this vibrant economy.

SENATOR CONTILLO: No one is anxious, certainly, to put a deposit on plastic. It is sort of a stick. We would prefer to offer you a carrot. But, we are going to leave it up to the industry to develop those ideas and plans over the next year or so.

The problem I see is putting the plastic -- if you

were to have your wish -- putting the bottles at the curb. How do we collect them economically?

MR. BERNSTEIN: You may have to have grinding equipment on the trucks, which grinds them up. For example, there are reverse vending machines in deposit law states. You feed the plastic into it, it grinds it up, you know, it makes it-- It densifies (sic) it, and would be a mechanism for collecting it and taking care of the space problem that Mary mentions, which is very real.

SENATOR CONTILLO: Is there anyone doing that now with a truck?

MR. BERNSTEIN: I don't know of curbside programs that are doing that. I know that that kind of program exists at retail establishments. When the material comes back there, and they don't want the air, and they don't want the storage problems, they are grinding it right there on the site. I can see how that system could work in a curbside program as well, although I am not an engineer.

SENATOR DALTON: Just on that point, what stores are they where they are grinding it?

MR. BERNSTEIN: They are doing it in a bunch of stores in New York State that I am aware of, and in other states. It's reverse vending companies that are doing it. You put the plastic bottle in, or the glass bottle, or the aluminum can; you get your deposit or coupon kicked out by the machine. They grind it right there in the facility. There are companies doing it.

SENATOR DALTON: What is the status of the study that is going on presently at the Rutgers Institute? Where are you as far as that is concerned?

MR. BERNSTEIN: There are a bunch of grants that have been issued; there are projects under way. I don't have a report.

SENATOR DALTON: Do you have a deadline? Is there a

self-imposed, or otherwise imposed deadline when you have to come out and make -- when that Institute has to come out and make some sort of recommendation?

MR. BERNSTEIN: I think they are making all different types of recommendations on all different types of projects in terms of-- They're studying polyethylene recycling. They have a pilot plant in New Brunswick which is trying to get a recycling line on stream and operating, and hopefully to see that technology, so there are other recyclers who get into the business, which would drive the prices up because now there are a few that seem to have a monopoly on it and are making, I think, a bundle of money, frankly. I know, for example -- and I have seen the invoices -- that they are buying PET bottles for, like, seven or eight cents a pound, and they have markets they are selling it to for \$.35 or \$.40 a pound, competing with virgin material, which is in the 50s, for example. I am just giving you some ball park figures. I think--

SENATOR DALTON: Where is that?

MR. BERNSTEIN: It's St. Jude's Palimers (phonetic spelling) in Frackville, Pennsylvania, which is probably the largest, closest operation to here. Mary may know of others. They're handling about 13 or 14 million pounds a year. They want to go up to 20 or 25; they've got markets for that. They would be interested in coming in here and working with Mary to figure out how to get containers out of this State.

SENATOR DALTON: One of the things you recommended was that, in the definition, I guess, of recycling, that plastics going to waste-to-energy facilities be given credit. Many of the facilities that are presently planned for the State, however, are incinerators; that is, they will just burn the materials. They are not resource recovery. As a result, what we are faced with-- We are faced with making a determination as to the safety of those emissions.

I recently attended a seminar where Barry Commoner was

a guest. He indicated it is not safe. I think there was a gentleman from the resource recovery industry who indicated it was. As a public official, oftentimes-- It's not actually a legislator's job, but county officials are grappling with this important issue. I mean, that has to be very, very difficult, to look at people and say -- after you have very credible witnesses -- "It is not safe to go ahead and allow plastics within the stream of waste that is going to be burned."

How would you react to that? I mean--

MR. BERNSTEIN: I would think it is unfortunate that Dr. Commoner is given as much credence as he is. I don't consider him a credible witness. I think that he does not reflect the preponderance of scientific opinion in the world. He is not a peer of the top people in this world. He ran for president on solar energy. This is a new issue. He has brought in the siting disputes to bolster the case of those who don't want these sites in their back yard, but he has theories that don't bear out and don't handle the tough scrutiny of scientists who are looking at these systems, and evaluating them.

There is more and more evidence, which we will furnish this Committee, that convinces us, and convinces neutral scientists in the world that this is a very safe, proven technology, and that under controlled temperatures, in properly run plants, it is safe to burn mixed municipal trash with plastics in the mix. Commoner has a theory -- God knows how he arrived at it -- which is that dioxins are created, it's unsafe, there are cancer risks, and blah, blah, blah, but, under the scrutiny of the world scientific community, he doesn't seem to get much support.

SENATOR DALTON: You have a siting problem; you have a perceived -- whether correctly or incorrectly -- dioxin problem. I mean, my point is that you seem, as a representative of your industry, to be convinced that the only

way we are going to get rid of these plastics-- The predominant way would be waste to energy. But, you have so many problems just siting a resource recovery facility, with the technology being, at times, questionable, with the whole issue of now adding on the dioxin issue-- I mean, are you convinced that the only way we are ultimately going to get rid of these plastics is not through recycling, but through burning, given that backdrop, given all those problems?

MR. BERNSTEIN: I would make your statement stronger. The only way you are going to get rid of the garbage crisis in the State of New Jersey is to burn it. That doesn't include just plastics. We are just a very small overall fraction of what has to be disposed of in that manner. It is a small fraction. I'm telling you that our industry could walk out of the State, and you would still be in a hearing such as this trying to cope with this kind of a mess. That is what I am trying to really say. We will prove that the burning of plastics is going to facilitate the burning of the other stuff you must dispose of in this manner, and it can be done safely.

SENATOR DALTON: Okay.

SENATOR CONTILLO: Could you just briefly discuss with us the new plastic cans. I read, in the press, of course -- (reaction from audience) -- that was my reaction, too -- that Coca-Cola, for instance, wants an alternative, so they can deal better with the aluminum company if it suggests the development, to give them an alternative source of supply. It has also been suggested that it makes the collection and recycling of the aluminum itself more difficult because of their very existence.

MR. BERNSTEIN: First of all, I want to candidly say--

SENATOR CONTILLO: Candidly?

MR. BERNSTEIN: --that we really don't have any members among our trade association that are actually making this product. I have a hard time-- We're going to find a

constituency for the plastic can, other than Coca-Cola, which is the people who are test-marketing this product. As a lobbyist, I will say it gives me problems because it raises the wrath of the aluminum industry, which then tries to attack that problem -- which is a marketplace issue -- through legislation, and the response might be bans on all plastic containers. So I get involved, inadvertently, trying to defend other plastic containers under an attack which is really aimed at the plastic can, in the form of a bill, for example.

So, it is a problem for me to deal with the rumored introduction of this package. I will say that in talking to people at Coca-Cola, they have assured me that the package is not going to be rolled out anywhere. It is not coming out of test marketing until they have developed a tight, viable recycling scheme that will guarantee the recycling, and a recycling value for that container. They realize that they are entering a hostile political atmosphere, vis-a-vis recycling and mature recycling industries that are threatened by this product, and I don't think they want another new Coke fiasco by coming in with a product for which there is no close-looped system to guarantee that somehow it is going to be handled properly.

They are walking very carefully with this product. I think there has been probably an over-reaction. Maybe they are just trying to get aluminum prices more honest. God knows what they are trying to do, but I wouldn't worry about plastic cans taking over markets any time soon. They seem to be taking it step by step, and actually, the plastic can is at St. Jude for them to work on a system, to see whether or not it can be viably recycled. They are looking at it, but the recycling component is going to be integral to its introduction. They will not introduce the package, they tell me, if they do not have that solved.

SENATOR CONTILLO: Thank you.

SENATOR DALTON: Last question, if I could. What part of New Jersey's waste stream does plastics compose, what percentage?

C A R L K A M E N A: Let me-- Maybe I can-- I think you have touched on most of the things. I'm Carl Kamena from Dow Chemical. I'm with Roger, representing the SPI also.

Just bear with me on a few of these statistics, and maybe that will answer your question. It is estimated that in 1986, about 150 billion rigid containers will be manufactured in this country. Okay? About 42% of that--

SENATOR DALTON: Rigid plastic?

MR. KAMENA: No, no, 150 billion total containers. Forty-two percent of that is aluminum, 26% glass, 17% steel, and about 12% of those rigid containers are plastic. So, that is about 18 billion containers, and of those 18 billion containers, 13 billion containers are made into either high density polyethylene milk bottles or into PET soda bottles.

SENATOR CONTILLO: But they represent a heck of a lot more volume of space than what would be indicated by those numbers, if you're talking about milk bottles and the big soda bottles.

MR. KAMENA: I don't know what the volume they represent is in the total waste pile. The waste people always deal in tons, rather than volumes.

SENATOR CONTILLO: Okay, but plastic tonnage is not indicative of the volume of space that that would take up as compared to all the other materials we use.

MR. KAMENA: Well, perhaps intuitively one would say that, but I don't know what statistics or what data there is to talk about that.

SENATOR CONTILLO: Okay, thank you.

MR. KAMENA: When we look at that total pile of plastics then, if you look at New Jersey's population of seven and a half million -- that's a little over 3% of the total U.S.

-- then I think you can assume that that percentage of the milk bottles and soda bottles would be consumed in this State. And that would work out to just about 50 million pounds, or 24,000 tons.

SENATOR DALTON: Don't you have better statistics than that? I mean, don't you have statewide statistics?

MR. KAMENA: On plastic containers?

SENATOR DALTON: Yeah.

MR. KAMENA: I'm not sure if you've got better statistics than this or not.

MR. BERNSTEIN: My understanding is that we don't have. The industry doesn't collect statistics on a statewide basis.

SENATOR DALTON: Is that going to be part of your Rutgers study?

MR. BERNSTEIN: You may be proposing a grant possibility for somebody, but I have not seen that quoted yet.

SENATOR DALTON: It would seem to me that if we are going to determine-- If we can assume or make a determination as to what kind of problem we have with plastics in this State, then we better know how much of the waste stream is composed of plastics.

MR. KAMENA: I would tend to agree.

SENATOR DALTON: Okay. And it would seem to me that if, in fact, there is an institute -- a plastics institute at Rutgers trying to deal with this whole recycling problem, that it would probably behoove them to find that answer out.

MR. BERNSTEIN: Franklin Associates has an EPA Federal grant to analyze the plastics component of solid waste. I think those statistics would be kind of national and may be very reflective of the situation here. I'm sure this State can't be that different from other urban states, and that is going to be available sometime soon. (Mr. Bernstein's statement may not be verbatim, since he had returned to the

audience and was not near a microphone.)

MR. KAMENA: They have updated that study before going through a whole new study. On the updated study, they indicated that, as an example, all forms of packaging are about 30% of the total municipal solid waste, while plastics is 12% of the packaging waste. So that's less than 4% of the total. Plastic containers -- that's what the bill gets at -- are less than 1% of the total.

SENATOR DALTON: Okay. All right, thank you very much.

MR. KAMENA: May I make another comment about waste to energy, or have you heard enough on that? We really feel strongly about the recycling of plastics through waste-to-energy incinerators.

SENATOR DALTON: That was a fairly strong statement the previous speaker made -- he said, "We can do it" -- unless you want to--

MR. KAMENA: Oh, I'll just-- One perhaps interesting statistic for you is that if you take those 24,000 tons I spoke of before, if you could magically recover all of the PET and polyethylene milk bottles -- that 50 million pounds -- the energy contained in that material is about a trillion BTUs. A trillion BTUs is equivalent to seven and a half million gallons of Number 2 fuel oil. I don't know what Number 2 fuel oil is selling for right now in today's volatile market. If it's a dollar a gallon, then that means the plastic -- the energy equivalent in the plastic, 50 million pounds -- is worth \$.15 a pound. If it's selling for \$.50 a gallon, it's worth seven and a half cents a pound. And you heard Roger before say what St. Jude is paying for raw material plastic.

SENATOR DALTON: But, how can you make any of those assumptions when we don't have the data as far as the plastic in the State? We don't have the basic data as far as the amount of--

MR. KAMENA: I think these are reasonable

assumptions. I don't think the data, as the data comes out, is going to prove to be much different.

SENATOR DALTON: You have to wait until the data comes out though, right?

MR. KAMENA: Well, okay. One questions then: Why go after plastics if we don't have the data?

SENATOR DALTON: Well, we better-- What I am suggesting is that we better get the data. That is what I'm saying. That is my point.

MR. KAMENA: We'll work with you to get the data.

From a dioxin standpoint -- Roger, again, said that -- the thing that we all have to realize is that dioxin is a product of the combustion process. Whether you have chlorinated plastics in that garbage or any combustion process or not, there are going to be dioxins generated. The way to minimize those is through good combustion conditions, not the removal of any given chlorine source. We will get you more data on that.

SENATOR DALTON: Thank you very much.

MR. KAMENA: Yeah, thank you.

SENATOR DALTON: The next person on the agenda is Peter Shapiro, Essex County Executive.

P E T E R S H A P I R O: Thank you, Senator Dalton and members of the Senate Energy and Environment Committee. I have written testimony which is available for you, which I am going to go through quickly, and then I would be happy to answer some questions.

I am pleased to appear before you to voice my strong support for S-1478, the far-reaching statewide mandatory recycling bill sponsored by Senator Paul Contillo.

This legislation is a responsible and sound program for New Jersey's future. It recognizes the fact that if New Jersey is to be an environmentally safe place to live and raise our families, we must end the practice of dumping thousands of

tons of garbage in landfills that steadily and unrelentingly ooze pollution into the air and water.

Through a two-part program consisting of recycling and garbage-to-energy conversion, we can reduce our reliance on landfills to a tiny portion of today's level. Such a program would greatly alleviate the present threat to public health, the pollution of our air and water, and look how much it would improve New Jersey's image. There is no more powerfully negative shadow on our State than that cast by the mountains of garbage which today welcome visitors if they land at Newark International Airport and take a short drive just up here, up the Turnpike.

Recycling is an integral part of any successful solid waste management plan. Essex County, which will break ground this year on the State's first trash-to-energy plant -- we hope it will be operating in two years -- was able to substantially reduce the size and cost of its facility because of an aggressive recycling program.

This bill works to build recycling as part of the whole fabric of life in New Jersey. For the first time, recycling activities and recycling consciousness would become a greater part of the everyday activities of the citizens of New Jersey.

This bill would effectively fill in many of the gaps in the statewide recycling program by implementing a solid planning process that involves all levels of government and defines the roles of each participant.

Most important, it clearly sets out the role industry must play to make recycling work. Government, alone, cannot make it a success. This bill recognizes that. And it effectively acts to remedy that by making industry a partner in the effort.

It does so by very emphatically saying to industry that recycling is not a game where one side invents new

packages, which the other side must determine what to do with once they are empty.

By the way, just to add parenthetically, there is no way you can define waste-to-energy conversion as recycling unless you are engaging in a kind of Orwellian vocabulary. That is not what I include in a definition of recycling.

In calling upon industry to play its part, this bill would set a policy that cannot be ignored: You are responsible for the product you create -- and that responsibility does not end with the consumer's purchase.

It makes sense that if industry cannot effectively come up with convenient and economically sound recycling proposals for products and packages, then the State should step in and charge a fee, in the form of a deposit, to finance the search for such markets, because markets are the key. It's tough to get people to recycle what no one wants to buy.

This legislation allays the fears of some in the recycling community by wisely tying mandatory recycling into marketability. S-1478 states that unless agreements can demonstrate the market for recyclables, there is no requirement on counties or municipalities to make recycling of that material mandatory.

Clearly, and properly, the legislation requires the State to undertake an extraordinarily aggressive role in developing markets for recyclables. With precedent-setting mechanisms in place, the State would have the power to place the burden of proof on the manufacturer if markets appeared to be too sparse for an effective recycling effort and a deposit was deemed necessary.

As part of the effort to increase markets, this bill contains excellent plans for the State's purchase of recycled products. Instead of, for example, covering acre after acre with dumps of old tires -- which, by the way, causes some of the most polluting and noxious smoke that we experience in this

region of the State -- New Jersey should, instead, now require its Department of Transportation to utilize crumb rubber for asphalt.

Government would be setting an example. Essex County, which has already, by the way, legislated mandatory recycling as part of our existing solid waste management plan, is presently revising purchasing policies to bring us into line with the specifics of this legislation.

The provisions of this bill are right on target, and I am pleased that my County will be using them as guidelines in shaping portions of our new purchasing policies.

Among other provisions of the legislation which I think are particularly important are: The sales tax exemption for recyclable beverage containers -- again, truly recyclable, not ones that we are going to throw into an incinerator -- a good way to provide a cash incentive for people to buy containers that are recycled; a tax credit on recycling equipment, which is a boon to the recycling industries in the State -- we need to look carefully at the credit to make sure it would be sizeable enough to generate the benefits we are looking for; tax incentives for manufacturers who produce products that are from at least 50% recycled materials. By providing a corporate net income tax deduction equal to 100% of the energy costs incurred in the manufacture of the product, we would be offering an incentive to use recyclables and, at the same time, cutting the cost of producing them. That, in turn, should result in lowering the cost of the product and making it more competitive and attractive to the consumer.

Because the need for new markets is so critical to the success of any recycling program, I believe the State's efforts would be enhanced by development of a statewide marketing strategy plan that could be presented to the public for its review and ideas. Toward this end, I would recommend the establishment of a markets development council that would

directly involve the Office of Recycling and county and municipal representation, as well as agencies like the Port Authority of New York and New Jersey and the Delaware River Port Authority, which play a major role -- could play a major role in helping to obtain foreign markets.

I am concerned about provisions in the bill which set up planning procedures for the development of recycling programs with municipalities. This is a process which Essex County has virtually already completed. To insure that bureaucracy does not hinder Essex or the other counties that have already implemented recycling plans, I would prefer that the bill acknowledge that differences now exist among counties. It would be beneficial to provide a mechanism for straightforward approval of existing plans where appropriate, rather than the planning procedure called for in the legislation, as it now exists, which would cause many counties nothing but delay in their work. This is something, by the way, which frequently goes on. I can't tell you how often it happens that we've already got something good working, and we have to change it to comply with a new set of guidelines that saps our creativity, makes us go through more paperwork, and, ultimately, makes it so that the people in place on the local level simply point to the State and say, "We've got to do what they say. There's no point to us even thinking about it any more." So anything you can do to try to make that provision one where, in a sense, the burden would be on the State for it to show that we hadn't complied, rather than making us jump through all sorts of unnecessary hoops that are just going to justify people's jobs, we sure would appreciate.

Another aspect of the legislation that needs to be examined is the requirement that municipalities come up with recycling plans that target reduction of the waste stream by 15% the first year and 25% the second year. There is just simply not enough data at this time to determine what those

percentages actually mean, because there are no scales weighing the garbage coming to the landfills. That may sound extraordinary, but I ask the State to end its delay and enforce the law written by Assemblyman McEnroe, which mandates truck-weighing scales to measure landfill and provide us with the data we need to put this bill into full operation once it is passed.

The state -- as you found in earlier discussion -- of information on this business is still pretty darn primitive and easily subject to distortion, I believe. I urge speedy passage of S-1478. Let's enact it quickly enough, and let's make it tough enough to deal, for example, as was already mentioned, with a leading soft drink manufacturer, who is currently test marketing a plastic can with an aluminum top. This new and unrecyclable hybrid hasn't come to New Jersey yet, and perhaps with this bill as law, we can make sure it won't.

The heart of the problem, basically, is that if a manufacturer knows that production is a cost that they pay for, while disposal is a cost that we -- the members of the public -- pay for, things are not going to work right. If the free market worked correctly -- and this bill would help move it in that direction -- each producer would bear its own true costs, and a lot less junk would end up in our dumps and alongside of our roads in the future, and in our energy recovery plants. Passage of this bill would be a big step in the right direction.

Thank you very much.

SENATOR DALTON: Thank you, Peter.

SENATOR CONTILLO: Peter, as I promised, I want to ask a question. As the proud father of our first resource recovery unit, probably--

MR. SHAPIRO: Expectant father, I guess, is the right phrase here.

SENATOR CONTILLO: We think-- We hear Bergen is on the same road, though it is a rocky road. Could you give us a

fair estimate of when you think your plan might actually be operating?

MR. SHAPIRO: Let me try to give an optimistic and a pessimistic estimate if I can, so you can get a sense of the range.

We expect to break ground this year. We are breaking ground a little bit behind schedule, but not a lot. A big reason for the delays is really basically because it is the first plan. Everybody is doing everything for the first time. DEP had no experience in the permit process. They have acted completely in good faith, by the way, but it has just taken a little bit longer than expected. Doing the various contracts, all the site preparation, and all of the things like that, have been a little bit more complex than people anticipated, going even through BPU to get the franchise agreement. We were the first to do that, so, again, you're setting up the institutional framework that others will undoubtedly benefit from. But, for us, it has amounted to a few delays.

Breaking ground this year-- Assume -- and, again, these are optimistic gauges now -- we have an 18-month construction schedule and a six-month start-up period, what they refer to in construction as the "shakedown period," terminology I don't like to use with construction projects. (laughter) Let's assume a six-month start-up period. Then you've got to basically attune your timetable from this year until 1988 for the plant to start up.

That's optimistic; let's take the pessimistic schedule. Any number of things could throw it off. Unexpected delays in delivery of major components of the plant-- We don't think that will occur because we have already anticipated it and have already got that process going. But major components include boilers and grates of great complexity, that have to come in and have to be delivered right. Delays in construction could occur due to labor disagreements. We don't anticipate

any, but they could occur. Weather problems -- those could occur.

The delays which I would anticipate that might very well cost us some time would be lawsuits against us. We have, as you are undoubtedly aware, a number of people who strongly don't want it in that location because they live near there. We have tried to do everything we could to build in assurances on it, but we're never going to please all the people all of the time, and we recognize that. So, we could face a lawsuit there.

There are also people who are just dead set against any of these plants anywhere, as you are aware, and a lawsuit may come from that direction, as well. The suit would likely be against every one involved -- the County of Essex, the State of New Jersey in issuing permits, the Port Authority, which is our partner in this -- and that might drag things out. We have been preparing, however, for the lawsuit that we were expecting for two years, so hopefully they won't catch us too much by surprise, and hopefully the courts will not have procedural delays, which would just end up tying things up.

If I were going to be pessimistic, a two-year timetable. Who knows, it could stretch on another year; maybe two.

SENATOR CONTILLO: Is there anything stopping you now from putting a shovel in the ground?

MR. SHAPIRO: Right now, there are a number of small permanent approvals that we still need. There is a minor approval needed from the Army Corps of Engineers, nothing like the Bergen County situation. We are building it on land which is not wet, but there is a body of water, as they refer to in the law, which is just known as "Central Ditch." It's a rather small ditch that needs to be filled in, I think principally to build an access road. In order to get the approval process on that, it is mostly-- The question is not, "Will we be allowed

to do it?" but "How long will they take to issue the permit?"

There are some final contract matters between ourselves and the Port Authority, but I think those are basically dotting i's and crossing t's more than anything else.

SENATOR CONTILLO: So, certainly, three or four years is--

MR. SHAPIRO: I would hope three or four years would be the outside. I would hope that maybe my optimistic timetable of two years will be real and, who knows, maybe we could even have a couple lucky breaks along the way and it could be shorter. I am not going to put that on my-- I am not going to take out a loan based upon that happening.

SENATOR CONTILLO: Where will you be looking to dump in two or three years?

MR. SHAPIRO: Do you mean to dump our--

SENATOR CONTILLO: Solid waste now.

MR. SHAPIRO: --residue?

SENATOR CONTILLO: No, not your residue, just what you're dumping now.

MR. SHAPIRO: In the interim between now and the opening of the plant, we have an agreement with the Hackensack Meadowlands. That agreement expires at a specific date set in a consent judgment, which is in 1987, so we may be left with a need for some interim disposal capacity before the plant opens. We are hopeful that we can work out something on that that will not set us back on getting the actual solution built. My fear all along is that in pursuit of interim landfill space before the plant is operative, our energies will be so much distracted from getting the plant built, that that interim will continue to be longer and longer and longer. I think that has happened in other jurisdictions.

SENATOR CONTILLO: If we consume the landfill you are going to need with the burner in any case, then we may have a perpetual higher cost of operating the burner because some of

our reasonable landfills are so filled we would have to go--
Are you going to have to have on-site landfill at your--

MR. SHAPIRO: No, we will have off-site landfill for disposal of the ash -- the residue, which they call it. That is a significant cost, by the way, as it gets more distant. They're talking about now some very distant landfills that could up the costs tremendously.

My hope is -- and this is something that I would love to see this Committee address, if not in this legislation, in some other form-- My hope is that we can develop a significant way of recycling that ash. There is no reason it ought not be able to be recycled, knowing what we know about it technologically.

SENATOR CONTILLO: Well, have they been able to categorize whether it's solid waste or hazardous waste at the present time, or toxic waste? How is it categorized?

MR. SHAPIRO: I'm not certain; I'm not an expert in that. But I know that you can take the ash and do with it what other areas have done. For example, in Saugus, Massachusetts, which has one of the oldest existing garbage plants of this type in the country, it is operating very well. They use their ash for combining with road aggregate, and have paved whole areas with that road aggregate. We could do some of the same things with our State road projects, or by using it for plain fill if, indeed, it categorizes in that.

My understanding of the stuff is that it has been burned at a high temperature. It's obviously pretty sterile. It can be used in a way where it can be molded or shaped to make it so that it is not likely to pose problems in terms of leaching. You know, if we can overcome some of those technological things to make sure it is okay, I think that makes sense. I don't think there is any reason it should be any more toxic, so to speak, than asphalt, which I think if you ate it, you would find was not very good for you.

SENATOR CONTILLO: Yeah. I was hoping that we could use our ground glass for some of those purposes.

MR. SHAPIRO: I'm not sure if you will have enough of that. I would love to see us use our ground glass to make more glass.

SENATOR CONTILLO: Yeah, more glass or building blocks. From my standpoint, at least, as the sponsor of the legislation, the other requests you made certainly seem reasonable, and I will direct myself to those.

SENATOR DALTON: Peter, how do you envision-- Do you envision burning plastics?

MR. SHAPIRO: We plan on having some plastics, but I'll tell you honestly, Dan -- and this is mostly a layman's opinion here -- I feel more comfortable with the less plastic in our incinerator the better. You know, the questions about plastic-- We know chemically speaking that a furnace burning at a high temperature, with a long enough, what they call residence time -- if it sits there long enough -- you are going to break down those long, complex molecules that make up many of the plastics, and reduce them to things which are not going to be harmful anyway. The question always comes up: "What if things are not working perfectly?" We're human and we know things are not always going to work perfectly, so the less plastic we have in there, the more comfortable I feel.

I have heard discussions about dioxin, and there is considerable debate about what creates dioxin and how much dioxin you are going to have. Some people argue that it is part of any combustion process, and there is an awful lot of evidence that cigarette smoke is just as likely to have it as burning plastics. But I think that the more complex the chemical substance is you're burning, the more potential for the kinds of dangers we are talking about.

So, in the interest of public health, anything that we can do to reduce the flow of plastic into it, is going to give

you more comfort, knowing what the uncertainties are out there. So I would love to see us take on that issue aggressively.

SENATOR DALTON: Thank you very much for your time. We appreciate it.

The next testimony we will take will be from Steven Schwarz from Malcolm Pirnie, Inc. Is Mr. Schwarz available? (no response) Mr., I think it's Robert Coleman, President, Oxford Energy, Inc.? Is Mr. Coleman here? (no response) How about Terry Gray from Waste Recovery, Inc. (response from audience) Excuse me; I'm sorry. Who do we have here?

R O B E R T C O L E M A N: I'm Robert Coleman.

SENATOR DALTON: Okay, Mr. Coleman.

MR. COLEMAN: I am a representative of the Oxford Energy Company of New York. Oxford is the company that Ms. Sheil referred to earlier as the company that has the waste-to-energy project in California. I am here to discuss a small part of your legislation; it is the tire disposal problem -- the scrap tire disposal problem.

Our firm deals in the scrap tire disposal problem, not as a problem, but as an opportunity. We believe we have a viable solution for it. We would like to point out that the technology exists today to convert this problem into a useful product. The product that we feel provides the greatest long-term benefits to the State, and to the community, as well as private enterprise, is steam and electrical power for home and industry. By almost any measure, it is the most commercially viable and secure route to take.

Oxford Energy, in association with the General Electric Company, has already begun the development and construction of a series of tire-to-energy plants, utilizing a proprietary technology with a long-term proven track record in Europe, coupled with American-manufactured environmental control equipment to assure operation without adverse

environmental impact.

Our initial plant -- the first of its kind in the country -- is already under construction in Modesto, California. It's on a site which is reputed to be the world's largest stockpile of tires. It is a pile of 35 million tires which is growing every day. Other plants are in negotiation on the West Coast, in the Midwest, and in the New England area. We have distributed to you a summary of the plant that we are developing in the Connecticut area, which highlights a number of the concerns that you would have about any similar plant in New Jersey. I will return to that summary in a minute.

We are also actively pursuing an appropriate site for a Mid-Atlantic plant, preferably in New Jersey. You have already acknowledged that you have a tire problem. Scrap tires are an untapped energy resource. Tire-derived fuel, for example, has a heat value which is comparable to high quality coal. A single tire contains, on average, over 300,000 BTUs of heat value, which is an amount sufficient to supply one American household for a day. So, that's one tire for one American household.

Oxford's tire-to-energy plants, which are designed to consume between four and seven million tires per year, will bring this resource into productive use, with each plant meeting the requirements of between 14 and 21,000 households annually through long-term contracts with public utilities.

There are a number of options that are open to both the public and private sectors, which have been explored during the past decades in terms of putting waste tires to productive use. We have examined all of these, and our firm, which specializes in renewable resources, has selected the technology which is the most established, the most proven, and has the least significant negative environmental impacts. This is whole tire incineration.

I just want to discuss briefly a few of the other

alternatives before I come back and give you more detail on ours. One of the alternatives, which has been alluded to earlier, has to do with crumb rubber. For instance, the State of Minnesota has been attempting to encourage this as a way of disposing of scrap tires. But, according to a recent study which the state had prepared, the total national market for crumb rubber -- which would be created by shredding and grinding tires into small particles -- requires only about three to four million tires a year. So this process does not provide the potential for a regional, or even a statewide solution.

Another application, which has also been referred to earlier, is pyrolysis, where tires are slowly decomposed in an oxygen-starved environment, yielding low BTU gas, recoverable oil, and carbon black. Unfortunately, this process has not proved commercially viable. Most pyrolysis applications require shredding, which is costly. You're putting energy into it, rather than taking energy out of it. More important, the markets for pyrolysis by-products are highly competitive and relatively insecure.

Oxford's approach has been to seek a technology where the revenues to be generated would be long-term revenues. This has a distinct advantage to the retail tire industry, which needs a long-term solution to its waste stream problem, something dealers can depend on, and that will remain viable year after year. It is also attractive to communities seeking dependable alternatives to the build-up of solid waste and the diminishing of flows -- landfills.

Each Oxford tire-to-energy plant represents an investment of \$30 to \$40 million. At those prices, when you have committed that much financing, you can be sure that the plants will be around for the long haul. So, it is not a short-term solution.

Aside from the creation of permanent jobs --

construction jobs -- there would be a substantial increase in the tax revenues of a community. Again, these items are highlighted in the handout we have given you.

The Oxford tire-to-energy plant is modeled after two similar plants in Germany, which have operated dependably accumulatively for over 15 years. The basic technology has a durable, proven track record. It was developed by the Goomey-Meier Corporation (phonetic spelling) of Landau, West Germany, which is Europe's largest tire retreader, and Oxford Energy has the exclusive U.S. rights to this process.

The U.S. application, starting with the plant now under construction by the General Electric Company in California, where we are the owner of the facility, features a set of precision-designed boiler furnaces with reciprocating stoker grates. This is similar to mass burn technology in a refuse plant equivalent, and it is utilized in conjunction with a steam turbine generator. The process is efficient and it is clean. Whole tires entering the system are burned at temperatures exceeding 2000 degrees Fahrenheit to assure complete combustion. All of the plants include state-of-the-art U.S.-designed pollution control equipment, including a wet scrubber to remove most of the sulphur emissions, and a fabric-filter bag house to eliminate over 99% of the particulate matter. The slag, ash, and other by-products are all valuable and can be recycled.

The Oxford tire-to-energy system, which is a careful blend of German precision and boiler selection, and U.S. advances in emission control, totally eliminates the smoke and odor normally associated with the burning of tires. We would be happy to show you our existing plants in Germany, where you could verify this sort of thing for yourselves.

SENATOR DALTON: We would be glad to fly over to Germany. (laughter)

MR. COLEMAN: In each Oxford plant, European suppliers

guarantee the performance of their plant components. This is not a new technology, and it is not something where there is a technological risk. The General Electric Company, which is our preferred general contractor, will stand behind the performance of the facility, will guarantee timely and efficient completion, and then will operate the facility.

The markets for the by-products, which are steam and electrical power, are readily accessible. Public utilities are increasingly finding it attractive to encourage private development and ownership of these facilities, where they have to make no capital investment. In New Jersey, we have been talking actively with Jersey Central, which may want to join us as a venture partner in this thing, and which would offer a power contract on a long-term basis for the power.

So, most of the elements, we think, are in place in New Jersey for a project such as this. I think one plant could solve the entire scrap tire problem in New Jersey. It is a plant which would probably be about 100 by 200 feet.

I know we are running late for lunch, but I have a schematic diagram which I can just show you. That is a cross-sectional diagram of our California facility. You can see there is a stack on the left (demonstrating). It is about 200 feet wide and 100 feet high, and the left half of the facility -- the blue portion -- is all environmental control equipment. So, on the basis of area, roughly half of the plant is dedicated to pollution control.

We have a permit to construct in California, which is an extremely stringent state, and I doubt if New Jersey's requirements would be more stringent than what we have encountered in California. But, there are a couple of elements in New Jersey which are not in place, and I just want to address those briefly.

Two remaining parts of the puzzle are tire flow and siting. In California, we have a stockpile of tires, so we

have less concern about tire flow. In California, we know that sufficient tire flow exists on a yearly basis, but you need a way to coordinate that tire flow, because in order to build a plant and finance a plant, you have to assure your investors that the tires -- your fuel supply will be coming in. So, we think that in order to make this viable in New Jersey, we need a mandate of some sort for tire flow and tire collection, some designation of being an appropriate facility.

The second problem has to do with siting. You have already discussed earlier today the hazards of siting any type of waste-to-energy facility in New Jersey. We don't expect the State to solve this problem for us. We will take the initiative. We have already begun to work on siting in New Jersey, but we would like some sort of cooperation and support on a State level if we were to proceed.

We need a site which has access to a highway. We need a site which has certain proximity to a transmission line. We need water for the generation of steam.

I would welcome any comments that any of you would like to make, or questions.

SENATOR DALTON: Thank you, Mr. Coleman.

Senator?

SENATOR CONTILLO: At the oil plant in California--

MR. COLEMAN: Yes?

SENATOR CONTILLO: Is this generated by private funds, or are these grants or public money?

MR. COLEMAN: It's all private money. We've issued \$30 million of tax-exempt financing, so we--

SENATOR CONTILLO: Are they Economic Development Authority bonds?

MR. COLEMAN: They're California Alternate Energy Authority bonds.

SENATOR CONTILLO: Okay, same category. Okay.

MR. COLEMAN: Same thing. But it's all privately

financed. There's equity and there's some bonds. We've put up some equity; we have another private investor who's joined us. Morgan Stanley was the underwriter on that project.

SENATOR CONTILLO: How do you propose to collect the tires in California?

MR. COLEMAN: We have a stockpile which will give us roughly a 10-year supply of tires. And the plant is situated on a hill right above a pile of 35 million tires, so we have a conveyor system which just moves them up the hill, puts them in a hopper, and they go into the incinerator.

There is-- The fellow who has created this pile has a collection system which is capable of bringing in 4-5 million tires a year, in addition to the 35 million.

SENATOR CONTILLO: Well, then your site is somewhat bigger than a 100 by 200 feet (inaudible).

MR. COLEMAN: In that case, yes it is.

SENATOR CONTILLO: What's the size of the site?

MR. COLEMAN: Well, he has tires on -- oh, about 30 acres.

SENATOR CONTILLO: Thirty acres.

MR. COLEMAN: We would not intend to create a pile like that in New Jersey. When I said 100 by 200 feet, that is really the footprint for the building itself.

SENATOR CONTILLO: I understand. There's no deposit or anything like that in the State of California for collection at the present time, is there?

MR. COLEMAN: No, there's not.

SENATOR DALTON: What do you think of that, Mr. Coleman? What do you think-- Did you read our bill -- the bill -- Senator Contillo's bill?

MR. COLEMAN: Yes. I think the-- I think that's the wrong solution, and I'm not sure it solves the problem. I mean, you have -- you're creating a burden for tire manufacturers. Policing the thing is going to be incredibly

complex, and you still have scrap tires that people are going to get rid of and are going to dump in the wrong place, unless there's an incentive for them to bring it somewhere else. If you give people a--

SENATOR CONTILLO: I don't understand you. If I live in California, why wouldn't I just dump it off on the side of the road? What's the point in carrying it anywhere? If I lived in California, why don't I just throw my old tire in the corner lot?

MR. COLEMAN: If you don't do -- if what in California?

SENATOR CONTILLO: According to the plan you've suggested, why don't I just take my tire and discard it on the side of the road, or if -- discard it on a corner lot? What's the incentive to me to bring it to you, or get it to you, as a homeowner?

MR. COLEMAN: Well, it's against the law to dump it on the corner.

SENATOR CONTILLO: What are you supposed to do with it? If you live in California, what are you supposed to do with the tires? Bring it up to the 30-acre site?

MR. COLEMAN: There are-- No, you have a collection system in place in California.

SENATOR CONTILLO: What is that collection system?

MR. COLEMAN: That collection system involves leaving an empty truck in a certain location, and that truck is a repository for waste tires. The truck gets filled up and then it's taken to our location. I think we could do similar things around the State of New Jersey.

SENATOR CONTILLO: But then you would need a law to prevent anyone from discarding tires other than at designated places.

MR. COLEMAN: That's right.

SENATOR CONTILLO: Or-- But of course, your whole suggestion really blends in with what the plastic industry

would like to do, which is a conversion from the product to energy. That's how-- You're viewing it as a -- not a reusable product in one sense, but rather, a conversion from the rubber to energy, as the plastic industry views taking the plastic and also taking that and turning it into energy.

MR. COLEMAN: That's right.

SENATOR CONTILLO: Okay. Which we have not accepted in this bill at this point, because we have a problem. As Peter Shapiro indicated, and from the best information I can gather, we're not going to be burning anything here within -- not much prior to 1990, 1989.

MR. COLEMAN: Well, in this case, I think there's a distinction with the plastics. I don't know what the environmental impact is on plastics, and I think there's some question about what it is. We have the technology where we know what the environmental impact is, and so it's not something we have to speculate about. And we know that it's sound environmentally.

I think the other thing is that if we were to start a plant today in New Jersey, we wouldn't have to wait until 1990. I think the plant would be in place in 1988.

SENATOR CONTILLO: If you were-- For instance, if the law was to say any place that sites a resource recovery unit could also site a tire-burning plant, how many plants would be needed to deal with the problems with New Jersey's tires?

MR. COLEMAN: Well, if you can tell me what the tire flow is in New Jersey, I can give you an answer.

SENATOR CONTILLO: Well, we have seven million residents, that might--

MR. COLEMAN: Seven-- Well, I think if you can assume a tire a year per resident--

SENATOR CONTILLO: Is that it?

MR. COLEMAN: --and I'll just ask my brethren in (inaudible due to PA system feedback)-- We could use one plant

for the State of New Jersey.

SENATOR CONTILLO: One single plant.

MR. COLEMAN: That's right.

SENATOR CONTILLO: And how much area would you need for that plant?

MR. COLEMAN: We would need about 10 acres. We need some storage to allow for disruptions in flow, and we need a couple of acres to build a plant.

SENATOR DALTON: Thank you very much, Mr. Coleman.

We'll now break for a half an hour, and I will be returning about a quarter after one.

RECESS FOR LUNCH

AFTER RECESS

SENATOR DALTON: The next person to testify is Mr. Andrew Vaccaro, the Bergen County Recycling Coordinator.

A N D R E W V A C C A R O: First of all, I want to thank the Committee for allowing me to testify, and compliment them for introducing this legislation, which is essential to help to solve the solid waste crisis. It's not a problem, it's a crisis.

I wholeheartedly endorse this bill, and ask for its support. I am -- Can you hear me now?

SENATOR CONTILLO: Talk into the upright mike.

MR. VACCARO: --I would like to offer this one comment regarding the County as the agency to oversee the contracts and the implementation of the solid waste plan. As you know, Bergen County has a unique situation in that the solid waste plan is now being done by the Bergen County Utilities Authority. Therefore, we are now in the process of building a

resource-recovery plant, and in addition, we are also in the process of implementing a district recycling plan which includes all the goals as enacted by legislation.

On December 23rd, 1980, the Freeholders introduced a resolution which stated that they designate the Bergen County Utilities Authority as the County agency in power to supervise the implementation of the Bergen County district solid waste management plan, which includes the recycling and everything else. We are in the process of doing this right now. We have been doing it for the past several years, and in Section 3, I believe, in your bill -- I don't have the exact words because I did not get the bill -- it says, "each county." We would like to have added to that bill the "each county and/or its designee"--

SENATOR CONTILLO: Is that not implied, Chuch?

MR. VACCARO: No. I don't believe it is, Paul. I believe that if you look at it just as each county -- and we just want to make sure that what we're doing now, we don't conflict with the County, where you have two people doing the same job.

SENATOR CONTILLO: Would be on the safe side, you mean.

MR. VACCARO: No problem? (affirmative response)
That's all I ask, and I thank the Committee very much.

SENATOR DALTON: Thank you very much.

We'd next like to hear from Mr. Terry Gray, Waste Recovery, Inc.

T E R R Y G R A Y: Thank you for the opportunity to come before you today.

The State of New Jersey is currently attempting to establish legislative objectives and the regulatory framework for statewide solid waste resource recovery and disposal programs. It's a complex and difficult task, as I've gleaned just from listening to the people so far this morning, and one which must be addressed carefully and thoroughly because of the

significant impact on the State's environment, residents, and businesses. The problem is compounded by the State's high population density -- the highest in the country -- which leaves landfill siting and availability as a disposal option.

The following comments are intended to constructively assist the State by clarifying the problems and identifying some of the alternative solutions being considered or implemented by other states. These comments deal specifically with the scrap tire portion of solid waste stream, but some parallels may apply to the general solid waste problem.

The State of New Jersey scrap tire disposal problem may seem mammoth and uncontrollable to some people, but in fact, it was neither of these. You talked about the numbers earlier; I'd like to give you some numbers to give you a feeling of the size of the problem. For perspective, there were approximately 144 million new replacement passenger tires and 31 million truck tires sold in the United States during 1984. That's the latest year for which industry figures are available.

Each truck tire equals about four passenger tires in weight and volume, so 31 million truck tires are equivalent to about 124 million passenger tires. Since each replacement tire generates a scrap tire, the total U.S. scrap tire generation was about 270 million passenger tire equivalents in 1984. Historical data has shown that scrap tire generation rates within an area are roughly a proportion of the population. Dividing 1984's 270 million scrap tires by 240 million yields about 1.1 scrap tires per person. With New Jersey's 7.5 million population, approximately 8-9 million scrap tires are produced annually in New Jersey. Those numbers are going to be close enough; if they vary by 20%, they won't change New Jersey's problem or solution.

This represents only about 3% of the nation's scrap tires. It is a controllable quantity which can be used for

constructive purposes in a properly structured, regulatory environment.

As a second step toward defining the scrap tire problem, the primary sources and existing disposal methods must be examined to define weak links which can be strengthened by appropriate regulations, to encourage environmentally sound disposal practices and resource recovery. Recent studies -- such as the one Waste Recovery recently completed for the State of Minnesota, and that was quoted earlier -- and our actual experience in the Pacific Northwest indicate that almost all scrap tires are currently left with a replacement dealer who installs the new tires on the vehicle. That's occurring naturally, now. As a result, scrap tires are accumulated by replacement tire dealers without added regulations such as those being considered in New Jersey. Therefore, the existing bill will probably only encumber residents, dealers, and tire manufacturers without accomplishing anything that is already occurring naturally.

Once the dealer has accumulated scrap tires, he must dispose of them. Typically, they are trucked away by the dealer or a hired hauler, hopefully, to an environmentally acceptable disposal site or processing center. And I say that hopefully, knowing that's not what happens a lot of the time.

However, most landfills will not accept whole tires because of the bulky volume and propensity to hamper landfill operations by popping back up through the surface cover material. Tires can be split or coarsely shredded for proper landfill disposal at an added cost of less than 50 cents a tire, but some haulers will not bear this cost without adequate regulation, enforcement, and penalties. That at least gets them off of the street and off of the illegal tire piles.

The absence of low-cost disposal sites and regulations which encourage their use result in the creation of illegal tire piles. These piles become an environmental

hazard, and ultimately, a liability to the residents of New Jersey. Tire piles have caught on fire in the Pacific Northwest. When they did, one of the sites resulted in a two and a half million dollar liability for cleanup, as having to be borne by the state residents who did not follow -- and there's a Superfund cleanup.

If the disposal sites involve processing operations capable of producing saleable products from resources contained in tires, New Jersey's resource recovery objectives will be accomplished at a minimal cost to the residents. The State of New Jersey may wish to confirm these observations through a detailed, statewide analysis and development plan. As previously referenced, WRI conducted the study for the State of Minnesota, and I'll leave a copy of it with you. It's a comprehensive 300-page document that goes through the whole distribution channels -- how to collect them, alternative technologies -- it's pretty comprehensive.

A properly conducted analysis would probably cost \$75,000-\$100,000, depending on the specific scope of activities. Once the size and cause of the problem have been identified, development of appropriate regulations can be targeted at preventing illegal dumping and promoting creation of resource recovery operations.

The first step is establishment of regulations with appropriate enforcement of penalties to eliminate improper disposal of scrap tires. One method of accomplishing this objective is to require all scrap tire haulers to be licensed by the State. As part of the licensing procedure, all haulers should be required to identify the disposal sites. Nominal licensing fees could be charged to partially support licensing procedures and enforcement activities. Penalties should be sufficiently severe to minimize the economic incentive associated with noncompliance. Such penalties could include fines, business interruption, and possibly even criminal

prosecution for repeat offenders.

Evidence of a reasonable bond should be required in licensing to assure the availability of funds for cleanup of identified illegal operations. Oftentimes, somebody will go into operation, collect tires, create a big pile, and disappear. If you have a bond, you avoid that.

Tire dealers could be required to utilize licensed haulers, with similar penalties resulting from failure to do so. Such a regulatory framework would encourage a legitimate scrap tire hauling operation without significantly increasing their operating cost, if the licensing fees and bonding requirements are reasonable.

The next, and equally important, regulatory step would encourage establishment of legitimate resource recovery operations. These operations should also be licensed and bonded to minimize State liability for tire cleanup operations in the event of business failure. Bonding requirements should reflect disposal costs associated with the maximum number of tires permitted to be stored at the site before processing. Bonding would minimize operations which collect disposal fees but fail to process the tires.

Resource recovery operations could be further encouraged by availability of low-cost loans for facility expansion if the rate of development does not meet the State expectations. Loans should only be extended to those operators having established technology, proven performance history, and demonstrated economic viability as required by private lending institutions.

Since the State of New Jersey has budgetary constraints, licensing and loan programs -- entire cleanup operations -- could be supported by a nominal uniform fee added to vehicle registration fees, as recently established in Minnesota. Such a fee is selectively paid by those residents operating vehicles, and thereby generating scrap tires, but

does not require massive new record keeping or enforcement activities by tire dealers with State authorities.

Implementation of a vehicle registration fee would also be significantly more expedient and less complex than a tax on replacement tires. Michigan, it is reported, is trying to put in a tax on each replacement tire, and they're encountering strong resistance.

There are a number of resource recovery technologies which have been applied to scrap tires. These applications are discussed in detail in the study that I referenced. Low-volume uses such as crash barriers, fabricated products, artificial reefs, and chrome rubber are interesting but will not consume quantities of tires generated annually in New Jersey.

Pyrolysis is technically intriguing, but has yet to prove its technical and economic feasibility. Out of over 40 identified historical world-wide pyrolysis projects -- and by the way, those probably involve well over \$150 million -- none have yet proven sustained technical and economic viability on the financial conditions anticipated in New Jersey. I've personally seen about 20 of those installations, and I've looked at it ourselves, for our own company. It's an engineer's dream, and I'm a chemical engineer, but I've yet to see one that can hold up to technical and economic scrutiny. I hope somebody does some day, but this can be very difficult in today's oil environment.

Of all applications, the use of scrap tires as a fuel is most likely to consume New Jersey's annual volumes. Scrap tires contain more energy per pound -- about 15 to 16,000 BTUs per pound -- than coal, which is typically 10 to 12,000 BTUs per pound. Whole tires have been combusted specifically, in specially designed boilers, to generate steamer power. It is our understanding that this technology has not been broadly demonstrated in this country on a commercial scale (inaudible), and the previous person alluded to that.

Goodyear also had one that was demonstrated in England, that they applied here in Jackson, Michigan. That system was shut down for environmental reasons.

Another alternative is to shred scrap tires into a small chip resembling coal which can be used as a fuel supplement in existing solid-fuel (inaudible), partially displacing the demand for coal, oil, and gas. Now, this uses existing facilities so you don't have to put capital into the existing facilities. It's applicable to places where the people's environmental controls would be acceptable.

The strength and resiliency of tires makes them difficult to shred, but WRI has developed an efficient process for doing this through 10 years of extensive effort. It was very difficult to learn how to do it. It involved over \$3 million in trying to develop the technology.

WRI economically processes over 50% of all scrap tires generated in the Northwest -- Washington, Oregon, and Idaho -- right now, and reprocesses it into a high-quality, tire-drive fuel in a single plant located in Portland, Oregon. WRI's process even removes 97% of the steel bead and cord material to enhance ease of use of the material.

WRI's TDF has been used for years by Fortune 500 companies in full compliance with strict Federal and environmental regulations. Oregon and Washington, where we use the fuel, are even tougher than California is in many of their air pollution control regulations.

WRI has even developed proprietary systems for assuring uniform usage rates to avoid environmental excursions. WRI is currently constructing a new facility in Houston which will be capable of processing over half of all scrap tires generated annually in Texas. New plants in Dallas and Cleveland are scheduled for completion within the next 15 months. Our current plans call for installations of facilities in Southern New Jersey in 1987, and in Northern New Jersey in

1988, provided the State establishes reasonable regulations. We believe there ought to be two plants, even though each of our plants could probably process the total quantity, the reason being that Northern New Jersey and Southern New Jersey are almost like two separate countries, if-- (laughter)

SENATOR DALTON: I've been saying that for a long while. (laughter)

SENATOR CONTILLO: Just because part of New Jersey's below the Mason-Dixon line.

MR. GRAY: But basically, if you don't provide a site that is closer than people's other options that may be legal or illegal, then they won't take them to the site. So, if you have one in Southern New Jersey, that will be within 50 miles of everybody; and you have one in Northern New Jersey that will be within 50 miles of everybody, you service the State

Each facility will be able to process 4-5 million tires per year. The two combined facilities, therefore, can eliminate New Jersey's disposal problem by processing all scrap tires produced annually in the State. A resource recovery alternative must also be economically attractive to minimize both the disposal costs alternately borne by the consumer and the financial incentive for illegal dumping.

WRI's Portland facility operates profitably at a tipping fee of only 25 cents per tire. This tipping fee is significantly lower than that charged by most landfills. Therefore, total disposal costs for more dealers, including their hauling, are less than 50 cents per tire. Although the tipping fee charged in New Jersey will depend on a number of local factors, WRI anticipates that it will also be 25 cents per tire or less within a reasonable regulatory framework. Local industries using the fuel will also benefit from availability of low-cost fuel. The fuel is typically sold at 25% less than -- 20-25% less than the alternative coal as an incentive to use it. That helps the industry in terms of their

energy costs.

In summary, New Jersey's scrap tire disposal problem is manageable. With carefully conceived regulations to control illegal dumping and assist legitimate resource recovery operations, the State's scrap tires can be economically converted to a prudent fuel benefitting local industry. WRI will gladly provide references from State regulatory agencies in the Northwest and fuel users to allow in the verification of these comments.

Thank you for your interest. We'd welcome the opportunity to work with the State of New Jersey to convert a disposal problem into a resource.

SENATOR DALTON: Thank you, Mr. Gray. I have a couple questions for you--

MR. GRAY: Sure.

SENATOR DALTON: --while Senator Contillo-- We'll await Senator Contillo's question. But first of all, your testimony -- I found it very intriguing, particularly the part with regard to the uniform fee added to vehicle registration fees. Can you tell me a little bit about what Minnesota has done, what type of fee that they have, and what sort of money in the aggregate is generated?

MR. GRAY: Minnesota is a State with a population of less than half of New Jersey's. They also have a far more diverse area that they have to deal with. A lot of the things that are problems in resource recovery for New Jersey -- population density and high population -- are actually a benefit when you go to deal with resource recovery because you deal with limited transportation. Minnesota's tax, I believe, is \$3-4 added to the vehicle registration tax. They had to do that in order to raise enough funds. New Jersey's tax could probably be on the order of \$1-2 and provide the enforcement and other things necessary to run the program.

SENATOR DALTON: In other words, what you're talking

about here is, you're talking about a fairly comprehensive program relative to establishment of a statute relative to improper disposal, licensing, bonding--

MR. GRAY: Most of those are designed to make sure that the hauler mechanism doesn't use illegal methods, and also to minimize the liability to State residents. If somebody doesn't operate a legitimate business, they will leave a tire pile or an accumulation somewhere that will become a State liability. By having bonding, by having licensing, you've tried to do something to control that.

SENATOR DALTON: Presently, there is really no technology that can be used for the disposal of tires, available to State residents, presently. As a result, what you do is, you go around the State and you find a lot of towns with piles of tires. What you're saying is that what we want to do is, we want to create some sort of regulatory framework to bring in private enterprise, such as yourself.

MR. GRAY: If you control the flow of the tires so that they do not to the illegal purposes, which is your objective--

SENATOR DALTON: Right.

MR. GRAY: --then they will go to legitimate ones. Legitimate ones, short-term, could be the landfills. I know you have a landfill problem, but they're not a significant part of that problem. If they can go there, they should be shredded. If you shred them, you reduce the volume that they consume in a tire -- I mean, in the landfill, very significantly. You also eliminate operating problems in the landfill. You can do coarse shredding of tires with commercially available material. Just breaking it into chunks will accomplish the volume reduction you're talking about. And I reference that in the discussion.

We could come and be in New Jersey quicker. We have not developed our markets here fully; we know some of them.

We're not a General Motors or someone else; we also have to operate within capital limitations. By doing things that offer an incentive and help make capital available, you increase the rate at which companies like ourselves would be able to come in.

SENATOR DALTON: What is-- Are you aware of the present regulations relative to the dumping of, quote, "dumping tires illegally in the State" now?

MR. GRAY: I'm not. I'm not.

You know, one thing that you have to do is, if you put in a licensing system -- Houston, Texas-- I'm from the Northeast. I went to school here in New Jersey, but I live in Houston now. And Houston has an ordinance that licenses the tire haulers. They don't have a strong enough enforcement arm -- the fees and the tax base aren't strong enough to support that. But what they basic-- The ordinance is good except that it falls down in not having sufficient penalties. If the penalties are not greater than the license fees, then somebody will take their chances on operating unlicensed.

SENATOR DALTON: I have no further questions. Senator Contillo?

SENATOR CONTILLO: When you said -- if I understood you correctly, Mr. Gray -- that the end result of the product you sell can be about 25% less than a fuel oil that might have to be used--

MR. GRAY: Typically, it is sold about 20-25% less than coal. I have an sample of it here, if you have an interest in looking at it.

SENATOR CONTILLO: Okay. Have you taken into consideration the fact that within the legislation, we talked about allowing that product to be sold without a sales tax added to it?

MR. GRAY: That would be helpful.

SENATOR CONTILLO: That would be another six percent.

MR. GRAY: That would be helpful.

SENATOR CONTILLO: We also talk about the energy used to develop the product -- the utility bills used to develop the product, you will develop a tax rebate system on that, for that energy.

MR. GRAY: All of those things, basically, we need. We need to derive a certain amount of revenue in order to fund out operations and make a suitable profit.

SENATOR CONTILLO: But you are considering that you have Economic Development Authority bonds? Or are you talking about going out into the market cold?

MR. GRAY: No. Both plants that we've constructed to this point, and the two that we have planned, are being done with private financing. What I'm saying, though, is that those (inaudible) are resources, so we can't be in New Jersey in both plants in 1987. Only one of them -- we can't-- So, if there are things that help make capital available to us, it helps us be here early.

In contract to large, mass burning plants -- \$30, \$50 million dollars or whatever -- one of our plants has a cost of a couple million dollars, and we utilize existing capital equipment for combustion of the materials, so you don't have high capital costs in that. The result is that it can be done more quickly with lower capital limitations.

SENATOR CONTILLO: I'm confused now. Is that strictly a shredded product, or is that a product that has been heated and melted down again, or what?

MR. GRAY: No. It is strictly a shredded product. It is -- if you saw it in a pile, it would look like a pile of coal.

SENATOR CONTILLO: So why do you need the combustion? I don't understand what you need combustion for.

MR. GRAY: Because it's sold as a fuel. We've take out the wire and put it into a readily handleable form. It's sold as a fuel, just--

SENATOR CONTILLO: Mechanically, but-- You do that mechanically?

MR. GRAY: Yes.

SENATOR CONTILLO: Okay.

MR. GRAY: And they're good-neighbor plants. There's no air pollution control coming from the plants at all--

SENATOR CONTILLO: How about the people who use that product? Are they going to have emission products?

MR. GRAY: The fuel is a good fuel for heat value. It has some sulphur. It has some zinc oxide in it. The result is, what we've had to do in working with the Fortune 500 companies that we've worked with is, choose the places where it is used. And we choose it based on our knowledge of the environmental controls that the people have. It's used in a relatively small portion of the total fuel that somebody uses. Typically, it's used in 3 to 10% of the total fuel. It's not a totally dedicated facility.

SENATOR CONTILLO: Give me an idea-- Could a power company use it?

MR. GRAY: Yes.

SENATOR CONTILLO: Who does it now?

MR. GRAY: We have not spent a lot of time working with the power companies. Typically, power companies can buy coal so inexpensive -- much cheaper than industry does, that they haven't been a target market for us.

SENATOR CONTILLO: Who, then, does use it?

MR. GRAY: Well, work has been done on using tire fuel, and it's been done in Minnesota -- I don't remember the specific utility. It's referenced in this report, but I don't remember the name. The companies that use it? Crown Zellerbach, Champion--

SENATOR CONTILLO: Where do they use it? Do they use it in--

MR. GRAY: Right now, in the Pacific Northwest. They

will also be--

SENATOR CONTILLO: It's being used in a location right now?

MR. GRAY: Has been for years -- has been for five or six years, and the references I talked about is that we'd be glad to give you references of Washington and Oregon, air pollution control people who have watched this operate and comply with ordinances. So, it's not something that's a dream, it's not something that maybe will be in operation. It's something that has operated, and it's just a question of applying it to a different geography.

SENATOR CONTILLO: What does the plant cost?

MR. GRAY: A couple million dollars.

SENATOR CONTILLO: A couple million dollars.

MR. GRAY: Right.

SENATOR CONTILLO: Okay. I think it's-- On the surface, it sounds very interesting.

MR. GRAY: If any of you would love -- would like to look at the tire, I'll be glad to leave it.

SENATOR CONTILLO: You mentioned the West Coast to us, and that was really-- Is there any place closer?

MR. GRAY: We just started-- We started in Portland, Oregon. It took us 10 years to develop machines that will efficiently shred tires. There are a lot of commercially available units, but we couldn't get them to operate more than a year or two before they'd disintegrate on us. It was a hard-learned lesson; that was a part of the \$3 million it cost us to learn the (inaudible). We developed our own machines. The reason-- We started there, and we'd just started expanding to other areas. The Houston plant, now Dallas this year; Cleveland, early next year; and then our plan will be to come into Southern New Jersey and a couple of other places.

SENATOR CONTILLO: That interested me. You said your plan is to come into Southern New Jersey.

MR. GRAY: Yes. In other words, these plants have short lead times on construction. The plants can be constructed from the time you have the agreement on the property--

SENATOR CONTILLO: Is there anything stopping you from coming into New Jersey right now?

MR. GRAY: Capital availability, and it takes us some time to develop our markets. We don't come in without developing markets.

SENATOR CONTILLO: Have you considered applying for Economic Development Authority bonds?

MR. GRAY: No, haven't gotten that far in the thought process. Be glad to do so.

SENATOR DALTON: Obviously, then, you feel there's a market in this area for that material. You wouldn't be here otherwise.

MR. GRAY: We've done a detailed analysis. The traditional industries we've worked with -- it's not the strongest market that we could have. It's not the strongest compared to some other parts of the country, but we believe it is adequate to support the fuel generated by a plant.

SENATOR DALTON: The-- And you've taken a look at some of our air quality standards, and feel that your customers can safely be within those standards?

MR. GRAY: Your air quality standards are not as rigorous as what we've encountered in Oregon and Washington. They are very stringent regulations. Again, it's going to depend upon the specific air pollution control on the energy users that we look at. And I have not gone through and done that analysis. Typically, we go to the State Environmental Authorities to find out who solid fuel users are, look at their air permits, their equipment; and see if there's an opportunity for it to be used, then go talk with the people. Sometimes, it takes a while for the company -- companies involved to

comfortable with a non-traditional fuel. Any assistance with the part of local people to encourage them would be very beneficial. It would help the process.

SENATOR DALTON: I appreciate your taking the time out, Mr. Gray.

MR. GRAY: I'll leave--

SENATOR DALTON: Certainly you've made some point that we definitely will consider, particularly your recommendations on the regulatory framework.

MR. GRAY: I think -- I understand the motivation of what you're trying to accomplish by doing that, but I think you'll find that the things you were trying to do are already being accomplished, and it doesn't deal with the primary issues that you have to deal with.

SENATOR DALTON: Okay.

MR. GRAY: I will leave a copy of the report if anybody wants to read through 300 pages, and (rest of sentence inaudible; speaker leaves microphone).

SENATOR DALTON: Thank you very much.

The next person is Mr. Frank Ryan, from the Rubber Manufacturers Association.

F R A N K R Y A N: Senator Dalton, I would first of all like to thank you for the opportunity to be here today, and request that the full copy of our remarks be entered into the record, and I'll try to keep my oral presentation as brief as possible.

I should indicate that today I'm representing the viewpoint of the United States Tire Manufacturing Industry. At the outset, let me state that the RMA agrees that New Jersey must 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 that although scrap tires are a distinct type of solid waste, they constitute one percent or less of all such solid waste. We do not believe, however, that

the provisions included in Section 17 of the proposed bill that you currently have under consideration will produce the best method for dealing with the scrap tire portion of the solid waste stream.

Without question, the disposal of tires presents some special problems which clearly have to be addressed. In their normal or whole state, scrap tires are unsuitable for disposal in landfills, even if adequate landfill capacity were available. However, the relatively simple act of slitting a tire in half, or shredding such a tire into smaller pieces, greatly enhances the ability to deal with its disposal.

Scrap tires can be used as fuel, either in whole or in part, as already described during the hearing. Scrap tires, in a groundup fashion, can be used as an additive in asphalt roads. It can also be used as a component in sludge composting. You've already heard from two companies today who are in the business of scrap tire recovery, and I understand that a third company will be submitting comments for the record, that's Ergon Fluidize Bed (phonetic spelling) out of Jackson, Mississippi.

We feel strongly that scrap tires are a valuable source of energy, and not just a disposal problem. They cannot, however, be recycled in the same way that a beverage container -- whether it be glass or metal -- or a paper product is recycled, whereas the recycled glass, paper or metal can, can be re-used in the process of manufacturing another glass or metal container or paper product. There is minimal or virtually no potential to re-use the scrap tire as a material in the tire manufacturing process.

Turning now to some of the specifics and the language of Section 17 of the bill before you, I'd just like to offer a few comments. As pointed out above, tires can not be recycled to the same degree as glass, aluminum, paper and so forth. Thus, the term recycling in this sub-section needs

clarification. Further on in sub-section A, we see no rationale for assigning the burden of proof to only the tire manufacturers to determine whether a convenient and economically feasible mechanism is available to each county and municipality in the State. Certainly, such burden of proof should include tire dealers, recyclers, and others.

Sub-section B -- the deposit and labeling provisions. We feel the deposit and labeling system envisioned in this sub-section creates an administrative nightmare. As I mentioned before, tires are just not like bottles or cans. They are not merely one-use throwaways. We do not have manufacturing facilities in each and every state or major metropolitan area, or even every geographic region of the country. In fact, there are a total of 44 tire plants divided among 20 states. Tires manufactured in any given plant are likely to be shipped anywhere in the country. Similarly, tire manufacturers supplying tires to vehicle manufacturers have no way of telling before hand where any given automobile may be shipped. And the question of tire and vehicle imports simply compounds that problem.

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

We believe that a scrap tire has the potential to pay for its own disposal and produce energy or other resources. As I have stated, and as you have heard today, there are companies in existence which specialize in dealing with these types of

concerns. Rather than enacting legislation that includes an unwieldy deposit mechanism and feasible tire labeling provisions, alternative legislation could be adopted that would regulate the flow of scrap tires and encourage the development of tire recycling processes in the State of New Jersey.

Such an alternative could include the following elements, some of which you've already heard from Mr. Gray: regulations that certain tire collectors or processors be required to obtain permits; rules for the permitting of waste tire collectors and processors, waste tire nuisance abatement, and waste tire collection; establishment of financial assurance methods for licensed tire collectors and processors; assisting tire recyclers with arrangements relating to the siting of facilities; and finally, providing low-interest loans or bonds to businesses engaged in scrap tire recycling.

We therefore recommend that Section 17 of this bill, as currently written, be eliminated, but we'd like to stress that the RMA and its member companies stand prepared to work with your Committee in developing alternatives. Thank you, and I'll be pleased to answer any questions.

SENATOR DALTON: Thank you very much. The issue of -- that you raised, with regard to the problems with the marking of tires-- You indicated that that is a problem based upon the -- basically, the origin of the tires, is that correct? And where, ultimately, the tire is going to?

MR. RYAN: Correct.

SENATOR DALTON: Okay. I tend to agree with you, although I want to learn more about that whole area. I don't know how you get around that, and that does present somewhat of a problem, I believe.

MR. RYAN: Well, as indicated in the testimony -- and perhaps it needs a little expansion-- As I mentioned, tires are produced in only about 20 states. There are 44 plants among those 20 states. You have a lot of wording that is

required on the sidewall of the tire, both with regard to not only who the manufacturer is, but also, information related to the Federal motor vehicle safety standards.

But those tires emanating from any of those 44 plants could go to any state. So, it would be clearly unfeasible for tire manufacturers at any given plant to know exactly where that product would go, and to permanently mold, into the sidewall of that tire, the words "New Jersey Recycling Deposit." You have something nearly-- We've got about, in excess of 200 million tires being produced.

SENATOR DALTON: What section is that of the bill?

MR. RYAN: Section 17, should be Subsection (b).

SENATOR DALTON: Let's explore some ways to do -- see if we can do that a little easier. Okay? Thank you very much for your testimony.

MR. RYAN: Okay. Thank you.

SENATOR DALTON: The next person to testify is Sandra Beatty, from ANJEC. Is Sandra here? (no response) Okay. Did Jim Brennan testify yet? Is Mr. Brennan here?

J I M B R E N N A N: Ladies and gentlemen, good afternoon. As both sessions of the meeting started right by my watch, so has New Jersey, with regards to this problem -- about 25 years.

We've heard a lot of experts today give a lot of expert testimony. They all support the bill. But they all find problems with that section of the bill that deals with either their industry or their agency. I do not come here as an expert for any industry or any agency. I come here as an expert taxpayer. I pay all the taxes -- a lot of them. Too many. I don't want to pay any more. I'm a resident of New Jersey, I'm a resident of Bergen County. I'm a resident of Paramus, New Jersey.

Every item discussed in the bill is a problem for a given industry. And I agree with each of those industries. Again, government is infringing an economic burden on different

industries. It's creating bureaucracy. It's attempting to create registration requirements. It's attempting to create many, many other requirements and mandates on various industries involved -- most of them horrendous, most of them ludicrous. Ultimately, who pays? The consumer. The consumer always pays, whether it's a tax, whether it's an added burden on industry, whether it's a regulation on registration on vehicles to include tires.

Also, I'm amazed to find out that New Jersey has gotten to the point, legislatively, where they are, by law, going to make every resident a trash picker. I have problems with the mandatory requirements. I now, on a personal basis, do selectively separate metals, glass, and paper at my home and at my business. If this registration passes, I personally, as an objector -- and to establish a case, because I feel it is unconstitutional, probably more so or at least as much as the New Jersey seat belt law, which I find equally ludicrous. I will not comply, because I will want to establish a case to take into the courts. I feel this is ridiculous; I feel that the total bill is a waste of time and energy, as I have had time to read it and hear the experts today.

Gentlemen, I thank you.

SENATOR DALTON: Thank you, Mr. Brennan.

The next person is Carol Kimena, from Dow Chemical. Is Carol here?

UNIDENTIFIED AUDIENCE MEMBER: (from audience) No, that's Carl. He already spoke.

SENATOR DALTON: Okay, Carl spoke. It's just-- Carl's sister want to speak -- Carol? (laughter)

Is Mr. Schwartz here from Malcolm Pirnie? (no response) Okay. Does anybody else wish to testify at this time? (no response) That concludes our hearing. Thank you very much.

(HEARING CONCLUDED)

APPENDIX



RUBBER MANUFACTURERS ASSOCIATION
1400 K STREET, N.W. • WASHINGTON, D.C. 20005 • (202) 682-4800

STATEMENT
OF THE
RUBBER MANUFACTURERS ASSOCIATION
ON S.1478
BEFORE THE
NEW JERSEY SENATE ENERGY AND ENVIRONMENT COMMITTEE

February 13, 1986

Mr. Chairman and members of the Committee, I am Frank T. Ryan, Vice President, Government Relations of the Rubber Manufacturers Association. RMA is the national trade association which represents the interest of the domestic manufacturers of finished rubber products. I am here today to express the view of the U.S. tire manufacturing industry.

At the outset, let me state that the RMA agrees that New Jersey must find a way to manage the disposal of its solid waste, and that scrap tires are an element in the solid waste stream. It should be pointed out that, although scrap tires are a distinct type of solid waste, they constitute 1% or less of all solid waste. We do not believe, however, that the provisions included in Section 17 of the legislation you currently have under consideration will produce the best method for dealing with the scrap tire portion of the solid waste stream.

Without question, the disposal of tires presents some special problems which must be addressed. In their "normal" or "whole" state they are unsuitable for disposal in landfills, even if adequate landfill capacity were to exist. However, the relatively simple act of slitting a tire in half or shredding a tire into smaller pieces, greatly enhances the ability to deal with its disposal. Shredded tires can be used as fuel. They can be used as a fuel supplement with coal in stoker-fired boilers, as an additional fuel in waste-to-energy systems, or as a stand-

alone fuel. Ground-up tires can be used as an additive to asphalt paving, thereby significantly extending road life. Shredded tires can also be used in the composting of sludge. To cite some specific examples:

- o Louisiana Pacific Corp. in California uses shredded tires, wood wastes and other leftovers, at a savings of \$35,000 per day.
- o Waste Recovery, Inc. has an active production operation in Portland, Oregon for shredded tires. They also have other installations in the State of Washington. Recently WRI has completed building a tire shredding facility in Houston, Texas, at a cost of \$1-1/2 million. It will have a capacity for handling 4 million scrap tires per year (40,000 tons). Production costs are in the area of \$15 per ton, and the final shredded tire product is sold for \$35-40 per ton.
- o Oxford Energy, Inc., is currently developing tire energy projects that will use waste tires to fuel electric generating facilities. The proposed projects are industrial in design and similar in size to facilities that have over a decade of successful operating history in Europe.
- o Ergon Fluidized Bed, Inc. has the ability to install tires-to-energy plants each combusting some 500,000

tires a year. Combustion would take place in a fluidized bed boiler which burns the tires in an environmentally sound manner.

Two of these companies are testifying at today's hearing and it is my understanding that Ergon is submitting a statement for the record.

Several other technologies are available for disposing of either shredded or whole tires. We feel strongly that scrap tires are a valuable source of energy, not just a disposal problem. They cannot, however, be "recycled" in the same way that a beverage container (glass or metal) or paper product is recycled. Whereas the recycled glass, paper, or metal can be re-used in the process of manufacturing another glass or metal container or paper product, there is minimal or virtually no potential to re-use the scrapped tire as a material in the tire manufacturing process.

Turning now to the specific language of Section 17 of the bill before you, we would offer the following comments:

Subsection (a). As pointed out earlier, tires cannot be "recycled" to the same degree as glass, aluminum, paper, etc. Thus the terms "recycling" and "marketing" in this subsection need clarification.

It is also unclear 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? We would also suggest that the 24 month time period should begin with the issuance of any regulations pursuant to Section 17(d), not with the date of enactment. Would it not also be wise to provide for periodic review of the situation so that the provisions of Sections (b) and (c) could be rescinded?

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

Subsection (b). The deposit and labelling system envisioned in this subsection creates an administrative nightmare nearly beyond description. Tires 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 major metropolitan area or even every geographic region. In fact there are a total of 44 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 may be shipped. The question of tire and vehicle imports simply 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 or cosmetically.

The potential for fraud and counterfeiting is nearly unlimited. The problem is further exacerbated by tires which may be sold in New Jersey but delivered into New York or 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.

Subsection (c). As written, this subsection establishes the "Automobile Tire Recycling Fund" automatically with the date of enactment of the legislation and is not contingent upon the "trigger" which brings into effect the provisions of Subsection (b). Presumably the \$1.50 referred to as the source of revenue is the surplus of deposit over refund established in Subsection (b), but this is not stated.

Subsection (d). Similarly, this subsection contains no contingency "trigger" and represents the granting of unlimited regulatory authority.

In summary - we feel the enactment of this proposal is inappropriate and unnecessary.

We believe that a scrapped tire has the potential to pay for its own disposal and produce energy or other resources. As I have stated, there are companies in existence today which specialize in dealing with these kinds of concerns.

Rather than enacting legislation that includes an unwieldy deposit mechanism and an infeasible tire labelling provision, alternative legislation could be adopted that would regulate the

flow of scrap tires and encourage the development of tire recycling processes in the State. Such an alternative could include the following elements:

- o regulations that certain tire collectors or processors be required to obtain permits;
- o rules for the permitting of waste tire collectors and processors, waste tire nuisance abatement and waste tire collection;
- o establishment of financial assurance methods for licensed tire collectors and processors;
- * o assisting waste tire recyclers with arrangements relating to siting;
- * o providing low interest and/or tax free loans to businesses engaged in scrap tire recycling.

We therefore recommend that Section 17 of this bill ^{as currently written} be eliminated and RMA stands prepared to work with your Committee in developing alternatives.

STATEMENT OF WASTE RECOVERY, INC.

ON

NEW JERSEY SENATE BILL S-1478

BEFORE

THE NEW JERSEY SENATE ENERGY AND ENVIRONMENT COMMITTEE

FEBRUARY 13, 1985

TERRY A. GRAY

WASTE RECOVERY, INC.

INTRODUCTION

The State of New Jersey is currently attempting to establish legislative objectives and a regulatory framework for state-wide solid waste resource recovery and disposal programs. It is a complex and difficult task - one which must be addressed carefully and thoroughly because of its significant impact upon the State's environment, residents, and businesses. The problem is compounded by New Jersey's high population density - the highest in the country - which limits landfill siting and availability as a disposal option.

The following comments are intended to constructively assist the State by clarifying the problems and identifying some of the alternative solutions being considered or implemented by other states. These comments deal specifically with the scrap tire portion of the solid waste stream, but some parallels may apply to the general solid waste problem.

PROBLEM DEFINITION AND PERSPECTIVE

The State of New Jersey's scrap tire disposal problem may seem mammoth and uncontrollable to some people, but, in fact, it is neither of these. For perspective, there were approximately 144 million new replacement passenger tires and 31 million truck tires sold in the United States during 1984, the latest year for which industry figures are available. Each truck tire equals about four passenger tires in weight and volume so 31 million truck tires are equivalent to about 124 million passenger tires. Since each replacement tire generates a scrap tire, total U.S. scrap tire generation was about 270 million passenger tire equivalents in 1984.

Historical data has shown that scrap tire generation rates within an area are roughly proportional to population. Dividing 1984's 270 million scrap tires by a 240 million U.S. population yields about 1.1 scrap tires per person. Based upon a New Jersey population of 7.5 million people, approximately 8-9 million scrap tires are produced annually in New Jersey. This represents only about 3% of the nation's scrap tires. It is a controllable quantity which can be used for constructive purposes in a properly structured regulatory environment.

As a second step towards defining the scrap tire problem, the primary sources and existing disposal methods must be examined to define weak links which can be strengthened by appropriate regulations to encourage environmentally sound disposal practices and resource recovery. Recent studies (such as the one Waste Recovery, Inc. recently completed for the State of Minnesota) and our actual experience in the Pacific Northwest indicate that almost all scrap tires are currently left with the replacement tire dealer who installs new tires on a vehicle. As a result, scrap tires are accumulated by replacement tire dealers without added regulation such as that being considered by New Jersey. Therefore, the existing bill will probably only encumber residents, dealers, and tire manufacturers without accomplishing anything that is not already occurring naturally.

Once the dealer has accumulated scrap tires, he must dispose of them. Typically, they are trucked away by the dealer or a hired hauler, hopefully to an environmentally acceptable disposal site or processing center. However,

most landfills will not accept whole tires because of their bulky volume and propensity to hamper proper landfill operation by popping through the surface cover material. Tires can be split or coarsely shredded for proper landfill disposal at an added cost of less than fifty cents per tire, but some haulers will not bear this cost without adequate regulations, enforcement, and penalties. The absence of low cost disposal sites and regulations which encourage their use result in creation of illegal tire piles. These piles become an environmental hazard and, ultimately, a liability to the residents of New Jersey. As a result, appropriate regulations should be targeted at encouraging the creation and use of proper disposal sites. If the disposal sites involve processing operations capable of producing saleable products from resources contained in tires, New Jersey's resource recovery objectives will be accomplished at a minimal cost to its residents.

The State of New Jersey may wish to confirm these observations through a detailed statewide analysis and development plan. As previously referenced, WRI conducted such a study for the State of Minnesota, a copy of which I will leave with you. A properly conducted analysis would probably cost \$75,000 to \$100,000, depending upon the specific scope of activities.

REGULATORY FRAMEWORK

Once the size and cause of the problem have been identified, development of appropriate regulations can be targeted at preventing illegal dumping and promoting creation of resource recovery operations. The first step is establishment of regulations (with appropriate enforcement and penalties) to eliminate improper disposal of scrap tires. One method of accomplishing this objective is to require all scrap tire haulers to be licensed by the State. As part of the licensing procedure, a hauler should be required to identify its disposal site(s). Nominal licensing fees could be charged to partially support licensing procedures and enforcement activities. Penalties should be sufficiently severe to minimize the economic incentive associated with non-compliance. Such penalties could include fines, business interruption, and possibly even criminal prosecution for repeat offenders. Evidence of a reasonable bond could be required in licensing to assure the availability of funds for clean-up of identified illegal operations. Tire dealers could be required to utilize licensed haulers, with similar penalties resulting from failure to do so. Such a regulatory framework would encourage legitimate scrap tire hauling operations without significantly increasing their operating costs if licensing fees and bonding requirements are reasonable.

The next, and equally important, regulatory step should encourage the establishment of legitimate resource recovery operations. These operations should also be licensed and bonded to minimize State liability for tire clean-up operations in the event of business failure. Bonding requirements should reflect disposal costs associated with the maximum number of tires permitted to be stored at the site before processing. Bonding would minimize operations which collect disposal fees but fail to process the tires. Resource recovery operations could be further encouraged by availability of low interest loans for facility construction if the rate of development does not meet the State's expectations. Loans should only be extended to those operators having established technology, proven performance history, and demonstrated economic viability as required by private lending institutions.

Since the State of New Jersey has budgetary constraints, licensing, loan programs and tire pile clean-up operations could be supported by a nominal, uniform fee added to vehicle registration fees, as recently established in Minnesota. Such a fee is selectively paid by those residents operating vehicles (generating scrap tires), but does not require massive new record keeping and enforcement activities by tire dealers and state authorities. Implementation of a vehicle registration fee would also be significantly more expedient and less complex than a tax on replacement tire sales. Michigan is reportedly encountering strong resistance to its proposed replacement tire tax.

RESOURCE RECOVERY ALTERNATIVES

There are a number of resource recovery technologies which have been applied to scrap tires. These applications are discussed in detail in WRI's Minnesota Study so they will only be addressed briefly here. Low volume uses such as crash barriers, fabricated parts, artificial reefs, and crumb rubber are interesting but will not consume the quantities of scrap tires generated annually in New Jersey. Pyrolysis is technically intriguing, but has yet to prove its technical and economic feasibility. Out of over 40 identified historical world-wide pyrolysis projects, none have yet proven sustained technical and economic viability under financial conditions anticipated in New Jersey.

Of all applications, use of scrap tires as a fuel is most likely to consume New Jersey's annual volumes. Scrap tires contain more energy per pound (about 15,000-16,000 Btu per pound) than coal (10-12,000 Btu per pound). Whole tires have been combusted in specially designed boilers to generate steam or power. It is our understanding that this technology has not yet been broadly demonstrated in this country on a commercial scale, but may be in the future.

Another alternative is to shred scrap tires into a small chips resembling coal which can be used as a fuel supplement in existing solid fuel boilers, partially displacing demand for coal, oil, and gas. The strength and resiliency of tires makes them difficult to shred, but WRI has developed an efficient process for doing this through 10 years of extensive effort. WRI economically processes over 50% of all scrap tires generated in the Northwest (Washington, Oregon, and Idaho) into high quality tire-derived fuel (TDF) in a single plant located in Portland, Oregon. WRI's process even removes 97%+ of the steel bead and cord material to enhance ease of use. WRI's TDF has been used for years by Fortune 500 companies in full compliance with strict federal and state environmental regulations. WRI has even developed proprietary systems for assuring uniform usage rates to avoid environmental excursions. WRI is currently constructing a new facility in Houston which will be capable of processing over half of all scrap tires generated annually in Texas. New plants in Dallas and Cleveland are scheduled for completion within the next 15 months. Our current plans call for installation of facilities in Southern New Jersey in 1987 and Northern New Jersey in 1988, provided the State establishes reasonable regulations. Each facility will be able to process 4 to 5 million tires per year. The two combined facilities, therefore, can eliminate New Jersey's disposal problem by processing all scrap tires produced annually in the State.

A resource recovery alternative must also be economically attractive to minimize both the disposal costs ultimately borne by the consumer and the financial incentive for illegal dumping. WRI's Portland facility operates profitably with a tipping fee of only 25 cents per tire. This tipping is significantly lower than that charged by many landfills. Therefore, total disposal costs for most dealers, including hauling, are less than 50 cents per tire. Although the tipping fee charged in New Jersey will depend upon a number of local factors, WRI anticipates that it will also be 25 cents per tire or less within a reasonable regulatory framework. Local industries using the fuel will also benefit from availability of a low cost fuel.

SUMMARY

In summary, New Jersey's scrap tire disposal problem is manageable. With carefully conceived regulations to control illegal dumping and assist legitimate resource recovery operations, the State's scrap tires can be economically converted to a proven fuel benefiting local industry. WRI will gladly provide references from state regulatory agencies in the Northwest and fuel users to allow independent verification of our comments.

Thank you for your interest. WRI would welcome an opportunity to work with The State of New Jersey to convert a disposal problem into a resource.

Statement of

Donald Thomas Wilson

Director, Government Relations

National Tire Dealers and Retreaders Association

Submitted to the

New Jersey Senate Energy and Environment Committee

February 13, 1986

108

NTDRA Testimony -- New Jersey Recycling Legislation

My name is Donald Wilson, Director of Government Relations for the National Tire Dealers and Retreaders Association (NTDRA), a national non-profit trade association representing approximately 5,000 independent tire dealers and retreaders located in 50 states who are engaged in the wholesale and retail distribution of automobile and truck tires, the retreading of tires and the sale of related products and services.

Mr. Chairman, I appreciate this opportunity to convey to you and the members of this committee the views of NTDRA's membership regarding Senate Bill 1478. NTDRA applauds the efforts of the New Jersey Assembly to encourage solid waste recycling. NTDRA has long encouraged recycling of tires. NTDRA believes used tires are too valuable a resource to simply bury in the ground. Indeed, retreaders are the major recyclers of used tires in the country today, recycling roughly 20% of all used tires generated annually.

Because of our belief that retreading is the most viable of tire recycling options, NTDRA would hope that this legislation would encourage the state of New Jersey and local units of government within New Jersey to increase procurement of retreaded tires for use on state and local government vehicles.

Furthermore we would hope that retreaders of tires would be eligible for low interest loans or loan guarantees as provided for in the proposed amendment to Section 5 of P.L. 1981, C. 278. In addition we would urge that part of the 15% of the state Recycling Fund designated for "public information and education" programs be used to encourage the public to use retreaded tires.

As indicated earlier, NTDRA applauds the overall objectives of this legislation to encourage recycling of solid waste. NTDRA recognizes that high population density within New Jersey has created a monumental solid waste disposal problem. NTDRA also recognizes that scrap tires contribute to that problem. We would stress however, that although roughly 2 million scrap tires are discarded annually in New Jersey, this seemingly significant number of tires represents no more than one percent of the solid waste generated annually in the state. Even so, the New Jersey Tire Dealers Association and particularly Mr. Bill Babek, a member of both the New Jersey Tire Dealers Association and the NTDRA, has worked diligently with the New Jersey Office of Recycling to try and develop a Plan of Action to deal with scrap tires. We are cautiously optimistic that this plan will contribute in a meaningful way toward alleviation of New Jersey's scrap tire problem.

NTDRA is deeply concerned however, that section 17 of this proposed legislation will not effectively address the problem of scrap tire disposal in New Jersey. In fact Section 17 may well create more problems than it is intended to resolve.

First and foremost, the deposit program outlined in Section 17, if adopted, would place an unbearable financial and paperwork burden on tire dealers in New Jersey. The cost of compliance with the paperwork, which would surely accompany the deposit program, would have serious profitability implications for New Jersey's tire dealers. Additional government mandated paperwork would mean added payroll costs and lost productivity. This means increased costs of doing business for New Jersey tire dealers.

The impact on cash flow and additional financing costs, inherent in a system whereby dealers pay consumers \$1.50 for each scrap tire returned and then await reimbursement from the state, would have an even more devastating impact on the costs of doing business.

These increases in the costs of doing business would have to be passed along to consumers or absorbed. Absorption of these costs could financially devastate a marginal dealership while imposing terrific hardship on more prosperous dealerships. If these added costs of doing business are passed along to consumers and in addition the \$3.00 per tire deposit fee, tire dealers in New Jersey would find themselves at a distinct competitive disadvantage with tire dealers in neighboring states. Dealerships near state boundaries would be especially impacted. If the additional costs of doing business imposed by the deposit program were reflected in increased consumer prices, and they surely would be, fleet purchasers of tires would have real economic incentives to purchase their tires out of state. This loss of fleet sales would do further economic damage to New Jersey tire dealers. Out of state tire sales would also adversely impact the Recycling Fund.

Loss of business to lower costs out-of-state dealers would surely harm the level of sales tax revenues in New Jersey. The most important economic impact on New Jersey would occur when some New Jersey tire dealers, faced with increased costs of doing business and loss of sales, might be forced to close their doors of operation. The result would be increased unemployment and the state having to pay increased unemployment benefits. The state would also face the loss of income tax revenues.

So far I have only discussed the impact on consumers in terms of product costs. But increased product cost is surely not the only adverse impact on New Jersey consumers. Under the deposit concept, if consumers were dissatisfied with the brand of tires on their car, they would likely be faced with the prospect of buying their replacement tires at one dealership and then

having to take their used tires to another dealership to get their deposit refund. The lost opportunity costs to New Jersey consumers would be astronomical. Moreover, to avoid the inconvenience and lost opportunity costs, consumers would likely be forced to purchase their replacement tires at a dealership that sells the brand already on their car. This has the potential of drastically impacting consumer freedom of choice and disrupting market forces within the retail tire industry in New Jersey.

Another major problem inherent in the present deposit program proposal is the proposed labeling or marking of tires. NTDRA is not presently aware of a workable methodology for molding markings on tires at the manufacturing level for distribution to a single state. The result therefore would probably be that the retailer would be expected to label tires as they entered his inventory. Once again we are talking about sharply increased operating costs with all the ramifications discussed earlier.

A labeling system would open up the deposit program to widespread counterfeiting and fraud. Tires purchased out of state would be fraudulently labeled and returned to New Jersey tire dealers who would then have to pay out an unwarranted deposit refund. No doubt counterfeiting and fraud in labeling would result in trailer loads of scrap tires being brought in from out of state for purposes of collecting a fraudulent deposit refund. Such a situation would only exacerbate the scrap tire problem in New Jersey.

Also Mr. Chairman, section 17, subsection (d) gives the Department of Environmental Protection a virtually unlimited authority to regulate the wholesale and retail distribution of tires. This near blank check authority to a governmental unit to regulate the wholesale and retail tire industry in New Jersey is a totally unjustified invasion of the management prerogatives of the state's tire dealers. All small business men and women in New Jersey should be concerned that their industry would be the next to fall under such a broad regulatory edict.

NTDRA and its members in New Jersey would urge this committee to postpone any action on Section 17. We believe that the Assembly should allow the Department of Energy to finalize and implement its Plan of Action for scrap tires in cooperation with tire retailers, wholesalers, rereaders and manufacturers. The results of that program should be carefully evaluated after a reasonable period of time before any further legislative action.

Mr. Chairman, NTDRA believes that Section 17 is so inherently flawed that regardless of the results of the Plan of Action that Section 17 would have to be drastically revised if it were to ever have hopes of being workable.

Before concluding Mr. Chairman, NTDRA would like to acknowledge its support for sections 19,20,21,22,and 23. We believe these sections, if properly implemented, could encourage state and local units of government to increase utilization of retreaded tires and possibly other recycled tire products such as tire derived fuels, rubber asphalt, etc. Governmental units should take the lead in utilizing recycled products. These sections would encourage such use.

This association would also like to express its support for section 47. Sales tax exemption for recycled products such as retreaded tires, tire derived fuel and recycled rubber composting chips would certainly provide potential end users of these products with an added economic incentive to purchase recycled products. Stimulation of market demand for recycled products will go a long way toward bringing a viable tire recycling industry to New Jersey.

Likewise Mr. Chairman the tax credit provided in section 50 is viewed by this association as a very positive proposal. This provision could encourage retreaders to update their facilities and encourage other potential tire recyclers to locate and operate in New Jersey.

In conclusion Mr. Chairman and members of the committee, I want to assure you that NTDRA is ready and willing to work with officials of New Jersey to try and resolve the scrap tire problem and pledge to you our full cooperation.



New Jersey State Tire Dealers Association

General Business Office
c/o John Werley Agency
P.O. Box 1253
Fairfield, N.J. 07006
Tel. (201) 227-8557

Executive Director
John N. Gilvey
11 Buttonwood Place
Hazlet, N.J. 07730
Tel. (201) 739-4727

February 21, 1986

Senator Daniel Dalton
Mr. Mark Connelly
c/o Senate Energy and Environment Committee
Office of Legislative Services
Room 350, State House Annex- CN-042
W. State Street
Trenton, N. J. 08625

Re: Senate Bill 1478

Our association represents and is comprised of Tire Dealers in every community of New Jersey. Our members are extremely concerned about the impact on their business of Senate Bill 1478.

In cooperation with our National Association, we have developed a position paper which reflects the attitude and concerns of our membership, for Senate Bill 1478. We are attaching this position paper, and request that you and the members of the Senate Energy and Environment Committee review our opinions which originate as input from an important segment of the business community that serves the gigantic motoring public.

Your consideration to address our needs is urgently solicited, and we wish to offer our Association assistance in the futher study of the DEVESTATING IMPACT OF BILL 1478.

May we hear from you?

Yours very truly,

John N. Gilvey
Executive Director
John Nacco
President



LEAGUE OF WOMEN VOTERS OF NEW JERSEY

204 WEST STATE STREET, TRENTON, NEW JERSEY 08608 / TELEPHONE 1-800-792-VOTE / 609-394-3303

Testimony for Senate Energy and Environment Committee
on S. 1478, Statewide Mandatory Recycling Act
April 23, 1986

The League of Women Voters is a nonpartisan grassroots 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. We are currently studying solid waste management, and it is within the context of our study that S. 1478 was reviewed by our Natural Resources committee.

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 excellent, to single out this material may, in fact, impair its distribution and yield some of its market share to a less recyclable material, i.e. plastic.

Contracting with markets is fundamental, and indeed a material is not recycled until it is reused. We agree that markets must be secured before source separation and collection services are mandated. We are pleased to note that the bill now requires districts not only to "prepare," but to "adopt" recycling plans within six months. This will help avoid unnecessary delay in the implementation of recycling plans. 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 would establish recycling goals for certain plastic and bimetal beverage containers and would impose deposits if these goals are not met. While we believe strongly in the need for packaging reform and the necessity for accountability by manufacturers of packaging, we oppose inclusion of these provisions in S. 1478. These measures

Cont'd. . .

are regarded as unworkable in some instances and technically inappropriate in others. We recommend further study and separate legislation to most effectively address these complex packaging issues.

In place of the grants program administered through the Office of Recycling, we recommend a straight per capita distribution to municipalities that will provide timely initial program and public information funding.

Stimulation of 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 4 years) and the energy tax credit. The sales tax exemption appeared 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.

New Jersey  **Environmental Lobby**

Box 605, Teaneck, N. J. 07666

TESTIMONY BEFORE THE SENATE ENERGY AND ENVIRONMENT COMMITTEE
REGARDING THE MANDATORY STATEWIDE RECYCLING BILL, S-1178

APRIL 15, 1986

ON BEHALF OF

AMERICAN LUNG ASSOCIATION OF NEW JERSEY
NEW JERSEY CHAPTER OF THE SIERRA CLUB
NEW JERSEY ENVIRONMENTAL LOBBY

James Lanard
NJEL

214

TESTIMONY BEFORE THE SENATE ENERGY AND ENVIRONMENT COMMITTEE
April 15, 1986

RE: S-1178, CONTILLO

We are very pleased to see this committee moving ahead toward release of new recycling legislation and extend our compliments to Senator Contillo for sponsoring S-1178. We share the committee's and sponsor's concern that the final legislation yield the largest possible reduction in our waste stream and have several suggestions which we believe could contribute to that result.

First, let us state the premises upon which we make our suggestions:

1. The solid waste and landfill situation in New Jersey is a crisis, not merely a problem, and as such requires strong action. While the concerns of various manufacturers, recycling operators, local governments and volunteer groups must be heard and considered, solutions will require a willingness to override many objections in the interest of real progress in waste reduction.
2. The idea of recycling for income must give way to the idea of removing material from the waste stream out of vital necessity - not at any cost but at a cost commensurate to the need.
3. A rigid markets first policy fails to reflect the urgency of the situation and leaves too great a chance of failure to meet waste reduction goals. A growing supply will stimulate market seeking and attract buyers. Unsaleable supplies can, if necessary, be disposed of without sending them to sanitary landfills.
4. An orderly flow of recyclables out of the waste stream into production

requires adequate storage facilities to cushion shocks in the system.

Long term landbanking may be necessary for some materials.

5. Finding good markets requires centralized processing facilities for preparing materials to meet the quality demands of users.
6. The regulatory authority should be given the flexibility to deal with technological changes which threaten to setback recycling efforts. The introduction of the bi-material plastic can would be an example.

Now we turn to our specific suggestions:

1. Municipal recycling grants should be given only for materials recycled under a municipally operated or contracted recycling program. Municipal programs are where the greatest opportunity and likelihood of expansion exists. Rewarding them will encourage that expansion. Private profit or non-profit recycling is not stimulated by grants given to municipal governments. Too much time is (and would be under S-1178 as written) given to municipal efforts to document and collect grant money on ongoing, independent recycling that would take place regardless of the recycling program.
2. Municipalities determined not to be in conformance with their county plan or this statute should not be eligible for tonnage grant awards.
3. Each county should be required to establish, with partial or full State funding, an intermediate processing facility (IPF) to receive recyclables from municipalities in the county, process them to meet market require-

ments, and make them available to purchasers. Adequate storage should be provided to allow for a reasonable time for arranging the best terms for disposition of material, perhaps one to three months' collections. Municipalities should have the option of selling their recyclables to users or intermediaries directly or delivering them to their IPF's at no charge. A portion of the tonnage grant funds should be allotted to counties for the volume of material they process and sell.

4. Each county should have a reusable resource storage facility (RRSF) at which unsaleable recyclable materials can be placed for long term storage or, in the extreme, final disposition. No materials removed from the waste stream should have to be sent to sanitary landfills. Storage facilities would receive only non-toxic material cleansed of putrescible matter. Siting should not be a problem politically and the distance from the IPF to the RRSF should typically be short. Material placed in the RRSF would relieve the pressure on landfills and incinerators just as effectively as material that is recycled.
5. Every county should be required to have a leaf and yard waste composting facility available for those municipalities which cannot or choose not to compost this waste independently.
6. Under S-1478 disposal of leaves is prohibited at sanitary landfills. This prohibition should be extended to incinerator plants, and an appropriate regulatory agency should be given the authority to prohibit

disposal of other recyclables at sanitary landfills or incinerators.

7. Since it seems quite clear that neither plastic or bi-metal containers will reach even a 25% recycling rate without a deposit system, we suggest that the time period leading to institution of deposits under Sections 11 and 12 be reduced or eliminated.
8. Given the success of across-the-board beverage container deposit laws in other states in achieving high recycling rates, we urge this committee, independently of this act, to study the recycling potential for such a system in New Jersey.
9. We note that two very interesting proposals for collection and conversion of rubber tires to energy were presented at the last hearing. Since they required one or two facilities for the entire state, we urge that the Office of Recycling be required to study rubber tire recycling and present to the Legislature within 12 months specific recommendations regarding a statewide tire recycling or tire-to-energy collection and processing program.
10. The Office of Recycling estimates about 5 million tons of municipal solid waste landfilled in New Jersey each year or 45% of total solid waste. The Division of Waste Management reports 8½ million tons of annual MSW landfilled or 79%. In either event, there is a significant amount of non-municipal waste including building material, construction rubble, vehicles, appliances, agricultural waste, industrial waste, etc. We suggest that the Office of Recycling be required to study and report to the Legislature on the potential

for increased recycling of materials from non-municipal waste.

11. The recycling program should be financially self supporting through the landfill tax. The tax should be set high enough to cover all expenses of the State including paybacks to the General Fund for initial start-up appropriations.
12. Finally, we urge that the Office of Recycling be required to hold annual hearings on the progress and effectiveness of the program established by the act, file an annual report to the Legislature, and make recommendations for any needed additional legislation.

XXXXXXXXXXXXXXXXXXXX