

10
P277
1987P

PUBLIC HEARING

before

SENATE ENERGY AND ENVIRONMENT COMMITTEE

SENATE BILLS 2728, 2987, 2988, 2989, 2990, 2991,
2992, 2993, 2994, 2995, 3094, and SJR-60

(Hazardous Waste Minimization)

April 1, 1987
Room 341
State House Annex
Trenton, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Senator Daniel J. Dalton, Chairman
Senator William L. Gormley

ALSO PRESENT:

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

* * * * *

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

New Jersey State Library



DANIEL J. DALTON
Chairman
PAUL CONTILLO
Vice-Chairman
CATHERINE A. COSTA
WILLIAM L. GORMLEY
LEE B. LASKIN

New Jersey State Legislature
SENATE ENERGY AND ENVIRONMENT COMMITTEE
STATE HOUSE ANNEX, CN-068
TRENTON, NEW JERSEY 08625
TELEPHONE: (609) 292-7676

NOTICE OF A PUBLIC HEARING

The Senate Energy and Environment Committee will hold a public hearing on Wednesday, April 1, 1987, beginning at 10:30 A.M. in Room 341 at the State House Annex, Trenton, New Jersey. The following bills will be the subject of the public hearing:

- | | |
|----------------------------|---|
| <u>S-2728</u>
Gormley | Increases Corporation Business Tax for generators of hazardous waste not meeting waste reduction requirement. |
| <u>S-2987</u>
Bassano | Creates Office of Hazardous Waste Minimization and Hazardous Substance Source Reduction Science Advisory Board, appropriates \$1,000,000. |
| <u>S-2988</u>
Garibaldi | Requires hazardous waste generators to submit minimization plans. |
| <u>S-2989</u>
Bubba | Establishes a program for systematic review of hazardous waste management practices by industrial establishments, appropriates \$90,000. |
| <u>S-2990</u>
Dorsey | Exempts hazardous waste minimization equipment from property tax. |
| <u>S-2991</u>
Cardinale | Exempts sales of hazardous waste minimization equipment from "Sales and Use Tax." |
| <u>S-2992</u>
Ewing | Allows credit against Corporation Business Tax equal to 50% of cost of hazardous waste recycling or reduction equipment. |
| <u>S-2993</u>
Brown | Appropriates \$50,000 for Source Reduction and Recycling Task Force. |

S-2994
Haines Directs review of regulations in conflict
with hazardous waste minimization.

S-2995
McNamara Provides for "fast-track permitting" in
certain areas.

S-3094
Hurley Requires permit for toxic chemical
discharge.

SJR
Gagliano Memorializes Congress and EPA to simplify
the RCRA permit procedure.

Persons wanting to testify at the public hearing should
contact Mark Connelly at (609) 292-7676.

SENATE, No. 2728
STATE OF NEW JERSEY

INTRODUCED OCTOBER 27, 1986

By Senators GORMLEY, McNAMARA and HURLEY

Referred to Committee on Energy and Environment

AN ACT concerning the reduction of the generation of hazardous waste, supplementing Title 54 of the Revised Statutes, and amending P. L. 1945, c. 162.

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

1 1. This act shall be known and may be cited as the "Hazardous
2 Waste Reduction Tax Incentive Act of 1986."

1 2. The Legislature finds that the generation of hazardous waste,
2 while often an unavoidable aspect of many manufacturing proc-
3 esses, presents a threat to the environment and public health, and
4 requires the siting and construction of hazardous waste disposal
5 facilities; that reducing the amount of hazardous waste which must
6 be disposed of would prolong the capacity of existing hazardous
7 waste disposal facilities and decrease the number of new facilities
8 which must be sited and constructed; that generators of hazardous
9 waste should be given a financial incentive to reduce the amount
10 of hazardous waste they generate; that generators of hazardous
11 waste who do not reduce the amount of hazardous waste they
12 generate should be subject to an increase in the Corporation
13 Business Tax, the proceeds of which would be used to mitigate
14 the environmental problems caused by hazardous waste; and that
15 it is appropriate for the State, in fulfillment of its duty to preserve
16 and protect the public health and environment, to use its taxing
17 power to discourage the generation of hazardous waste.

18 The Legislature therefore determines that it is in the public
19 interest to establish a comprehensive program designed to en-

Matter printed in italics thus is new matter.

20 courage businesses generating hazardous waste to implement waste
21 reduction strategies.

1 3. On or before June 1, 1987, the Hazardous Waste Facilities
2 Siting Commission established pursuant to section 4 of P. L. 1981,
3 c. 279 (C. 13:1E-52) shall transmit a written report to the Legis-
4 lature setting forth recommendations concerning:

5 a. the percentage of reduction of hazardous waste generation
6 which would be appropriate to qualify a taxpayer for exemption
7 from the tax imposed pursuant to subsection (g) of section 5 of
8 P. L. 1945, c. 162 (C. 54:10A-5);

9 b. appropriate methods for defining and measuring reductions in
10 hazardous waste generation;

11 c. any generators of hazardous waste which, because of the
12 quantity or type of hazardous waste generated, should be exempt
13 from the tax increase imposed pursuant to subsection (g) of
14 section 5 of P. L. 1945, c. 162 (C. 54:10A-5); and

15 d. any other information relevant to encouraging the reduction
16 of hazardous waste generation and the implementation of this act.

1 4. On or before September 1, 1987, the Legislature shall enact
2 legislation amending or supplementing this act to establish the
3 amount or range of reduction in hazardous waste generation neces-
4 sary to qualify a taxpayer for exemption from the tax increase
5 imposed pursuant to subsection (g) of section 5 of P. L. 1945, c. 162
6 (C. 54:10A-5), and any other criteria as may be necessary for the
7 implementation of this act.

1 5. On or before March 1, 1988, the Division of Taxation in the
2 Department of the Treasury, in consultation with the Hazardous
3 Waste Facilities Siting Commission and the Department of En-
4 vironmental Protection, shall adopt rules and regulations estab-
5 lishing technical criteria which shall be used by the division to
6 determine eligibility for exemption from the tax imposed pursuant
7 to subsection (g) of section 5 of P. L. 1945, c. 162 (C. 54:10A-5).
8 These technical criteria shall be designed to permit the division
9 to verify any application for an exemption from the tax imposed
10 pursuant to subsection (g) of section 5 of P. L. 1945, c. 162 (C.
11 54:10A-5) based on the hazardous waste generation reduction
12 levels established pursuant to section 4 of this act. Upon the
13 adoption of these regulations, the Division of Taxation shall trans-
14 mit these regulations, with any appropriate explanatory material,
15 forms, and returns, to each taxpayer subject to the tax imposed
16 pursuant to subsection (g) of section 5 of P. L. 1945, c. 162
17 (C. 54:10A-5).

1 6. On or before March 1, 1989, and annually thereafter, any
2 taxpayer subject to the tax imposed pursuant to section 5 of P. L.
3 1945, c. 162 (C. 54:10A-5), who manifests hazardous waste on the
4 hazardous waste manifest system established by the Department
5 of Environmental Protection pursuant to regulations adopted under
6 the provisions of P. L. 1970, c. 39 (C. 13:1E-1 et seq.), and who
7 seeks an exemption from the tax imposed pursuant to subsection
8 (g) of section 5 of P. L. 1945, c. 162 (C. 54:10A-5), shall submit
9 an application for exemption to the Division of Taxation on forms
10 supplied by the division together with any other information or
11 documentation deemed necessary by the division.

1 7. On or before September 1, 1989, and annually thereafter, the
2 Division of Taxation shall approve or deny any application for an
3 exemption from the tax imposed pursuant to subsection (g) of
4 section 5 of P. L. 1945, c. 162 (C. 54:10A-5) filed by a taxpayer
5 pursuant to section 6 of this act.

1 8. Within 60 days of the effective date of this act, the Department
2 of Environmental Protection shall transmit to the Division of
3 Taxation a list of the names and addresses of persons manifesting
4 hazardous waste on the hazardous waste manifest system estab-
5 lished by the department pursuant to regulations adopted under
6 the provisions of P. L. 1970, c. 39 (C. 13:1E-1 et seq.). Upon
7 receipt of this list, the Division of Taxation shall transmit to each
8 person on the list a notice and explanation of the provisions of
9 this act.

1 9. Section 5 of P. L. 1945, c. 162 (C. 54:10A-5) is amended to
2 read as follows:

3 5. The franchise tax to be annually assessed to and paid by each
4 taxpayer shall be the sum of the amount computed under subsec-
5 tion (a) hereof, or in the alternative to the amount computed under
6 subsection (a) hereof, the amount computed under subsection (f)
7 hereof, and the amount computed under subsection (c) and sub-
8 section (g) hereof:

9 (a) That portion of its entire net worth as may be allocable to
10 this State as provided in section 6, multiplied by the following
11 rates: 2 mill per dollar on the first \$100,000,000.00 of allocated
12 net worth; $\frac{1}{10}$ of a mill per dollar on the second \$100,000,000.00;
13 $\frac{1}{10}$ of a mill per dollar on the third \$100,000,000.00; and $\frac{1}{10}$ of a
14 mill per dollar on all amounts of allocated net worth in excess of
15 \$300,000,000.00; provided, however, that with respect to reports
16 covering accounting or privilege periods set forth below, the rate
17 shall be that percentage of the rate set forth in this subsection for
18 the appropriate year:

Accounting or Privilege
Periods Beginning on or

The Percentage of the Rate
to be Imposed Shall Be:

After:

19	April 1, 1983	75%
20	July 1, 1984	50%
21	July 1, 1985	25%
22	July 1, 1986	0

23 (b) (Deleted by amendment, P. L. 1968, c. 250, s. 2.)

24 (c) $3\frac{1}{4}\%$ of its entire net income or such portion thereof as may
25 allocable to this State as provided in section 6; provided, how-
26 ever, that with respect to reports covering accounting or privilege
27 periods or parts thereof ending after December 31, 1967, the rate
28 shall be $4\frac{1}{4}\%$; and that with respect to reports covering account-
29 ing or privilege periods or parts thereof ending after December 31,
30 1971, the rate shall be $5\frac{1}{2}\%$; and that with respect to reports cov-
31 ering accounting or privilege periods or parts thereof ending after
32 December 31, 1974, the rate shall be $7\frac{1}{2}\%$; and that with respect
33 to reports covering accounting or privilege periods or parts thereof
34 ending after December 31, 1979, the rate shall be 9%;

35 (d) Provided, however, that the franchise tax to be annually
36 assessed to and paid by any investment company or real estate
37 investment trust, which has elected to report as such and has filed
38 its return in the form and within the time provided in this act and
39 the rules and regulations promulgated in connection therewith,
40 shall, in the case of an investment company, be measured by 25%
41 of its entire net income and 25% of its entire net worth, and in the
42 case of a real estate investment trust, by 4% of its entire net
43 income and 15% of its entire net worth, at the rates hereinbefore
44 set forth for the computation of tax on net income and net worth,
45 respectively, but in no case less than \$250.00, and further provided,
46 however, that the franchise tax to be annually assessed to and paid
47 by a regulated investment company which for a period covered by
48 its report satisfies the requirements of chapter 1, Subchapter M,
49 Part I, Section 852 (a) of the federal Internal Revenue Code shall
50 be \$250.00.

51 (e) The tax assessed to any taxpayer pursuant to this section
52 shall not be less than \$25.00 in the case of a domestic corporation,
53 \$50.00 in the case of a foreign corporation, or \$250.00 in the case
54 of an investment company or regulated investment company.

55 (f) In lieu of the portion of the tax based on net worth and to
56 be computed under subsection (a) of this section, any taxpayer,
57 the value of whose total assets everywhere, less reasonable reserves
58 for depreciation, as of the close of the period covered by its report,

59 amounts to less than \$150,000.00, may elect to pay the tax shown
60 in a table which shall be promulgated by the director.

61 (g) 5% of its entire net income or such portion thereof as may
62 be allocable to this State as provided in section 6 of P. L. 1945, c. 145
63 (C. 54:10A-6), provided, however, that the tax imposed pursuant
64 to this subsection shall apply only to taxpayers who manifest
65 hazardous waste on the hazardous waste manifest system estab-
66 lished by the Department of Environmental Protection pursuant to
67 regulations adopted under the provisions of P. L. 1970, c. 39 (C.
68 13:1E-1 et seq.) and who have not been certified as exempt from
69 the tax imposed pursuant to this subsection pursuant to section 7
70 of P. L. 1986, c. (now before the Legislature as this bill).
71 The director shall deposit, on a quarterly basis, all revenues col-
72 lected pursuant to this subsection in the "Hazardous Discharge Site
73 Cleanup Fund" established pursuant to section 1 of P. L. 1985,
74 c. 247 (C. 58:10-34). The tax imposed pursuant to this subsection
75 shall apply to reports covering accounting or privilege periods or
76 parts thereof ending after December 31, 1989.

1 10. This act shall take effect immediately.

STATEMENT

This bill would increase the rate of the Corporation Business Tax (P. L. 1945, c. 162) from 9% to 9.5% for taxpayers who generate hazardous waste and who have not met waste reduction targets established by law. Hazardous waste generators who have met the reduction targets would be exempt from the increase. Specifically, this bill would require the Hazardous Waste Facilities Siting Commission to prepare and submit to the Legislature a report concerning the appropriate percentage of reduction which would qualify a generator from the tax increase. Within three months of receipt of the report, the Legislature would enact legislation establishing the amount or range of reduction in hazardous waste generation necessary to qualify for exemption from the tax increase. The Division of Taxation and the Department of Environmental Protection would be required to adopt rules and regulations establishing technical criteria for use by the Division in reviewing applications for an exemption from the tax increase. By March 1, 1989, (and annually thereafter) generators of hazardous waste seeking an exemption from the tax increase would be required to file for an exemption. The Division of Taxation would have until September 1 to make final decisions on the applications. The tax increase would first be imposed for the 1990 calendar year.

HAZARDOUS WASTE

Increases Corporation Business Tax for generators of hazardous waste not meeting waste reduction requirement.

SENATE, No. 2987

STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators BASSANO, DORSEY, HURLEY, CARDINALE,
BUBBA, CONNORS, GAGLIANO, DiFRANCESCO, GARI-
BALDI, BROWN, DUMONT and HAINES

Referred to Committee on Energy and Environment

AN ACT creating the Office of Hazardous Waste Minimization,
and the Hazardous Substance Source Reduction Science Ad-
visory Board, supplementing Title 13 of the Revised Statutes,
and making an appropriation.

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

1 1. The Legislature finds and declares that the hazardous waste
2 generated in the State is growing in both quantity and complexity;
3 that the safe and secure disposal of this waste is posing an increas-
4 ing financial and public health burden on the State and private
5 industry; that waste reduction at the source, recycling, materials
6 recovery, and on-site treatment are cost effective, safe, and effica-
7 cious strategies that comprise an important part of the State's
8 hierarchy of hazardous waste management options; that the grow-
9 ing sophistication of the hazardous waste produced and the tech-
10 nologies available for its treatment are, in many cases, beyond the
11 resources and expertise of the generators thereof; and that the
12 creation within State government both of an Office of Hazardous
13 Waste Minimization to serve as a clearing house for research and
14 development in managing hazardous waste and to provide technical
15 and financial assistance to those hazardous waste generating busi-
16 nesses and industries that require such assistance, and a Hazardous
17 Substance Source Reduction Science Advisory Board to direct
18 efforts toward achieving increased waste reduction at the source
19 would be both in the private interest and in the interests of the citi-
20 zens of the State of New Jersey.

1 2. As used in this act:

1A "Board" means the Hazardous Substance Source Reduction Sci-
1B ence Advisory Board created pursuant to this act;

1C "Commission" means the Hazardous Waste Facilities Siting
1D Commission established pursuant to section 4 of P. L. 1981, c. 279
1E (C. 13:1E-52);

2 "Department" means the Department of Environmental Protec-
3 tion;

4 "Hazardous waste" means any waste, or combination of wastes,
5 excluding radioactive waste, sewage, and sewage sludge, resulting
6 from an industrial or commercial activity, that contains a sub-
7 stance, including any petroleum product, which is defined as haz-
8 ardous waste by the department, after public hearing, and which
8A shall be consistent to the maximum extent possible with, and which
8B shall include, the list of hazardous substances adopted by the
9 federal Environmental Protection Agency pursuant to section 102
10 of the "Comprehensive Environmental Response, Compensation,
11 and Liability Act of 1980," Pub. L. 96-510 (42 U.S.C. § 9602), as
12 amended and supplemented by the "Superfund Amendments and
13 Reauthorization Act of 1986," Pub. L. 99-499;

14 "Hazardous waste management hierarchy" means the hierarchy
15 of hazardous waste management options established in the "New
16 Jersey Hazardous Waste Facilities Plan" of 1985;

17 "Hazardous waste minimization" means source reduction, re-
18 cycling, or treatment activities undertaken by a generator that
19 result in either a reduction of the total volume or quantity of the
20 hazardous component, or the toxicity, or both, of hazardous waste
21 generated or treated, stored, or disposed of in any environmental
21A medium;

22 "Office" means the Office of Hazardous Waste Minimization
23 created pursuant to this act;

24 "Recycling" means the use or reuse of a hazardous waste as an
25 effective substitute for a commercial product or as an ingredient
26 or feedstock in an industrial process, the reclamation of useful
27 constituent fractions within a hazardous waste, or the removal of
28 contaminants from a hazardous waste such that would permit the
29 remainder to be reused; and

30 "Source reduction" means the reduction or elimination of haz-
31 ardous waste generated by a business or industry at the source,
32 usually within an industrial process, which is achieved through the
33 implementation of certain types of treatment processes, process
34 modifications, feedstock substitutions or improvements in feedstock
35 purity, alterations in housekeeping or management practices. or

36 recycling within an industrial process, or the utilization of more
37 efficient machinery.

1 3. There is created within the Department of Environmental
2 Protection the Office of Hazardous Waste Minimization.

1 4. The office shall facilitate and promote the commercial imple-
2 mentation of hazardous waste minimization technologies and pro-
3 cedures by providing technical and financial assistance to business
4 and industry. Specifically, the office shall, consistent with the haz-
5 ardous waste management hierarchy:

6 a. compile, organize, and make available for distribution infor-
7 mation on hazardous waste minimization technologies and pro-
8 cedures;

9 b. compile, and make available for distribution to business and
10 industry, a list of expert private consultants on hazardous waste
11 minimization technologies and procedures;

12 c. sponsor and conduct conferences and individualized workshops
13 on hazardous waste minimization for specific classes of business
14 or industry;

15 d. conduct feasibility analyses for innovative hazardous waste
16 minimization technologies and procedures;

17 e. evaluate the market potential for recovered or recycled
18 materials extracted from hazardous waste and facilitate and pro-
19 mote the establishment of such markets where appropriate;

20 f. facilitate and promote the transfer of hazardous waste mini-
21 mization technologies and procedures through sales or licensing
22 agreements between businesses or industries;

23 g. develop, where appropriate, and distribute for voluntary
24 implementation, hazardous waste minimization plans for the major
25 classes of business or industry that generate and subsequently
26 treat, store, or dispose of hazardous waste in the State;

27 h. develop, and make available for distribution, hazardous waste
28 audit procedures or protocols for utilization by business and indus-
29 try in conducting internal hazardous waste audits;

30 i. conduct, to the extent that funds may be appropriated or
31 otherwise made available therefor, a hazardous waste audit upon
32 the request of a business or industry;

33 j. administer loan, loan guarantee, interest subsidy, or grant
34 programs which may be established pursuant to law for the pur-
35 pose of providing monies to a business or industry to subsidize
36 the costs of conducting hazardous waste audits or minimization
37 studies, or developing or purchasing, and implementing, hazardous
38 waste minimization technologies and procedures, or for other
39 similar purposes;

40 k. provide monies, from such funds as may be appropriated or
 41 otherwise made available therefor, to academic institutions, busi-
 42 nesses or industries, government agencies, or private organizations
 43 located in the State to conduct demonstration or pilot programs
 44 utilizing innovative hazardous waste technologies and procedures;

45 l. provide monies, from such funds as may be appropriated or
 46 otherwise made available therefor, to academic institutions or
 47 private organizations located in the State for basic or applied
 48 research on hazardous waste minimization; and

49 m. compile, and make available for distribution, in cooperation
 50 with the Division of Taxation in the Department of Treasury,
 51 information on available tax benefits for the implementation of
 52 hazardous waste minimization technologies and procedures by a
 53 business or industry.

1 5. The Hazardous Waste Facilities Siting Commission, estab-
 2 lished pursuant to section 4 of P. L. 1981, c. 279 (C. 13:1E-52),
 2A shall, consistent with the hazardous waste management hierarchy:

3 a. establish and promote a "chemical conservation" education
 4 awareness program for business and industry;

5 b. establish and promote a Statewide goal of reducing the amount
 6 of hazardous waste generated and treated, stored, or disposed of
 7 in the State by at least 10% annually for the five years next
 8 following the effective date of this act, to be accomplished through
 9 voluntary implementation of hazardous waste minimization tech-
 10 nologies and procedures by business and industry; and

11 c. establish and promote, in cooperation with the Office of the
 12 Governor, a Governor's awards program to recognize those busi-
 13 nesses and industries which have made noteworthy efforts to mini-
 14 mize the amount of hazardous waste they generate and treat, store,
 15 or dispose of in the State.

1 6. a. There is established in, but not of, the department a Haz-
 2 ardous Substance Source Reduction Science Advisory Board, which
 3 shall consist of 13 members appointed by the Governor with the
 4 advice and consent of the Senate. The board shall comprise mem-
 5 bers from the various environmental, public health, and other dis-
 6 ciplines related to source reduction, and the members shall be
 7 selected from the established leadership thereof. Recommenda-
 8 tions shall be solicited by the Commissioner of the Department of
 9 Environmental Protection and the Commissioner of the Depart-
 10 ment of Health from leaders in source reduction among industry,
 11 labor, and State or national organizations, agencies, or academic
 12 institutions, such as the United States Environmental Protection
 13 Agency, the National Academy of Sciences, Rutgers, The State

14 University, and the New Jersey Institute of Technology. At least
15 two members of the board shall be representatives of industry with
16 relevant scientific background, training, and education. Each of
17 the members shall be appointed for a term of three years, provided
18 that of the members of the board first appointed by the Governor,
19 four shall serve for a term of one year, five shall serve for terms
20 of two years, and four shall serve for terms of three years.

21 b. A majority of the members of the board shall constitute a
22 quorum for the transaction of board business. Action may be taken
23 and motions and resolutions adopted by the board at any meeting
24 thereof by the affirmative vote of a majority of the full member-
25 ship of the board.

26 c. The board shall meet at least three times annually, and shall
27 also meet at the call of the Commissioner of the Department of
28 Environmental Protection.

29 d. The board shall appoint a chairman from among its members
30 and such other officers as may be necessary. The board shall ap-
31 point an executive director with proven private sector managerial
32 expertise and experience. The board may, within the limits of
33 any funds appropriated or otherwise made available to it for this
34 purpose, appoint such other staff or hire such experts as it may re-
35 quire.

36 e. Members of the board shall serve without compensation, but
37 the board may, within the limits of funds appropriated or other-
38 wise made available for such purposes, reimburse its members for
39 necessary expenses incurred in the discharge of their official duties,
40 and when appropriate, award members with nominal honoraria.

41 f. The board may call to its assistance and avail itself of the
42 services of such employees of any State, county, or municipal de-
43 partment, board, commission, or agency as may be required and
44 made available for such purposes.

45 g. The duties of the board shall be to:

46 (1) evaluate the effectiveness and technical merit of office, com-
47 mission, and department activities in the area of facilitating and
48 promoting the commercial implementation of source reduction tech-
49 nologies and procedures;

50 (2) review and evaluate alternative interpretations of scientific
51 and technological data relevant to source reduction;

52 (3) review and evaluate science policy principles relevant to
53 source reduction;

54 (4) review and evaluate options for source reduction;

55 (5) conduct scientific and technical review of specific projects of
56 the office and provide technical support on specific issues as needed;

57 (6) suggest topics to the office, the commission, and the depart-
58 ment for consideration and investigation;

59 (7) communicate source reduction research needs to other mem-
60 bers of the scientific research community; and

61 (8) establish standing committees of the board, and ad hoc com-
62 mittees which may involve outside participants as the need arises.

63 h. The board shall report regularly and as needed to the Com-
64 missioner of the Department of Environmental Protection, and
65 shall submit an annual written report to the Governor and the
66 Legislature.

1 7. The department shall, pursuant to the "Administrative Pro-
2 cedure Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.), adopt such
3 rules and regulations as may be necessary to implement the pro-
4 visions of this act.

1 8. There is appropriated from the General Fund to the Depart-
2 ment of Environmental Protection the sum of \$1,000,000.00, which
3 shall be allocated for the purposes described in this act as follows:
4 \$600,000.00 to the Office of Hazardous Waste Minimization, of
5 which \$300,000.00 shall be allocated for activities and personnel
6 associated with source reduction and \$300,000.00 shall be allocated
7 for activities and personnel associated with recycling and treat-
8 ment; \$200,000.00 to the Hazardous Substance Source Reduction
9 Science Advisory Board; and \$200,000.00 to the Hazardous Waste
10 Facilities Siting Commission.

1 9. This act shall take effect immediately.

STATEMENT

This bill would create the Office of Hazardous Waste Minimization within the Department of Environmental Protection, the purpose of which would be to facilitate and promote the commercial implementation of hazardous waste minimization technologies and procedures by providing technical and financial assistance to business and industry. The commercial implementation of hazardous waste minimization technologies and procedures will reduce the generation and flow of hazardous waste in the State, thereby minimizing the threat posed by such waste to the public health, safety, and welfare.

This bill would also create a blue ribbon, 13-member Hazardous Substance Source Reduction Science Advisory Board in, but independent of, the Department of Environmental Protection. Nationally recognized leaders in the area of source reduction from the scientific and industrial communities would be appointed by the

7

Governor to the board, with the advice and consent of the Senate. The board would employ an executive director with managerial, but not necessarily scientific, experience and expertise, who would thereby be better qualified to effectively communicate the various benefits of source reduction to corporate chief executive officers.

Distinguishing source reduction as the preeminent method of hazardous waste minimization is particularly important. While hazardous waste minimization refers to actions taken to reduce the volume and toxicity of hazardous waste shipped from plants, including recycling and on-site treatment, source reduction is hazardous waste prevention.

Source reduction thus represents a different philosophy, i.e., "front end" versus "end of the pipe" thinking. It requires the input of top management and process and operational managers at the plant level rather than the input of environmental engineers and lawyers. An explicit State policy on source reduction is needed to refocus corporate attention.

A serious source reduction program would significantly reduce future disposal costs. It would also alter the major public investment to be made for new hazardous waste disposal facilities.

While other forms of minimization and reduction are desirable goals, source reduction is clearly preferable.

The bill would appropriate from the General Fund to the Department of Environmental Protection the sum of \$1,000,000.00, which would be allocated as follows: \$600,000.00 to the Office of Hazardous Waste Minimization, of which \$300,000.00 would be allocated for activities and personnel associated with source reduction and \$300,000.00 would be allocated for activities and personnel associated with recycling and treatment; \$200,000.00 to the Hazardous Substance Source Reduction Science Advisory Board; and \$200,000.00 to the Hazardous Waste Facilities Siting Commission.

HAZARDOUS WASTE

Creates Office of Hazardous Waste Minimization and Hazardous Substance Source Reduction Science Advisory Board, appropriates \$1,000,000.

SENATE, No. 2988

STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators GARIBALDI, DiFRANCESCO, GAGLIANO, CONNORS,
BUBBA, CARDINALE, HURLEY, BASSANO, HAINES, DOR-
SEY, BROWN and EWING

Referred to Committee on Energy and Environment

AN ACT concerning hazardous waste minimization plans and supple-
menting Title 13 of the Revised Statutes.

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

1 1. As used in this act:

2 "Generator" means any person who is required to submit a "toxic
3 chemical release form" pursuant to section 313 of the "Superfund
4 Amendments and Reauthorization Act of 1976," Pub. L. 99-499:

5 "Hazardous waste" means any waste, or combination of wastes,
6 excluding radioactive waste, sewage, and sewage sludge, resulting
7 from an industrial or commercial activity, that contains a substance,
8 including any petroleum product, which is defined as hazardous
9 waste by the department, after public hearing, and which shall be
10 consistent to the maximum extent possible with, and which shall
11 include, the list of hazardous substances adopted by the federal
12 Environmental Protection Agency pursuant to section 102 of the
13 "Comprehensive Environmental Response, Compensation, and
14 Liability Act of 1980," Pub. L. 96-510 (42 U.S.C. § 9602), as
15 amended and supplemented by the "Superfund Amendments and
16 Reauthorization Act of 1986," Pub. L. 99-499.

17 "Hazardous waste minimization" means source reduction, re-
18 cycling, or treatment activities undertaken by a generator that
19 result in either a reduction of the total volume or quantity of the
20 hazardous component, or the toxicity, or both, of hazardous waste
21 generated or treated, stored, or disposed of in any environmental
22 medium.

1 2. A hazardous waste generator shall submit a hazardous waste
 2 minimization plan biennially to, and in accordance with a schedule
 3 established by, the Department of Environmental Protection. Each
 4 plan shall address, in order, the following elements of the hierarchy
 5 of hazardous waste management options: hazardous waste reduc-
 6 tion at the source, recycling and materials recovery, and treatment.
 7 The plan shall provide for the exploitation of the full potential of
 8 each option as a condition of proceeding to the next.

1 3. The Department of Environmental Protection shall, pursuant
 2 to the "Administrative Procedure Act," P. L. 1968, c. 410 (C.
 3 52:14B-1 et seq.), adopt rules or regulations prescribing the format
 4 and required content of a hazardous waste minimization plan to
 5 be submitted pursuant to section 2 of this act.

1 4. This act shall take effect immediately.

STATEMENT

This bill would require a hazardous waste generator to submit a hazardous waste minimization plan biennially to the Department of Environmental Protection, the format and content of which to be prescribed by the department pursuant to rule or regulation. The purpose of this measure is to cause a hazardous waste generator to examine its industrial process closely for opportunities to implement hazardous waste minimization technologies and procedures. Utilization of such technologies and procedures ultimately could save the generator considerable money while also helping to reduce the generation and flow of hazardous waste in the State, thereby minimizing the threat posed by such waste to the public health, safety, and welfare.

The "hierarchy of hazardous waste management" is needed to distinguish hazardous waste reduction at the source from other hazardous waste management alternatives. This hierarchy ranks hazardous waste reduction at the source as the optimal waste management strategy. It is followed by: recycling and materials recovery, treatment, incineration, storage, and disposal.

Distinguishing hazardous waste reduction at the source as the pre-eminent method of hazardous waste minimization is particularly important. While hazardous waste minimization refers to actions taken to cut down on the volume of hazardous wastes shipped from plants, including recycling and on-site treatment, hazardous waste reduction at the source is waste prevention. This bill would provide for more than an ounce of prevention.

Hazardous waste reduction at the source represents a different philosophy ("front end" versus "end of the pipe" thinking). It involves different corporate people with different expertise. The input of top management and process and operational managers at the plant level is needed rather than simply the input of environmental engineers and lawyers. Explicit State policy on hazardous waste reduction at the source is needed to refocus corporate attention.

A serious hazardous waste reduction at the source program would significantly reduce future disposal costs. It would alter the major public investment to be made for new hazardous waste disposal facilities.

While other forms of minimization and reduction are desirable goals, reduction at the source is clearly preferable:

1. Hazardous waste reduction at the source can prevent generation of the hazardous wastes that must now be handled, transported, and treated;

2. Hazardous waste reduction at the source reduces pollution threats to all environmental media, rather than encouraging transfer of solid waste problems into air or water pollution problems. Research of hazardous chemical discharges from New Jersey plants found pollutants entering air, land, and water in comparable amounts;

3. Hazardous waste reduction at the source reduces pressures caused by mounting solid wastes for hazardous waste disposal facilities, which are increasingly difficult to site;

4. Hazardous waste reduction at the source is economically efficient. Research shows that companies could avoid waste handling and treatment costs, save costs on raw materials, reduce future liability risks, and improve their public relations. At virtually every plant, business and environmental benefits go hand-in-hand; and

5. Hazardous waste reduction at the source is not now being pursued vigorously by all segments of industry. While hazardous waste reduction at the source could significantly reduce hazardous waste problems, industry is taking few steps on its own. Research finds companies turning to hazardous waste reduction at the source only as the last resort, after traditional treatment and disposal options were exhausted.

HAZARDOUS WASTE

Requires hazardous waste generators to submit minimization plans.

SENATE, No. 2989

STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators BUBBA, CONNORS, GAGLIANO, EWING, GARBALDI, BROWN, DiFRANCESCO, HURLEY, DORSEY, BASANO and CARDINALE

Referred to Committee on Energy and Environment

AN ACT requiring regular hazardous waste management reviews for certain industrial establishments, supplementing P. L. 1983, c. 330 (C. 13:1K-6 et seq.), and making an appropriation.

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

1 1. This act shall be known and may be cited as the "Hazardous
2 Waste Management Review Act."

1 2. The Legislature finds and declares that the generation of
2 hazardous wastes, while to some extent a necessary byproduct of a
3 healthy economy, has presented, when sound waste management
4 practices are not employed, unacceptable risks to the public health
5 and the environment; that the State has taken certain actions in the
6 regulation of these wastes and the enforcement of the laws
7 established to protect the environment which have prompted in-
8 creased private-sector concern regarding the management of
9 hazardous wastes; that while governmental regulation of hazardous
10 wastes is necessary, the prevention of the entrance of toxic sub-
11 stances into the waste stream through better management, source
12 reduction and waste minimization will more effectively protect the
13 public health and the environment; and that the systematic review
14 and auditing of certain industry practices by producing better in-
15 formation will provide for this reduction and management.

1 3. The owner or operator of every industrial establishment shall
2 have a hazardous waste management review performed at the site

3 of the industrial establishment by a person certified pursuant to
4 section 8 of this act, in accordance with the review schedule estab-
5 lished pursuant to section 4 of this act. For the purposes of this act
6 "industrial establishment" shall only include those places of busi-
7 ness engaged in operations which involve the generation, refining,
8 treatment, or disposal of hazardous substances or wastes on-site or
9 off-site, above or below ground, and having a Standard Industrial
10 Classification within Major Group Numbers of 28, 29, 33, or 34, as
11 designated in the Standard Industrial Classification Manual pre-
12 pared by the Office of Management and Budget in the Executive
13 Office of the President of the United States, but shall not include an
14 industrial establishment for which a cleanup plan or negative decla-
15 ration has been approved by the Department of Environmental Pro-
16 tection within the immediately preceding three years immediately
17 preceding the effective date of this act; an industrial establish-
18 ment for which a consent agreement for a full site cleanup has
19 been signed with the department; an industrial establishment
20 deemed as such solely due to the storage of hazardous substances
21 underground and otherwise required to comply with P. L. 1986,
22 c. 102 (C. 58:10A-21 et seq.); or, an industrial establishment which
23 handles quantities of hazardous waste less than the minimum
24 quantities adopted by the department pursuant to section 13 of this
25 act.

1 4. The department shall establish a schedule for the submission
2 of hazardous waste management reviews required under section 3
3 of this act which shall provide that the number of industrial
4 establishments submitting these reviews shall be approximately
5 equal in each of the four calendar years subsequent to the effective
6 date of this act. The timetable for the performance of the
7 hazardous waste management review is as follows:

8 a. The first review shall be completed, and the final report filed
9 with the Department of Environmental Protection, not later than
10 June 30 of the third, fourth, fifth and sixth calendar year following
11 enactment.

12 b. The second and subsequent reviews shall be completed and the
13 final report filed with the department annually on June 30, there-
14 after.

15 c. Upon the submission of two reviews to the department, the
16 owner or operator of an industrial establishment may petition the
17 department for permission to conduct these reviews on a biennial
18 basis. The department may approve this petition if it determines
19 that the last two reviews of the industrial establishment demon-
20 state substantial compliance with State and federal environmental

21 laws relating to the handling, storage, treatment or disposal of
22 hazardous waste. The department may require an industrial
23 establishment approved for biennial reviews to perform annual
24 reviews if it determines that the a biennial review does not demon-
25 strate substantial compliance with State and federal environ-
26 mental laws relating to the handling, storage, treatment or disposal
27 of hazardous waste.

28 d. The owner or operator of an industrial establishment shall
29 continue to have these reviews performed according to the schedule
30 established in this section until the industrial establishment is
31 closed, terminated or transferred in accordance with the provisions
32 of P. L. 1983, c. 330.

1 5. The Department of Environmental Protection shall prescribe
2 and provide the standard forms to be used in reporting the results
3 of reviews conducted pursuant to this act and shall require the
4 provision of only the following information:

5 a. A summary information component including:

6 (1) The name, street address, and site description of the
7 industrial establishment.

8 (2) A general description of all land uses of all properties
9 adjacent to the site of the industrial establishment.

10 (3) The types, quantities, and location of hazardous waste
11 annually generated, refined, transported, treated, stored,
12 handled, or disposed of at the industrial establishment.

13 (4) The location and nature of any known discharges of
14 hazardous waste from current or prior operations at the in-
15 dustrial establishment, and any remedial actions taken to
16 cleanup or mitigate these discharges.

17 (5) The location of areas prone to discharges of hazardous
18 waste, such as transfer areas.

19 (6) A description of, and the results of any soil, ground-
20 water, and surface water sampling studies conducted on site.

21 (7) A certification that the required State, federal and local
22 permits for the handling, storage and disposal of hazardous
23 waste have been obtained and complied with, or have been
24 applied for.

25 (8) A general description of drainage facilities and equip-
26 ment within the industrial establishment.

27 (9) A description and verification of any insurance held
28 governing the handling, storage and disposal of hazardous
29 waste.

30 b. A waste management component including:

31 (1) A description of any plans instituted or developed to
32 prevent or remediate potential spills or discharges of hazard-
33 ous waste.

34 (2) A description of any programs for training employees
35 in the safe management of hazardous waste.

36 (3) A general description of the hazardous waste manifest-
37 ing system, record-keeping, and reporting system for
38 hazardous waste, and the efficiency thereof.

39 c. A waste minimization component including:

40 (1) A description of storage and handling practices with
41 respect to hazardous waste, quantities stored, and accumulation
42 dates thereof; locations; and leak detection procedures, if any.

43 (2) The methods employed by the industrial establishment
44 for identifying, analyzing, and characterizing hazardous
45 wastes.

46 (3) A description of any hazardous waste recycling, efforts
47 undertaken by the industrial establishment to use or reuse a
48 waste as an effective substitute for a feedstock for a com-
49 mercial product or ingredient, the reclamation of useful con-
50 stituent fractions within a waste material, or removal of con-
51 taminants from a waste to allow it to be reused.

52 (4) Methods of source reduction wherein treatment pro-
53 cesses, process modifications, feedstock substitutions or im-
54 provements in feedstock purity, increases in the efficiency of
55 machinery, or recycling within a process have been utilized to
56 reduce the toxicity or amount of hazardous waste generated
57 at the industrial establishment.

58 (5) Any recommendations for better management of hazard-
59 ous waste.

1 6. Within 21 days of the date on which the hazardous waste
2 management review is completed at the site of an industrial
3 establishment, the reviewer shall transmit an interim report con-
4 taining the findings of the review to the owner and operator of the
5 industrial establishment. The reviewer shall send the final report
6 to the owner or operator of the industrial establishment and the
7 Department of Environmental Protection not later than 90 days
8 after the date on which the interim report was sent to the industrial
9 establishment. During this intervening period, if the industrial
10 establishment corrects any deficiencies reported in the interim re-
11 port and the reviewer verifies that these deficiencies have been cor-
12 rected, the reviewer shall amend the interim report and eliminate
13 any references to the corrected deficiencies in the final report unless
14 these corrected deficiencies once had the potential to cause serious

15 impairment to human health or to the environment. Nothing in
16 this section shall be construed to prevent or prohibit the reviewer
17 from making any other reports of discharges as required by law.

1 7. The Department of Environmental Protection shall review
2 the reports received pursuant to section 6 of this act and take any
3 actions with respect thereto as may be required by law.

1 8. A person performing hazardous waste management reviews
2 pursuant to this act shall be certified by the Department of Environ-
3 mental Protection pursuant to this section. The department, in
4 consultation with the New Jersey Institute of Technology, shall
5 establish standards for the certification of these reviewers, which
6 shall include the following:

7 a. A degree in science or engineering from a four-year college
8 approved by the department;

9 b. At least three years of experience in the management of
10 hazardous waste;

11 c. Successful completion of a program in hazardous waste
12 management review at the New Jersey Institute of Technology or
13 another substantially similar program approved by the depart-
14 ment;

15 d. Successful completion of an examination prepared and given
16 in the manner and at the times as shall be determined by the depart-
17 ment.

18 The department shall keep a list of certified reviewers on file and
19 shall provide this list to the owner or operator of any industrial
20 establishment requesting this list from the department. A certified
21 reviewer shall not perform a hazardous waste management review
22 for an industrial establishment if that reviewer, or any member of
23 the immediate family of that reviewer, is employed by or has any
24 financial interest in that industrial establishment; or if the partner-
25 ship, firm or corporation which employs the reviewer to perform
26 hazardous waste management reviews, or any controlling member
27 of that partnership, firm or corporation, is employed by, or has any
28 financial interest in that industrial establishment.

1 9. The Board of Trustees at the New Jersey Institute of Tech-
2 nology shall, in consultation with the Department of Environmental
3 Protection, establish an instructional program, of less than three
4 months in duration, in hazardous waste management for the
5 purpose of certifying persons conducting hazardous waste manage-
6 ment reviews pursuant to this act. The institute may charge stu-
7 dents of this program the fees necessary to cover the costs of the
8 program. This program shall graduate its first class not later than
9 January 1 of the second calendar year next following enactment.

1 10. Any report or information obtained by the Department of
2 Environmental Protection under this act shall be available to the
3 public, except upon a showing by the owner or operator of the in-
4 dustrial establishment, and a determination by the commissioner,
5 that the report or information, if made public, would divulge in-
6 formation entitled to trade secret protection. Only that portion
7 of a report or information obtained under this act which is directly
8 related to the trade secret shall be kept confidential by the depart-
9 ment.

1 11. Notwithstanding the provision of any law, rule or regulation
2 to the contrary, a hazardous waste management reviewer and the
3 partnership, firm, or corporation employing that reviewer to per-
4 form hazardous waste management reviews shall be liable only for
5 negligent acts in the performance of hazardous waste management
6 reviews pursuant to this act; and an industrial establishment, in-
7 cluding the owner and operator thereof, which in good faith under-
8 takes remedial measures concerning hazardous waste management,
9 in reliance on, and in conformance with, a hazardous waste manage-
10 ment review, shall be liable only for negligent acts committed in
11 the process of this remediation.

1 12. A person who violates any provision of this act, or any rule
2 or regulation adopted thereto, or who knowingly gives or causes to
3 be given any false information with respect to any hazardous waste
4 management review conducted pursuant to this act, shall be subject
5 to a penalty of not more than \$25,000.00 for each offense. If the
6 violation is of continuing nature, each day during which it con-
7 tinues shall constitute an additional and separate offense. Penalties
8 shall be collected in a civil action by a summary proceeding under
9 "the penalty enforcement law" (N. J. S. 2A:58-1 et seq.). Any
10 proceedings instituted under this section shall be brought by the
11 Department of Environmental Protection. Any owner or operator
12 of an industrial establishment who knowingly commits or authorizes
13 a violation of any provisions of this act shall be personally subject
14 to the penalties established in this subsection. For the purposes
15 of this section, "person" does not mean the Department of Environ-
16 mental Protection or the New Jersey Institute of Technology.

1 13. The Department of Environmental Protection shall, pur-
2 suant to the "Administrative Procedure Act," P. L. 1963, c. 410
3 (C. 52:14B-1 et seq.), adopt procedural rules and regulations
4 necessary to carry out the provisions of this act. Beginning June
5 30, 1990, and annually thereafter, the department shall submit to
6 both houses of the Legislature a written report outlining the pro-
7 gress and effectiveness of programs instituted under the provisions
8 of this act.

1 14. There is appropriated from the General Fund to the Depart-
 2 ment of Environmental Protection the sum of \$90,000.00 for the
 3 purpose of making a grant to the New Jersey Institute of Tech-
 4 nology to implement the provisions of section 8 of this act.

1 15. This act shall take effect immediately.

STATEMENT

New Jersey has made extensive efforts to develop programs that regulate and control the generation, transportation and disposal of hazardous wastes. The primary focus of this effort has been related to the clean up of pollution incidents after they occur. The recently enacted Environmental Cleanup and Responsibility Act (ECRA) provides a means of restoring polluted properties to an acceptable condition before they can be sold or transferred.

This measure, the "Hazardous Waste Management Review Act," is preventive in nature. It establishes a mechanism which would be implemented by those industries engaged in activities which generate hazardous wastes. Specifically, the bill requires a comprehensive inspection program and a systematic reporting requirement. The inspection program would be conducted by the private sector; industrial establishments subject to the bill would retain certified professional auditors to perform the review and compile the reports. Enactment of this bill would provide the State Department of Environmental Protection with annual reviews of each business handling of hazardous waste in the State.

The reporting process established by the bill will not require any significant growth in the staff of the DEP since the inspections and risks assessments will be conducted by professional certified personnel from the private sector. It is a measure which will benefit all parties, except those industrial establishments which have not been conscientious or concerned about proper management of hazardous wastes. Those establishments already in compliance will suffer little by way of additional costs through enactment of this bill. It is the sponsor's belief that the incentives provided under this bill for the safe and efficient handling of hazardous wastes could actually reduce the overall costs of hazardous waste management.

HAZARDOUS SUBSTANCE

Establishes a program for systematic review of hazardous waste management practices by industrial establishments, appropriates \$90,000.

SENATE, No. 2990

STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators DORSEY, HURLEY, CARDINALE, BUBBA, CON-
NORS, BASSANO, HAINES, BROWN, GARIBALDI, EWING
and GAGLIANO

Referred to Committee on Energy and Environment

AN ACT providing for the exemption from taxation of certain
hazardous waste minimization equipment and supplementing
article 2 of chapter 4 of Title 54 of the Revised Statutes.

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

1 1. As used in this act:

2 "Commissioner" means the Commissioner of the Department of
3 Environmental Protection; and

4 "Hazardous waste minimization equipment" means any building,
5 machinery, apparatus, or combination thereof, constructed, or
6 purchased and installed by, a taxpayer necessary to achieve, and
7 primarily for the purpose of, source reduction, recycling, or
8 treatment that results in either a reduction of the total volume or
9 quantity of the hazardous component, or the toxicity, or both, of
10 hazardous waste generated or treated, stored, or disposed of in
11 any environmental medium by the taxpayer. "Hazardous waste"
12 means any waste, or combination of wastes, excluding radio-
13 active waste, sewage, and sewage sludge, resulting from an
14 industrial or commercial activity, that contains a substance, in-
15 cluding any petroleum product, which is defined as hazardous
16 waste by the department, after public hearing, and which shall be
17 consistent to the maximum extent possible with, and which shall
18 include, the list of hazardous substances adopted by the federal
19 Environmental Protection Agency pursuant to section 102 of the

20 "Comprehensive Environmental Response, Compensation, and
 21 Liability Act of 1980," Pub. L. 96-510 (42 U. S. C. § 9602), as
 22 amended and supplemented by the "Superfund Amendments and
 23 Reauthorization Act of 1986," Pub. L. 99-499. "Recycling" means
 24 the use or reuse of a hazardous waste as an effective substitute
 25 for a commercial product or as an ingredient or feedstock in an
 26 industrial process, the reclamation of useful constituent fractions
 27 within a hazardous waste, or the removal of contaminants from a
 28 hazardous waste such that would permit the remainder to be
 29 reused. "Source reduction" means the reduction or elimination of
 30 hazardous waste generated by a business or industry at the source,
 31 usually within an industrial process, which is achieved through the
 32 implementation of certain types of treatment processes, process
 33 modifications, feedstock substitutions or improvements in feed-
 34 stock purity, alterations in housekeeping or management practices,
 35 or recycling within an industrial process, or the utilization of
 36 more efficient machinery.

1 2. Any equipment constructed, or purchased and installed, sub-
 2 sequent to the effective date of this act which has been certified
 3 by the Commissioner of Environmental Protection as being neces-
 4 sary to achieve, and primarily for the purpose of, hazardous waste
 5 minimization, shall be exempt from taxation under the chapter to
 6 which this act is a supplement.

1 3. A taxpayer may apply to the commissioner for a certificate
 2 of exemption. A certificate of exemption issued by the commis-
 3 sioner shall contain information describing the hazardous waste
 4 minimization equipment and identifying the cost thereof and shall
 5 be in such form and detail as the commissioner shall prescribe
 6 pursuant to rules and regulations adopted pursuant to the
 7 "Administrative Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1
 8 et seq.). The certificate shall be transmitted to the applicant
 9 therefor with a copy to the assessor of the taxing district in which
 10 the hazardous waste minimization equipment is located and in-
 11 stalled; and the exemption from taxation for the hazardous waste
 12 minimization equipment shall become effective for the tax year
 13 following the year in which certification has been granted and
 14 each year thereafter during the active useful life of the equipment.

1 4. The commissioner, after giving notice to the holder of a
 2 hazardous waste minimization certificate and giving the holder
 3 an opportunity for a hearing, may revoke or modify the certificate
 4 whenever any of the following occurs:

5 a. The certificate was obtained by fraud or misrepresentation;

6 b. The claimant for tax exemption has failed substantially to
 7 proceed with the construction, or purchase and installation, of the
 8 hazardous waste minimization equipment; or

9 c. The hazardous waste minimization equipment to which the
 10 certificate relates has ceased to be used for, or no longer adequately
 11 serves, the primary purpose of hazardous waste minimization.

12 The commissioner shall forward a copy of the notice of revoca-
 13 tion or modification of any such certificate to the assessor of the
 14 taxing district in which the equipment involved is located.

1 5. Hazardous waste minimization equipment receiving an exemp-
 2 tion from taxation pursuant to P. L. 1966, c. 127 (C. 54:4-3.56
 3 et seq.) shall not be eligible to receive an exemption from taxation
 4 under the provisions of this act.

1 6. This act shall take effect immediately.

STATEMENT

This bill would exempt hazardous waste minimization equipment from the property tax established pursuant to R. S. 54:4-1 et seq. The purpose of this bill is to encourage business and industry to implement technologies and procedures which would reduce the generation and flow of hazardous waste in the State, thereby minimizing the threat posed by such waste to the public health, safety, and welfare.

HAZARDOUS WASTE

Exempts hazardous waste minimization equipment from property tax.

SENATE, No. 2991
STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators CARDINALE, HURLEY, DORSEY, BASSANO,
HAINES, DUMONT, BROWN, GARIBALDI, EWING, DiFRAN-
CESCO, GAGLIANO, BUBBA and CONNORS

Referred to Committee on Energy and Environment

AN ACT concerning hazardous waste minimization equipment and
supplementing P. L. 1966, c. 30 (C. 54:32B-1 et seq.).

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

1 1. Receipts from the sales of hazardous waste minimization equip-
2 ment are exempt from the tax imposed under the "Sales and Use
3 Tax Act." For purposes of this section:

4 "Hazardous waste minimization equipment" means any ma-
5 chinery, apparatus, equipment, or combination thereof, purchased
6 and installed by a taxpayer necessary to achieve, and primarily
7 for the purpose of, source reduction, recycling, or treatment that
8 results in either a reduction of the total volume or quantity of the
9 hazardous component, or the toxicity, or both, of hazardous waste
10 generated or treated, stored, or disposed of in any environmental
11 medium by the taxpayer. "Hazardous waste" means any waste,
12 or combination of wastes, excluding radioactive waste, sewage,
13 and sewage sludge, resulting from an industrial or commercial
14 activity, that contains a substance, including any petroleum product,
15 which is defined as hazardous waste by the department, after public
16 hearing, and which shall be consistent to the maximum extent pos-
17 sible with, and which shall include, the list of hazardous substances
18 adopted by the federal Environmental Protection Agency pursuant
19 to section 102 of the "Comprehensive Environmental Response,
20 Compensation, and Liability Act of 1980," Pub. L. 96-510 (42

21 U. S. C. § 9602), as amended and supplemented by the "Superfund
 22 Amendments and Reauthorization Act of 1986," Pub. L. 99-499.
 23 "Recycling" means the use or reuse of a hazardous waste as an
 24 effective substitute for a commercial product or as an ingredient
 25 or feedstock in an industrial process, the reclamation of useful
 26 constituent fractions within a hazardous waste, or the removal of
 27 contaminants from a hazardous waste such that would permit the
 28 remainder to be reused. "Source reduction" means the reduction
 29 or elimination of hazardous waste generated by a business or in-
 30 dustry at the source, usually within an industrial process, which
 31 is achieved through the implementation of certain types of treat-
 32 ment processes, process modifications, feedstock substitutions or
 33 improvements in feedstock purity, alterations in housekeeping or
 34 management practices, or recycling within an industrial process, or
 35 the utilization of more efficient machinery.

1 2. Subject to the "Administrative Procedure Act," P. L. 1968,
 2 c. 410 (C. 52:14B-1 et seq.), the Director of the Division of Taxa-
 3 tion in the Department of Treasury, in conjunction with the Com-
 4 missioner of Environmental Protection, shall, by rule or regulation,
 5 provide guidelines for the identification of hazardous waste mini-
 6 mization equipment which qualifies for the exemption from taxation
 7 permitted by this act as may be necessary to effectuate the pur-
 8 poses thereof.

1 3. This act shall take effect immediately.

STATEMENT

This bill would exempt sales of hazardous waste minimization equipment from the "Sales and Use Tax Act," P. L. 1966, c. 30 (C. 54:32B-1 et seq.). The purpose of this bill is to encourage business and industry to implement technologies and procedures which would reduce the generation and flow of hazardous waste in the State, thereby minimizing the threat posed by such waste to the public health, safety, and welfare.

HAZARDOUS WASTE

Exempts sales of hazardous waste minimization equipment from
 "Sales and Use Tax Act."

SENATE, No. 2992

STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators EWING, BUBBA, DiFRANCESCO, CONNORS, GARI-
BALDI, BROWN, CARDINALE, BASSANO and HURLEY

Referred to Committee on Energy and Environment

AN ACT concerning hazardous waste recycling and reduction equip-
ment, and supplementing P. L. 1945, c. 162.

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

1 1. A taxpayer who purchases hazardous waste recycling equip-
2 ment or hazardous waste reduction equipment to be used within
3 this State shall be entitled to a credit against the tax imposed
4 pursuant to section 5 of P. L. 1945, c. 162 (C. 54:10A-5) in an
5 amount equal to 50% of the cost of the hazardous waste recycling
6 equipment or hazardous waste reduction equipment. For the pur-
7 poses of this act, "hazardous waste" means any solid waste defined
8 as hazardous waste by the Department of Environmental Protec-
9 tion pursuant to P. L. 1970, c. 39 (C. 13:1E-1 et seq.), "hazardous
10 waste recycling equipment" means machinery or apparatus used to
11 process hazardous waste so that it may be returned to the economic
12 mainstream in the form of raw materials or products, or machinery
13 or apparatus used to produce finished products from hazardous
14 waste, and "hazardous waste reduction equipment" means ma-
15 chinery or apparatus used to reduce the generation of hazardous
16 waste in a manufacturing or industrial process. The Commissioner
17 of the Department of Environmental Protection, in consultation
18 with the Director of the Division of Taxation, shall adopt rules
19 and regulations establishing technical specifications and certifica-
20 tion requirements for eligibility for the credit established pursuant
21 to this act. Any unused portion of the credit established pursuant
22 to this act may be carried forward by the taxpayer for four sub-
23 sequent tax periods.

1 2. This act shall take effect immediately, and shall apply to tax
2 periods beginning January 1, 1988.

STATEMENT

This act would allow businesses which purchase hazardous waste recycling or reduction equipment a credit against the tax imposed by the "Corporation Business Tax Act (1945)," P. L. 1945, c. 162 (C. 54:10A-1 et seq.) in an amount equal to 50% of the cost of the hazardous waste recycling or reduction equipment.

HAZARDOUS SUBSTANCE (CONTROL)

Allows credit against Corporation Business Tax equal to 50% of cost of hazardous waste recycling or reduction equipment.

SENATE, No. 2993
STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators BROWN, DiFRANCESCO, GARGLIANO, CONNORS,
HURLEY, DORSEY, BASSANO, BUBBA, EWING and CAR-
DINALE

Referred to Committee on Energy and Environment

A SUPPLEMENT to "An act making appropriations for the support
of the State Government and the several public purposes for
the fiscal year ending June 30, 1987 and regulating the disburse-
ment thereof," approved June 30, 1986 (P. L. 1986, c. 41).

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

1 1. In addition to the sums appropriated under P. L. 1986, c. 41,
2 there is appropriated from the General Fund the following sum
3 for the purpose specified:

DIRECT STATE SERVICES

42 DEPARTMENT OF ENVIRONMENTAL PROTECTION

40 Community Development and Environmental Management

44 Hazardous and Toxic Pollution Control

4 23-4910 Waste Management \$50,000

5 Special Purpose:

6 Major Hazardous Waste Facilities

7 Siting Act—Source Reduction and

8 Recycling Task Force (\$50,000)

1 2. This act shall take effect immediately.

STATEMENT

This bill would appropriate \$50,000.00 from the General Fund
to be utilized by the Source Reduction and Recycling Task Force
to accelerate its review of the potential for implementing source

reduction and recycling technologies and procedures for the purpose of minimizing the generation of hazardous waste by several specific classes of industry within the State. The Task Force is an internal working group of the Hazardous Waste Facilities Siting Commission and is composed of representatives of academia, industry, and certain environmental organizations.

Pursuant to subsection b. (7) of section 10 of the "Major Hazardous Waste Facilities Siting Act," P. L. 1981, c. 279 (C. 13:1E-58b. (7)), the commission is charged with developing procedures to encourage the implementation of source reduction, recycling, and other hazardous waste minimization techniques as part of its "Major Hazardous Waste Facilities Plan." The Task Force was created to carry out that charge in part.

HAZARDOUS WASTE

Appropriates \$50,000 for Source Reduction and Recycling Task Force.

SENATE, No. 2994

STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators HAINES, BASSANO, DORSEY, CONNORS, HURLEY,
BUBBA, BROWN, EWING, GAGLIANO and CARDINALE

Referred to Committee on Energy and Environment

AN ACT concerning rules, regulations, and policies of the Department of Environmental Protection.

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

1 1. As used in this act:

2 "Department" means the Department of Environmental Protection; and

4 "Hazardous waste minimization" means source reduction, recycling, or treatment activities undertaken by a generator that result in either a reduction of the total volume or quantity of the hazardous component, or the toxicity, or both, of hazardous waste generated or treated, stored, or disposed of in any environmental medium.

1 2. a. The Office of Hazardous Waste Minimization created pursuant to P. L. . . . , c. . . . (C.) (now before the Legislature as Senate Bill No. 2987 of 1987 and Assembly Bill No. . . . of 1987), shall review the rules, regulations, and policies of the Department of Environmental Protection with the purpose of identifying those rules, regulations, and policies which may prevent or discourage the implementation and utilization of hazardous waste minimization technologies and procedures by business and industry.

9 b. The department shall modify those rules, regulations, and policies identified pursuant to subsection a. of this section to encourage the implementation and utilization of hazardous waste minimization technologies and procedures by business and industry

13 to the extent that the public health, safety, and welfare and the
14 environment would not be threatened or compromised thereby.

15 c. In developing and proposing a rule, regulation, or policy for
16 adoption, the department shall utilize approaches which accomplish
17 the objectives of the applicable statutes while minimizing any im-
18 pact upon the public policy to encourage the implementation and
19 utilization of hazardous waste minimization technologies and pro-
20 cedures by business and industry to the extent that the public
21 health, safety, and welfare and the environment would not be
22 threatened or compromised thereby.

1 3. Within one year of the effective date of this act, the depart-
2 ment and the Office of Hazardous Waste Minimization shall pre-
3 pare and submit a report to the Governor and the Legislature iden-
4 tifying those rules, regulations, and policies which they determine
5 are unnecessarily obstructive of the goals of hazardous waste mini-
6 mization, describing what administrative action has been taken to
7 remedy the problem, and recommending any appropriate legis-
8 lative action which would further the purposes of this act.

1 4. This act shall take effect immediately.

STATEMENT

This bill would require the Office of Hazardous Waste Minimization created pursuant to P. L. . . . , c. . . . (C.) (now before the Legislature as Senate Bill No. 2987 of 1987 and Assembly Bill No. . . . of 1987) to review the department's rules, regulations, and policies for the purpose of identifying those rules, regulations, and policies which may prevent or discourage the implementation and utilization of hazardous waste minimization technologies and procedures by business and industry. If any are so identified, the department would be directed to modify them accordingly so as to encourage hazardous waste minimization to the extent that the public health, safety, and welfare and the environment would not be threatened or compromised thereby. The bill would also require the department, when adopting future rules, regulations, and policies, to consider, and minimize if possible, the impact thereof upon the public policy to encourage hazardous waste minimization.

The implementation and utilization of hazardous waste minimization technologies and procedures by business and industry will reduce the generation and flow of hazardous waste in the State, which should be encouraged as much as possible to minimize the threat posed by such waste to the public health, safety, and welfare. In exercising its diverse responsibilities, however, the department

occasionally adopts rules, regulations, and policies which conflict with this goal. This bill seeks to resolve any existing conflicts and reduce the likelihood that any will occur in the future.

HAZARDOUS WASTE

Directs review of regulations in conflict with hazardous waste minimization.

SENATE, No. 2995
STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators McNAMARA, EWING, DiFRANCESCO, GAGLIANO,
CONNORS, BUBBA, CARDINALE, HURLEY, BASSANO,
HAINES, BROWN, GARIBALDI and DORSEY

Referred to Committee on Energy and Environment

AN ACT concerning certain environmental permits and supplement-
ing Title 13 of the Revised Statutes.

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

1 1. As used in this act:

2 "Department" means the Department of Environmental Pro-
3 tection;

4 "Hazardous waste minimization" means source reduction, re-
5 cycling, or treatment activities undertaken by a generator that
6 result in either a reduction of the total volume or quantity of the
7 hazardous component, or the toxicity, or both, of hazardous waste
8 generated or treated, stored, or disposed of in any environmental
9 medium. "Hazardous waste" means any waste, or combination of
10 wastes, excluding radioactive waste, sewage, and sewage sludge,
11 resulting from an industrial or commercial activity, that contains
12 a substance, including any petroleum product, which is defined as
13 hazardous waste by the department, after public hearing, and which
14 shall be consistent to the maximum extent possible with, and which
15 shall include, the list of hazardous substances adopted by the
16 federal Environmental Protection Agency pursuant to section 102
17 of the "Comprehensive Environmental Response, Compensation,
18 and Liability Act of 1980," Pub. L. 96-510 (42 U. S. C. § 9602),
19 as amended and supplemented by the "Superfund Amendments
20 and Reauthorization Act of 1986," Pub. L. 99-499. "Recycling"

21 means the use or reuse of a hazardous waste as an effective sub-
 22 stitute for a commercial product or as an ingredient or feedstock
 23 in an industrial process, the reclamation of useful constituent frac-
 24 tions within a hazardous waste, or the removal of contaminants
 25 from a hazardous waste such that would permit the remainder to
 26 be reused. "Source reduction" means the reduction or elimination
 27 of hazardous waste generated by a business or industry at the
 28 source, usually within an industrial process, which is achieved
 29 through the implementation of certain types of treatment processes,
 30 process modifications, feedstock substitutions or improvements in
 31 feedstock purity, alterations in housekeeping or management prac-
 32 tices, or recycling within an industrial process, or the utilization
 33 of more efficient machinery; and

34 "Office" means the Office of Hazardous Waste Minimization
 35 established pursuant to P. L. . . . , c. . . . (C.) (now
 36 before the Legislature as Senate Bill No. 2987 of 1987 and Assem-
 37 bly Bill No. . . . of 1987).

1 2. a. The Office of Hazardous Waste Minimization, established
 2 pursuant to P. L. . . . , c. . . . (C.) (now before the
 3 Legislature as Senate Bill No. 2987 of 1987 and Assembly Bill No.
 4 of 1987), shall prepare and maintain a list of facilities per-
 5 mitted by the Department of Environmental Protection which use
 6 a best attainable hazardous waste minimization technique. Such
 7 facilities shall be accorded priority in the permitting process. The
 8 office shall circulate this list, updated regularly, where appropriate
 9 within the department. The office shall determine which techniques
 10 may qualify an applicant for a permit or renewal for priority and
 11 what period the priority shall be extended pursuant to this act and
 12 shall prepare criteria, standards and guidelines for evaluating the
 13 equipment, processes and procedures defining "best attainable"
 14 which would reflect the minimization of waste relative to the total
 15 amount of hazardous waste released to the environment by the
 16 facility.

17 b. The office shall develop and apply criteria for removing facili-
 18 ties from the list.

1 3. a. A permittee or a permit applicant for a permit or permit
 2 renewal from the department employing a best attainable hazardous
 3 waste minimization technique may request that the office include
 4 its facility on the priority list.

5 b. An applicant who is using a "best attainable" hazardous
 6 waste minimization technique may request that the application
 7 receive priority during the review process.

- 1 4. The department shall, to the extent practical and feasible,
2 accord priority in the permitting process to facilities on the list
3 provided by the office pursuant to section 2 of this act.
1 5. This act shall take effect immediately.

STATEMENT

This bill would provide "fast-track permitting" for environmental permit and renewal applicants who use a best attainable waste minimization technique. The Office of Hazardous Waste Minimization, established pursuant to P. L. . . . , c. . . . (C.) (now before the Legislature as Senate Bill No. 2987 of 1987 and Assembly Bill No. . . . of 1987), shall determine which techniques may qualify an applicant to receive priority, prepare and maintain a list of permittees and permit applicants which use a best attainable hazardous waste minimization technique, and circulate that list within the Department of Environmental Protection.

This bill is part of a comprehensive strategy to encourage the minimization of the generation of hazardous waste. The bill is intended to reward the use of innovative equipment, processes and procedures, as well as any other technique not previously utilized at a given facility for minimizing the quantity or toxicity of waste.

HAZARDOUS WASTE

Provides for "fast-track permitting" in certain cases.

SENATE, No. 3094
STATE OF NEW JERSEY

INTRODUCED MARCH 9, 1987

By Senators HURLEY, DORSEY and EWING

Referred to Committee on Energy and Environment

AN ACT requiring a permit to discharge toxic chemicals to the
environment and supplementing Title 13 of the Revised Statutes.

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

1 1. The Legislature finds and declares that the hazardous waste
2 generated in the State is growing in both quantity and complexity;
3 that previous approaches to hazardous waste management have
4 failed to properly recognize the interrelationship and interdepen-
5 dence of the various environmental media receiving toxic chemical
6 discharges; that State programs to foster wise and effective
7 management and minimization of hazardous waste and to enforce
8 the hazardous waste laws are posing an increasing financial burden
9 on the State; and that source reduction, recycling, and materials
10 recovery are cost-effective, safe, and efficacious strategies com-
11 prising an important part of the State's hierarchy of hazardous
12 waste management options that are currently being underutilized
13 by private industry.

14 The Legislature therefore determines that it is appropriate to
15 require that those who discharge toxic chemicals to any environ-
16 mental medium obtain a permit therefor and to dedicate the fees
17 for these permits toward programs established to encourage mini-
18 mization of the amount of hazardous waste generated and to insure
19 that the public health and the environment are not harmed by such
20 discharges; that an individual discharger's share of the financial
21 burden caused thereby should be directly related to the quantity
22 and relative toxicity of the chemicals discharged so that those who

23 pollute the most pay the most; that any such permit program
 24 should recognize the ecological interdependence of the various
 25 environmental media so as to insure that one medium does not
 26 become cleaner at the expense of another; and that it is in the
 27 public interest, and ultimately for the benefit of private industry
 28 as well, to provide an economic incentive that will encourage
 29 greater implementation and utilization by private industry of
 30 hazardous waste minimization technologies and procedures, espec-
 31 ially those focusing on source reduction, recycling, and materials
 32 recovery.

1 2. As used in this act:

2 "Department" means the Department of Environmental Pro-
 3 tection;

4 "Discharge" means the release, as permitted by law, rule, or
 5 regulation, of a toxic chemical into any environmental medium,
 6 or the transfer of a toxic chemical to a licensed hazardous waste
 7 hauler for transport to a permitted hazardous waste treatment,
 8 storage, or disposal facility for release to any environmental
 9 medium;

10 "Environmental medium" means the air, the waters, upon or
 11 beneath the land, or a man-made lagoon or pond;

12 "Facility" means a place of business that has 10 or more full-
 13 time employees; has a Standard Industrial Classification, as desig-
 14 nated in the Standard Industrial Classification Manual prepared
 15 by the federal Office of Management and Budget, within Major
 16 Group numbers 20 through 39 as in effect on July 1, 1985; manu-
 17 factures, processes, or otherwise uses a toxic chemical; and is
 18 required to submit a "toxic chemical release form" pursuant to
 19 section 313 of the "Superfund Amendments and Reauthorization
 20 Act of 1986," Pub. L. 99-499 (U. S. C. §);

21 "Permit" means the annual facility toxic chemical discharge
 22 permit required pursuant to section 3 of this act; and

23 "Toxic chemical" means any chemical on the list subject to the
 24 requirements of section 313 of the "Superfund Amendments and
 25 Reauthorization Act of 1986," Pub. L. 99-499 (U. S. C. §).

1 3. a. After December 31, 1989, no owner or operator of a facility
 2 may discharge a toxic chemical pursuant to any law, rule, or regu-
 3 lation without obtaining an annual facility toxic chemical discharge
 4 permit for that activity from the Department of Environmental
 5 Protection. The facility toxic chemical discharge permit required
 6 pursuant to this act shall be in addition to any other applicable
 7 permits required by law, rule, or regulation.

8 b. On or before July 1, 1989, and annually thereafter by July 1,
9 each facility shall submit a permit application. As part of this
10 application, a facility shall report the quantity, in common units as
11 designated by the department, of each toxic chemical discharged
12 by the facility to each environmental medium during the previous
13 calendar year. A facility may, in lieu of the report required by this
14 subsection, submit a copy of the most recent "toxic chemical
15 release form" is submitted to the Administrator of the federal
16 Environmental Protection Agency pursuant to section 313 of the
17 "Superfund Amendments and Reauthorization Act of 1986," Pub. L.
18 99-499 (U.S.C. §).

1 4. The department:

2 (1) shall establish three classes of relative risk of harm posed
3 to the public health or the environment by a discharge of a toxic
4 chemical and assign each toxic chemical to one of these classes;

5 (2) may periodically revise the composition of these classes as
6 necessary to further the purposes of this act; and

7 (3) may place a toxic chemical in more than one relative risk
8 class based upon the ultimate environmental medium to which it
9 is discharged.

1 5. The department shall establish a fee schedule for the relative
2 risk classes, in dollars per unit of measurement of toxic chemical
3 discharged, which schedule shall establish fees proportional to the
4 relative risk of harm posed to the public health or the environment
5 by a discharge of a toxic chemical in a class.

1 6. The department shall calculate the fee for a discharge of a
2 particular toxic chemical by multiplying the annual quantity dis-
3 charged by the relative risk class fee for that toxic chemical in
4 accordance with the schedule. The permit fee for a facility shall
5 be calculated by summing the fees assessed for each toxic chemical
6 discharged by the facility.

1 7. The department shall set the fee schedule required to be
2 established pursuant to section 5 of this act so as to collect in
3 the first year not less than \$11,000,000.00 nor more than
4 \$13,000,000.00 in fees paid. If, at the end of this first year, the
5 fees paid do not attain, or, exceed such an amount, the department
6 shall adjust the fee schedule accordingly to generate the required
7 amount. Thereafter, the fee schedule shall remain fixed.

1 8. The department shall adopt rules and regulations pursuant
2 to the "Administrative Procedure Act," P. L. 1968, c. 410 (C.
3 52:14B-1 et seq.), establishing the form and content of a permit
4 application, and, as may be necessary, implementing the provisions
5 of this act.

1 9. A permit applicant may obtain review of a decision made by
2 the department pursuant to this act in accordance with the pro-
3 cedures set forth in the "Administrative Procedure Act" for a
4 "contested case."

1 10. The department shall, by January 1, 1991, and annually
2 thereafter, prepare, and submit to the Governor and the Legis-
3 lature, a report assessing the financial impact upon facilities of
4 the fees required to be paid pursuant to this act, the need, if any,
5 for an adjustment in the fee schedule established, the sufficiency
6 of the amount of fees paid and penalties collected to fund the
7 activities of the Office of Hazardous Waste Minimization and the
8 Hazardous Substance Source Reduction Science Advisory Board
9 established pursuant to P. L. , c. (C.) (now
10 before the Legislature as Senate Bill No. 2987 of 1987), the costs
11 of administering this act, and, where appropriate, the hazardous
12 waste management, hazardous waste enforcement, and hazardous
13 site mitigation programs of the department, and the effectiveness
14 of this act in providing an economic incentive for facilities to
15 minimize the quantity and toxicity of hazardous waste they gen-
16 erate through efforts undertaken consistent with the State's haz-
17 ardous waste management hierarchy set forth in the "New Jersey
18 Hazardous Waste Facilities Plan" of 1985.

1 11. a. A person who violates any provision of this act, or any
2 rule, regulation, or order promulgated or issued pursuant thereto,
3 shall be liable to a civil penalty of not more than \$10,000.00 for
4 each offense. If the violation is of a continuing nature, each day
5 during which it continues shall constitute an additional, separate,
6 and distinct offense.

7 b. The penalty imposed pursuant to subsection a. of this section
8 shall be collected by the department in a civil action by a summary
9 proceeding under the "penalty enforcement law," N. J. S. 2A:58-1
10 et seq. The Superior Court shall have jurisdiction to enforce the
11 "penalty enforcement law."

12 c. The department may institute a civil action in a court of
13 competent jurisdiction for injunctive or any other appropriate
14 relief to prohibit and prevent a violation of any provision of this
15 act, or any rule, regulation, or order promulgated or issued pur-
16 suant thereto, and the court may proceed in the action in a sum-
17 mary manner.

18 d. The department may compromise and settle any claim for a
19 penalty under this section in such amount, in the discretion of the
20 department, as may appear appropriate and equitable under all of
21 the circumstances.

- 1 12. There is established a nonlapsing, revolving fund in the
 2 Department of Treasury to be known as the "Hazardous Waste
 3 Minimization Fund." The fees paid and the penalties collected
 4 pursuant to this act shall be remitted to the State Treasurer for
 5 deposit to the credit of the fund. All interest earned on moneys in
 6 the fund shall be credited to the fund. Moneys in the fund shall be
 7 utilized to fund the activities of the Office of Hazardous Waste
 8 Minimization and the Hazardous Substance Source Reduction
 9 Science Advisory Board established pursuant to P. L., c.
 10 (C.) (now before the Legislature as Senate Bill No.
 11 2987 of 1987), the costs of administering this act, and, where
 12 appropriate, the hazardous waste management, hazardous waste
 13 enforcement, and hazardous site mitigation programs of the
 14 department. No moneys shall be expended from this fund except
 15 by appropriation by law.
- 1 13. This act shall take effect immediately.

STATEMENT

This bill would require those who manufacture, process, and use significant amounts of toxic chemicals to obtain an annual permit for discharges thereof to any environmental media. The permit required herein would be in addition to any others required by law, rule, or regulation. The permit fee would vary among facilities according to the quantity of, and the relative risk of harm posed to the public health or the environment by, the particular toxic chemicals discharged. Thus, the bill would cause those who pollute to pay for that privilege to a greater degree than they do now, and those who pollute more to pay a greater share than those who pollute less.

The purpose of the bill is to provide an economic incentive that will encourage greater implementation and utilization by private industry of hazardous waste minimization technologies and procedures, especially those focusing on the preferred hazardous waste management strategies of source reduction, recycling, and materials recovery established in the "New Jersey Hazardous Waste Facilities Plan" of 1985, and to provide a longterm source of funding for the Office of Hazardous Waste Minimization and the Hazardous Substance Source Reduction Science Advisory Board established pursuant to P. L., c. (C.) (now before the Legislature as Senate Bill No. 2987 of 1987) and the cost of administering this act. The fees collected would be placed in a dedicated fund to be known as the "Hazardous Waste Minimization Fund."

Under the provisions of the bill, a facility would annually report as part of its permit application the quantity of toxic chemicals discharged to any environmental media during the previous calendar year. This reporting requirement will not be burdensome to the facilities affected since they must, as of July 1, 1988, report such data in accordance with the requirements of the "Superfund Amendments and Reauthorization Act of 1986."

The Department of Environmental Protection would establish three classes of relative risk of harm posed to the public health or the environment by a discharge of a toxic chemical and assign each toxic chemical to one of these classes. A toxic chemical could be assigned to more than one relative risk class, depending upon the ultimate environmental medium to which it is discharged. This flexibility would give the department the capability of discouraging discharges to media that may be particularly vulnerable to invasions by certain toxic chemicals. The department would establish a fee schedule for the relative risk classes, in dollars per unit of measurement of toxic chemical discharged, which schedule would establish fees proportional to the relative risk of harm.

The department would calculate the fee for a discharge of a particular toxic chemical by multiplying the annual quantity discharged by the relative risk class fee for that toxic chemical in accordance with the schedule. The permit fee for a facility would be calculated by summing the fees assessed for each toxic chemical discharged by the facility.

Because of the delay in the implementation of the reporting requirements of the federal "Superfund Amendments and Reauthorization Act of 1986" until July 1, 1988, a permit for a toxic chemical discharge will not be required pursuant to the provisions of this bill until after December 31, 1989.

HAZARDOUS WASTE

Requires permit for toxic chemical discharge.

SENATE JOINT RESOLUTION No. 60
STATE OF NEW JERSEY

INTRODUCED FEBRUARY 19, 1987

By Senators GAGLIANO, CONNORS, BUBBA, CARDINALE,
HURLEY, BASSANO, HAINES, DORSEY, BROWN and
EWING

Referred to Committee on Energy and Environment

A JOINT RESOLUTION respectfully memorializing the Congress of the United States and the United States Environmental Protection Agency to streamline the permitting procedure for facilities engaging in the treatment, storage, or disposal of hazardous waste.

1 WHEREAS, The "Resource Conservation and Recovery Act of 1976"
2 and "The Hazardous and Solid Waste Amendments of 1984" (42
3 U. S. C. § 6901 et seq.) established permitting requirements and
4 procedures for facilities engaging in the treatment, storage, or
5 disposal of hazardous waste; and

6 WHEREAS, The United States Environmental Protection Agency
7 has adopted regulations implementing those requirements and
8 procedures; and

9 WHEREAS, The State of New Jersey is authorized by the federal
10 government to administer the federal permit program for
11 facilities engaging in the treatment, storage, or disposal of
12 hazardous waste; and

13 WHEREAS, Although the State of New Jersey fully supports the
14 intent of the federal legislation and regulations, it has become
15 apparent to the State in the course of administering the permit
16 program as delegated that the requirements and procedures
17 comprising it are unnecessarily complex and time consuming,
18 such that it commonly takes years from the time of application
19 to the issuance of a permit for a single facility; and

20 WHEREAS, Such delays obstruct progress toward the laudable goals
21 of the legislation and undermine public confidence in the admin-
22 istration of regulatory programs; now, therefore,

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

1 1. The Congress of the United States is respectfully memorial-
 2 ized to enact legislation to streamline the permitting requirements
 3 and procedures for facilities engaging in the treatment, storage, or
 4 disposal of hazardous waste as established pursuant to the "Re-
 5 source Conservation and Recovery Act of 1976" and "The Hazard-
 6 ous and Solid Waste Amendments of 1984" (42 U. S. C. § 6901 et
 7 seq.), to the extent that the public health, safety, and welfare and
 8 the environment would not be threatened or compromised thereby.

1 2. The Administrator of the Environmental Protection Agency
 2 is respectfully memorialized to streamline the permitting require-
 3 ments and procedures for facilities engaging in the treatment,
 4 storage, or disposal of hazardous waste as established pursuant
 5 to regulations adopted under the authority of federal legislation
 6 therefor, to the extent that the public health, safety, and welfare
 7 and the environment would not be threatened or compromised
 8 thereby.

1 3. A duly authenticated copy of this resolution shall be trans-
 2 mitted to the President, the President of the United States Senate,
 3 the Speaker of the House of Representatives, every member of
 4 the United States Congress elected from the State of New Jersey,
 5 and the Administrator and Region II Administrator of the United
 6 States Environmental Protection Agency.

1 4. This joint resolution shall take effect immediately.

STATEMENT

The purpose of this resolution is expressed in its title and
 preamble.

HAZARDOUS WASTE

Memorializes Congress and EPA to simplify RCRA permit pro-
 cedure.

TABLE OF CONTENTS

	<u>Page</u>
Senator James R. Hurley District 1	1
John Gaston Assistant Commissioner for Hazardous Waste Management New Jersey Department of Environmental Protection	16
Richard J. Gimello, Executive Director Hazardous Waste Facilities Siting Commission	16
Susan Boyle, Assistant Director Hazardous Waste Facilities Siting Commission	25
James C. Morford, Vice President for Governmental Relations New Jersey State Chamber of Commerce	59
James Sinclair New Jersey Business and Industry Association	66
Hal Bozarth Chemical Industry Council	71
William Everhardt, Vice President of Technical and Regulatory Affairs Advanced Environmental Technology Corporation	88
Robert P. Hollenbeck Public Service Electric & Gas Company	96
John Dalton Hoffman-LaRoche, and Chairman, Government Affairs Committee New Jersey Health Products Council	97
Dorothy Bowers, Executive Director Environmental Resources Merck and Company, and Member, Environmental Subcommittee New Jersey Health Products Council	99
Richard T. Corbett New Jersey Association of Realtors	113

TABLE OF CONTENTS (continued)

	<u>Page</u>
Barbara Monick Sweetwater Technology	116
Alexander Blake Sweetwater Technology	117

* * * * *

mjz: 1-122

SENATOR DANIEL J. DALTON (Chairman): We would like to get this public hearing started. The hearing is on a package of bills that were, I guess, announced on January 28 by the sponsors, dealing with the whole issue of hazardous waste minimization legislation. I would like it, if you could, if you would keep your comments on the bills themselves. There are, as you know, a number of bills. So, if you have any comments, please focus those comments on the bills. The Committee finds that more useful, as far as the ultimate consideration of this package is concerned.

Additionally, given the number of speakers we have, we are going to limit everyone to-- You know, if you can't say it in 10 minutes, you can't say it. We are going to try to limit everyone's remarks to 10 minutes or less.

With that, what I would like to do is start out and call Senator Jim Hurley, who is the sponsor-- Jim, you are not a sponsor of any of the bills, but are here as a spokesman for the package?

SENATOR JAMES R. HURLEY (speaking near chart; not near microphone): I am the sponsor of one bill.

SENATOR DALTON: One, okay. Fine.

SENATOR HURLEY: Senate Bill 3094, I think.

SENATOR DALTON: Just for everyone's information, we will go to Senator Hurley's comments; then comments by Senator Gormley; and then we will go to the Administration witnesses. Okay? Jim?

SENATOR HURLEY: I thank you very much, Senator, for scheduling this hearing.

Mr. Chairman, and members of the Committee, I would like to start with this chart overview of the waste minimization techniques. I can tell you later on the bibliography of where the research staff got the material, much of it from EPA, but also from other publications.

Just so we start to use these words -- you are familiar with them, I'm sure, but I don't know how familiar other people are -- words like source reduction-- We have heard recycling, obviously, in the solid waste field. Oh, I'm sorry, I'm off the record. (Senator Hurley moves to microphone) We have heard recycling in the solid waste area, but now we are talking about recycling of hazardous waste materials -- use and reuse -- and of effectively substituting an ingredient in the process. Reclaiming -- a process to recover usable product -- and regeneration. Treatment is another subordinate that comes off here. Source control, product substitution, things like good housekeeping, input material modification, and technology modification. All of these terms are now used by people under the general subject of waste minimization and source reduction. So, when we use the words in the future, hopefully you will start to understand what they are. You certainly are not going to understand them from one glance at a chart, but you will as we go through the package of bills, and start talking about the same words. I'm sure the words will change over a period of time, because minimization might be a buzz word today that changes into something else in the months or years ahead.

But I do thank you, Mr. Chairman, for this opportunity, and for calling this hearing, because, in my opinion, it is vital to the future health and safety of our residents. Approving of this legislative package, and even discussing it, will aid in resolving one of the State's most critical challenges, that of preserving the land, water, and air for generations to come. The handling of hazardous waste is one of New Jersey's most critical environmental issues at the heart of this challenge.

Fortunately, it is not too late to reverse the mistakes of the past. Your Committee has done yeoman duty in this area in past legislative achievements. Reversing past

mistakes is costly, imperfect, and time-consuming, and I don't think we can wait any longer. We in New Jersey are paying a high price for our past mistakes in dealing with the generation and disposal of hazardous waste. The Legislature enacted a \$600 million hazardous waste cleanup package. That is merely the State's share of the \$1.5 billion in cleanup moneys through 1991.

Operation and maintenance costs will continue into the next century. The Legislature has focused a lot of attention on cleaning up toxic waste sites -- toxic waste dumps, they might be called, or cesspools -- and siting locations for facilities to safely dispose of hazardous chemicals. These approaches address problems after they have occurred, rather than adopting a philosophy of prevention. They are reactive, rather than pro-active.

It is not enough to merely correct the mistakes of the past. We must learn from these mistakes. We must prevent the same mistakes from happening in the future. Until now, we have dealt with symptoms, and have failed to address the root of this critical environmental problem -- the generation of hazardous waste. That is why we are here today. We need a hazardous waste minimization and source reduction program in place in New Jersey.

With the passage of these bills, we will chart a new course of action that will make our State a safer and an environmentally cleaner place to live and work for many years to come -- and in the years to come.

Waste reduction is an economically sensible response to what many people see as a crisis. We are now producing an estimated 500 million tons of hazardous waste a year. That is about six tons of waste for every resident in our State. Thousands of people have lost their drinking water because of contamination by toxic waste. Across the State, there are hundreds, perhaps thousands, of sites contaminated by hazardous

waste that could require billions of dollars for cleanup. An increasing number of lawsuits are being brought by people who claim to have suffered adverse health effects from living near toxic waste sites. Also, there are a number of lawsuits being instituted by the government; they are mounting rapidly. These suits claim that certain waste generators have not complied with regulations, and that generators who abuse the waste management facilities now on the Superfund list, must pay for cleanups. If we do not dramatically reduce the production of hazardous waste now, we may find ourselves on a path of no return. We will be producing toxic waste faster than we can safely treat and dispose of it.

By acting now to reduce hazardous waste, we will significantly reduce future disposal costs and threats to the environment. Fortunately, we don't need to reinvent the wheel in finding the best approach to achieving waste reduction goals. In recent years, we have studied the problem -- many have studied the problem -- and these bills are a product of months of research. Now, I guess since the beginning of July, 1986, until this date, it is probably about nine months. We adopted several recommendations of the Federal Environmental Protection Agency, the Office of Technology Assessment of the Congress, and major environmental groups.

The package you are considering today is aimed at putting us on the right track. It is designed to give industry the technological assistance and financial incentives it needs to make the production changes required to reduce the generation of toxic waste. We didn't want to be punitive; we wanted to be positive.

So far, government has not required waste reduction. The Office of Technology Assessment found that it would be extraordinarily difficult for government to set and enforce waste reduction standards for a myriad of industrial processes. The impact on industry, particularly on troubled

manufacturing sectors, could be substantial. We recognize that industry is becoming more willing to cooperate in this effort. There has been a dramatic increase in the cost of hazardous waste management. Industries are finding it increasingly more difficult to find facilities to handle their waste, and they recognize that if hazardous waste is not disposed of properly, then they face stiff fines.

Another concern is the steep rise in liability insurance rates. All these factors, combined with a growing public pressure on industry to clean up its act, has led some industries to look for ways to reduce the generation of hazardous waste. But there are other factors that hold back progress on this issue. Although these programs will produce savings in the long run, the initial cost of modernizing a plant is a huge obstacle to overcome.

Industry is also reluctant to make the necessary changes in its production process out of fear that its final product will suffer. In some cases, industry does not have available to it the latest technological advances in hazardous waste reduction.

Finally, some of our State and Federal laws inadvertently place roadblocks to our moving ahead with waste minimization programs. This package seeks to address these factors. We are proposing a broad-based, forward-looking approach to the management of hazardous waste, that will balance the need to protect the public safety against the need to protect jobs. It takes advantage of the latest technological developments to set realistic goals in reducing the generation of hazardous waste.

Let me briefly describe the major bills in this package: Industries generating substantial amounts of hazardous waste would be required to obtain permits to dispose of that waste. The permit fee schedule would be designed to encourage industries to reduce the production of this waste.

The \$11 million to \$13 million in permit fees collected annually, would be used to finance the administration of hazardous waste pollution laws and technological programs to minimize waste.

Another bill would establish the Office of Hazardous Waste Minimization to provide technological and financial assistance to industries to reduce waste reduction.

According to the OTA, despite some claims to the contrary, industry is not taking advantage of all effective waste reduction opportunities that are available. Even a simple step toward waste reduction can seem difficult to a company with few technical resources and no obvious place to go for guidance. Reducing waste in the industrial process requires intimate knowledge of all aspects of that specific production process.

Another component of the package would promote responsible hazardous waste management by requiring industries to keep auditing records of the quantities and types of waste they produce. In another bill, industries would be required to submit hazardous waste minimization plans every two years. Research shows that any company planning to implement a waste minimization program, should start by performing an environmental audit. Among other areas of concern specific to a particular site, the audit should focus on plant efficiency and waste generation. From the results, plant managers could determine how much waste is produced, which components of the waste are hazardous, at what step in the process the wastes are generated, what costs of disposal are associated with each waste stream, and whether there are any leaks or unaccounted for material losses. This information, in addition to other customized questions which may be asked in the audit, can expose inefficient and wasteful practices in the manufacturing process.

Once discovered, research shows that a waste minimization plan should be developed. In the plan, waste minimization techniques may be applied to help increase efficiency and reduce costs. Waste minimization should be integrated into every phase of the production process, to enhance productivity and reduce costs.

In order to reduce the financial burden on industry, several tax incentives will be offered to firms involved in waste minimization. These incentives would include an exemption from the sales tax and property tax, or waste minimization equipment, as well as a credit against the corporate business tax.

Other parts of the package include additional financing to speed up the report of the Hazardous Waste Facility Siting Commission's Task Force, to promote source reduction and recycling technologies.

Finally, we have called for a review of DEP regulations to determine which regulations stand in the way of waste minimization.

Of course, I would be happy to answer any questions. Attached to my statement is a list of companies that we have pulled out of our research around the country, and the result -- the benefit -- of their savings in the process change they made. I don't want to go through those, because that will be at your disposal, I'm sure. The list includes companies like 3M, and newspapers like The St. Petersburg Times, and a company like IBM.

I don't want to take any more of your time than is necessary. I am trying to stay within the time limit you gave us, Mr. Chairman.

SENATOR DALTON: Jim, before we pose any questions to you -- if the Committee has any -- let me turn to Senator Gormley, who has indicated he would like to make a statement.

SENATOR GORMLEY: With regard to the bill I have introduced, the proposal is one that I think strikes a fair balance. Specifically, I am talking about S-2728, which would be an incentive program for the reduction of waste, based upon an increase in the corporate tax levels for those generating the waste. It would provide for a system -- a very thorough system -- whereby we, as legislators, concede the fact that we cannot specifically draft the technical language that would be necessary for a thorough program. We rely on the Hazardous Waste Siting Commission to prepare an outline for us of reduction goals. I don't think that can be done by the Legislature. Quite honestly, I think obviously we would over-react and set it at about 110%.

It would provide for their mixing both a legitimate reduction schedule with this incentive, so that it would serve as a common balance. People have indicated to me, why not just a credit system? I think there has to be a balance. If, in fact, we are going to say to individuals throughout the State of New Jersey, "There will be siting," and we do not tamper with that system -- if we don't manipulate waste minimization or source reduction to the point that it is actually used as a roadblock to legitimate siting -- we can't, on the other hand then have a system that is passive in terms of incentives for individuals. If it is merely a credit program, well, it doesn't quite have the incentive of an increase. I think that strikes a fair balance, because philosophically I think it would be inappropriate, at this time, to use one issue to hinder siting. At the same time, there has to be a balance.

When industry realizes that we are accepting our legislative responsibility, and the Governor is accepting his executive responsibility by not tampering with the mission of the Commission, at the same time, I think there has to be that even-handedness. We realize that the individual companies or corporations must have more of an incentive than a potential

credit. They have to know that there will be an increase. It won't be overnight. There would be a few years before it actually happened. And at the same time, the criteria are reviewed and their goals are reviewed by the Commission, but the Commission would not be locked into arbitrary standards that the Legislature would set down on them.

I think it is important to note that we have a natural advantage in New Jersey that we should take advantage of in this particular case. I would encourage the Chairman of this Committee, the Committee, and anyone involved in the issue, to work very closely with Senator Bradley on this particular issue. I think we have one who is acknowledged as the author, if you will, of the new tax code in this country. If we are going to talk about reductions and benefits in taxes, quite honestly we should look to a merger on the Federal level with our efforts. There should be a national incentive on source reduction and, as always, New Jersey is out in front, and we want to be out in front -- Jim Hurley, Dan Dalton, myself, and everybody. We can't sit passively by, because there isn't yet a national incentive. But, when we talk about these tax incentives, whether they be in Jim's package or my package, they must be cross-referenced on the Federal level.

In 1988, I believe, certain incentives, as they pertain to technology research, will be phased out of the Federal Tax Code. There is currently a debate in Washington as to whether they should be maintained or not. We have to look to putting an entire package together. We can make a step on the local level -- on the State level -- but I think we have to merge it with whatever considerations are going to come up over the next two years, as they pertain to technology credits or research credits on the Federal level, so we have a unified program from both the State and Federal levels.

I think the fact, Mr. Chairman, that you have listed it for today, the fact that Jim and staff have taken so much

time on their particular package, and hopefully I have lent a little bit to it with my bill-- I think cumulatively, if we take this effort and merge it on the Federal level, so that whatever initiatives we do merge hopefully into a Federal tax program-- Quite honestly, what better natural resource to take advantage of with regard to taxation and tax credits and incentives than the person who has been given primary consideration for bringing the issue up on the Federal level, and we should take advantage of that, in conjunction with our hearing.

So, thank you very much for the opportunity.

SENATOR DALTON: Thank you, Bill. Senator, just a few questions, before we move on. One of the things you indicated was that you feel the economics -- the present economics -- at work within to move people to waste reduction are the cost disposal and the cost of liability. Given those fairly strong -- and I think you acknowledge fairly strong -- incentives, why don't you just tell people to go and do it -- to minimize?

SENATOR HURLEY: Well, I wish it were that simple. Perhaps I ought to preface that by saying, I may not see -- we may not see this package as a panacea, but it is a start toward discussing this issue, in a State that is moving ahead with facility siting, and which produces -- is a major producer of hazardous waste in the United States. Whether or not we can do as you suggest and simply mandate it, I don't know. Those large companies-- What we found out in the research was that large companies, for whom the financial burden has become obvious and -- I won't say unbearable, but certainly so costly that they move in this direction-- They have told us that this is the official policy of their companies now. They are headed, not just headed in that direction-- For some companies, it has been -- major companies-- But, when you consider the 4500 companies -- 4500 companies in New Jersey -- the estimated 4500 producers of hazardous waste -- many of whom

are not the large producers, they do not have access to the technology, have not availed themselves of it, and it has not become costly enough for them yet to proceed in that direction on their own.

One of my fears is -- and I guess I might as well address that, because I have been accused by some people, who are saying, "You want to talk about waste minimization, and you want to talk about other things, to get away from siting facilities." That is only part of it. Personally, I don't have any motives, because we have been told, over and over again, that the site that was given in my district, is going to fall out in the process. So, I pursued it in light of, even that kind of information.

But I guess in specific answer to your question, I think we are looking, Mr. Chairman, to move out a step in the direction of what you are suggesting. I don't know that we, as a government, could move the entire way to simply mandating that they do this now. I would be anxious to listen to the wisdom of your Committee.

SENATOR DALTON: Jim, secondly, the package of bills establishes basically a system of reporting, I would assume, and just looking at it at a glance, where industries would have to report, I think even in Senator Gormley's bill, the amount of waste they have reduced. Does that assume an honest count and, if it doesn't, then does that assume establishing a fairly significant bureaucracy to achieve an honest count?

SENATOR HURLEY: Well, we tailored specifically my bill, which sets up the permit fees, on the Superfund SARA amendments, so we are not trying to duplicate any bureaucracy. These are existing Federal requirements. Now, they haven't reported under them yet, so you have to assume that you are looking for a base line; you are looking for a place to start. If they tell the truth in the first year under the SARA requirements, then we will know from that base line where we will go in the future, as far as reduction is concerned. So we

have to assume somewhere that we start with an honest figure. I don't think we can start off by asking them how much they have reduced it over the last five years. We have to take the inventory. We have to assume that they are going to file these accurately under the Federal law. Then we will know what the quantities are of the generation of hazardous waste, and then in the future we would know how much they have reduced those quantities. We also place a great deal of emphasis, as you might know, on the toxicity, so it is not just the quantity. It's how strong they are. The three levels, the most toxic, the not so bad, and the least toxic would be set up, and people would be charged. We are not trying -- as we rethink this, and think it over and over again -- to establish the fee. We are just trying to establish some criteria under which a fee could be charged.

SENATOR DALTON: The Hazardous Waste Siting Commission is coming out with a report, as I understand it, in the summer, or possibly in the fall, with regard to this whole subject matter. I imagine some base line data will be established with regard to the generation of toxic waste in the State. Does your bill assume-- Will you take that data and use it as the base line, or do you want to move ahead before that report is issued?

SENATOR HURLEY: We are not trying to supercede the Hazardous Waste Facility Siting Commission. We are not in contention with that. Our feeling, though, very honestly, is that as the Hazardous Waste Facility Siting Commission has performed its duties, much of its time -- most of its time -- was taken up in siting facilities, and not in this Task Force effort. In fact, we believe that Senator Gormley's discussion of this issue, your discussion of the issue, the Governor's discussion in the State of the State and, frankly, ours, have prompted them to move ahead more expeditiously with their report. My judgment would be that we would use their data. I

don't see any reason to reinvent that kind of information. If that is in contradiction to Bill's and our package, then we-- We are not presenting this as a panacea; we are presenting it to get the discussion started moving in that direction. That is why I think we have been, and this Committee action will be, a factor in moving the Hazardous Waste Facility Siting Commission forward. I don't think they would argue with that, frankly. In a recent appearance in a television interview with Chairman Dodd, we agreed on that same kind of statement and logic.

SENATOR DALTON: Bill?

SENATOR GORMLEY: You know, I would reiterate what Jim is saying. You tend to find -- and I think you found this also, Mr. Chairman -- when you have a discussion about the issue, that no one has any hard and fast answers. If anything, it has to be stylized to the particular degree of the toxics, as Jim has mentioned. That is why there has to be a grant of discretion, as I see it, to the Hazardous Waste Siting Commission in setting these goals, because if it were left up to the legislative process, it would just be impossible. I think the discussion is good, but I do think we have to provide a degree of flexibility in standards for the Commission. I know they have had a subcommittee that has been dealing, for many months now, with this particular issue. It is an easy conclusion to reach -- let's reduce the waste. Getting there is entirely another question.

SENATOR HURLEY: That is why we tried to be extremely careful about how we present this, because wherever you go people grab it as if it is a hook -- as if it is a lifesaver. They're sinking, and they say, "Oh, yeah, that's the way to go," but it is not as easy, as Senator Gormley said, to do it, as to say it.

We are not trying to paint this as a panacea, that, "Yes, embrace this program, and all will be well in the

world." It is just another step beyond what your Committee has already done, and I am sure we will take steps beyond this in the future. But it says the producer-- Although we all know that eventually the consumer will pay with a higher price on products, the producer is going to pay. They are creating it, and we ought to encourage them to produce less of it, so that we, as a public body in public policy, will have less to treat and dispose of. They have a difficult enough job in siting facilities now to treat and dispose of it, but I think that is another whole discussion. I think the entry of government into that siting process will lead us very quickly to the next step of minimization, because we don't want to be -- New Jersey doesn't want to be -- the builder of the best and the most hazardous waste disposal facilities in the country, and perhaps even attract hazardous waste from other states. That is a great fear of mine.

SENATOR DALTON: My last question, Jim: What if, in my manufacturing process, I produce a significant amount of hazardous substances through the process itself? What is government's role in that area? You know, Senator Gormley said that what you have to do is set out somewhat of a financial club to a certain extent. I don't want to misrepresent him.

SENATOR GORMLEY: Mallet.

SENATOR DALTON: We might call it a stick -- a rubber stick. (laughter) But, what else is in this package to assist those people, besides the mallet to reduce their waste?

SENATOR HURLEY: Well, the logic goes like this, you take the mallet first, and you collect the permit fee. Then you use that fee to create-- You use that money to create an office of hazardous waste recycling. That is really for the purpose of aiding everybody and anybody who generates it to come get the information, or for us to disseminate to them -- I didn't mean that "come to the mountain" theory -- but to go out and give it to them. Beyond that, though, these requirements

of starting with an inventory, or a base line, and requiring them to update their minimization plans every two years, gets the government squarely, with a giant step, into this business of, "Now we know what you're doing, and we know what you did last year, and we want to know what you are going to do in the future."

So, that starts the trend of generating less of it. That is the theory behind it and, of course, these other tax incentives-- I think they can be debated, and I certainly understand where Bill is coming from. They can be debated no matter how you look at them. They don't have to be sacred, as we have done it here.

SENATOR DALTON: If, in fact, a manufacturer looks at the Office of Hazardous Waste Minimization, and says, "Given my process, and given what I make -- what I produce -- there is no substitute presently available for me to alter the process to minimize my waste stream." What then is government's role?

SENATOR HURLEY: Well, I think that is where it really gets to be sticky, but I think the fact that we are taking these steps and government is entering into the minimization process, will motivate and instigate the businesses that are out there, as well as the scientific community, to find ways of neutralizing, disposing of, minimizing, and substituting. That is another incentive we are providing by taking this action. We are providing them an incentive to find a way.

If eventually -- and I don't know this; this is far over my head technologically -- there isn't any substitute, then I think we have to provide the flexibility within our Department of Environmental Protection and our Hazardous Waste Facility Siting Commission to recognize that. We are not trying to be punitive and run businesses out of the State, but neither do we want to continue to be the major -- without taking some steps toward minimization -- producer of hazardous waste, to become the capital of hazardous waste in America. We don't want that title, I don't believe.

SENATOR DALTON: Jim, thank you very much.

SENATOR HURLEY: Thank you.

SENATOR DALTON: I appreciate your presentation, and your activity in this area.

SENATOR HURLEY: Thank you.

SENATOR DALTON: Okay. The next person scheduled to speak is John Gaston, Assistant Commissioner, Department of Environmental Protection.

A S S T. C O M M. J O H N G A S T O N (speaking from audience): We are going to flip-flop, and-- (remainder of comment indiscernible to transcriber)

SENATOR DALTON: Okay, fine. Rick Gimello, Executive Director, Hazardous Waste Facilities Siting Commission?

R I C H A R D J. G I M E L L O: Thank you, Mr. Chairman. I would like to begin today with a very brief overview of some of the specific waste minimization initiatives that have been implemented by the Siting Commission. I will then move directly into the comments on the bills.

In 1984, as part of the Commission's effort to develop a comprehensive hazardous waste facilities plan for New Jersey, an analysis of waste generation practices, as well as a projection of future generation rates, was undertaken by the Commission. This analysis was the first comprehensive review of this State's generation patterns. We projected, at that time, an overall voluntary -- emphasis on the word "voluntary" -- reduction of waste generation of about 7%, due to the initial ongoing inertia towards this effort that industry was undertaking as a result of changes and regulations.

Our analysis also formed the foundation to support our waste management hierarchy, which the Commission has adopted as policy, which guides all of our efforts. This hierarchy gives preference to source reduction and recycling management options.

In 1985, the Commission took the initiative to form a volunteer body dedicated to the formulation of hazardous waste

source reduction and recycling policies. The Source Reduction and Recycling Task Force is a 10-member body. It is made up of academics and representatives from industry and environmental and public interest groups. The Task Force and the Commission have sponsored a series of annual round tables in this State to examine various aspects of hazardous waste minimization, and to generally get out the word about the feasibility of various alternatives.

Our first round table focused on the activities in other states. We are not the only ones wrestling with this problem. Our 1985 round table examined the technical assistance programs and their benefits, both regulatorily and from the point of view of industry. These round-table proceedings have circulated widely and are still available from the Commission.

In addition, the Commission staff is actively participating in a series of national source reduction round tables, which serve as an excellent clearing house for technical and policy information. The Commission's Assistant Director, Susan Boyle, who is with me today, is our representative on this national level.

In 1986, with the assistance of grants from the Commission and the Department of Environmental Protection, the Task Force embarked on a study of the motivations for, and the barriers to, waste reduction. Four specific industry categories were selected by the Task Force for our study. They were: the inorganic chemical industry, the plastics industry, the electroplating industry, and the electronic component manufacturers. Not only does this report contain 40 case studies from 22 on-site interviews with various industries, but the report clearly documents the current factors, motivating industries' efforts to achieve reduction in waste generation.

The barriers to additional waste reduction, as perceived by these industries, are also presented. Although

admittedly the report is somewhat limited in scope, applying only to those four industries, it nevertheless provides important insight into the industries' attitudes toward source reduction. I think that is something we have lacked in this debate.

This report, entitled, "Study of Hazardous Waste Source Reduction and Recycling," in four industrial groups in New Jersey, was the subject of our last round table, which was held just last month. Some of the representatives in the room today attended. The final report of the round-table proceedings will be available from the Commission very shortly, no later than the end of this month.

Finally, the Task Force has set a rather ambitious agenda for the rest of 1987. These activities are outlined in the attached flow chart. We are hopeful that by the end of the summer, we will be able to issue a report to the Legislature that contains the following: a specific definition for waste minimization and source reduction; a mix of economic incentives and disincentives; an outline for a technical assistance program in this State; and plans for information systems to measure and verify the impacts of waste minimization.

Frankly, Mr. Chairman, the Commission had real difficulty getting anyone to focus on waste minimization in 1985, when we started our efforts. However, now that sites for new facilities are under active consideration, the legislative rush toward waste minimization, or a waste reduction policy looks, at times, like a stampede, rather than a rational policy debate.

The Commission and Task Force, perhaps better than most, understand the need to move quickly. However, we must balance this against the more overriding need to be accurate. The Task Force and the Commission will do everything possible to accelerate our deliberations. We would ask that those testifying here today, as well as other interested parties,

supply us with all relevant facts and information that should be considered as this debate continues.

Mr. Chairman, in the Commission's view, it is essential that some basic realities be incorporated into any State policy on waste minimization. First, any comprehensive workable hazardous waste management program must address the full spectrum of waste management options. We must look, in a sense, Mr. Chairman, at both ends of the pipe. We must look toward reduction. We must look at permitting and enforcement and facility development. Waste minimization must not be viewed as an alternative to siting new facilities.

The Commission and Task Force are convinced, and have taken a firm position, that waste minimization is a long-term goal which will not result in zero generation. We are, therefore, troubled by the language in Senate Bill 2987, which states: "A serious source reduction program would significantly reduce future disposal costs. It would also alter the major public investment to be made for new hazardous waste disposal facilities." Without question, Mr. Chairman, a major investment on a public level must be made by all levels of government, if new disposal capacity is to be developed. Promises or vague references to the contrary may very well lead to a crisis, not unlike the current solid waste crisis in this State.

Secondly, the complexity of this debate must be fully appreciated. Our research, together with testimony we have received from industry, research groups and agencies, and from surrounding states, indicates that the issue does not lend itself to simple solutions. Knowing precisely how to define, measure, and promote waste minimization is critical, and has proven to be very difficult. By way of example, let me highlight for you some specific issues that have yet to be resolved.

The first relates to definitions. Definitions are important at this stage of the policy development, as Senator Hurley has mentioned. Many terms will be discussed here today. We must be certain what is meant by "waste reduction," by "waste minimization," by "recycling." Right now, there is considerable disagreement over the definition of these terms. For instance, there is much debate about the role that treatment technology should play in a waste minimization policy. Is the treatment of hazardous waste which results in the reduction in volume, or the reduction in toxicity, included in the definition of source reduction? The United States Congress -- their Office of Technology Assessment -- states that waste recycling, or the treatment of wastes after they are generated, should not be considered source reduction. However, it is clear from our case studies, that for many industries that is precisely how source reduction is defined. Although this debate may appear insignificant, it goes to the heart of the issue, because the mix of incentives and disincentives, the tax breaks, the motivators, if you will, which are applied industry-wide to bring about some level of reduction, will be keyed to these specific definitions.

We also note that the definitions of hazardous waste in many of the bills under consideration are inconsistent. We would urge that the Legislature consult the Department of Environmental Protection to determine which of the definitions is the most inclusive.

Finally, as it applies to definitions, it is unclear, in our reading of these bills, whether the tax incentives offered in the various bills ought to be applied to both on-site and off-site facilities. There was considerable debate by the members of the Task Force, as well as others, about how on-site and off-site activities are to be treated.

As it relates to measurement, the measurement of reduction is also a critical policy element. While we agree

with the multi-media approach to waste minimization envisioned in these bills, there are serious questions regarding this State's ability to measure either current emission levels or future reduction levels for each of the specific media -- air, water, and, in one sense, the plant gate. For example, data does exist for RCRA waste, and also for waste controlled under the New Jersey Discharge Pollution Elimination System. However, data regarding air emissions is presently inadequate. Lead time to develop air-related data, and perhaps more importantly, to coordinate the various information systems used in this State, will be required. Here again, this reality must be recognized, given the current thrust of Senate Bill 3094, which requires -- as I understand it -- sort of one permit for all pollution-related emissions.

Incentives and disincentives: The third broad category of concerns for the Commission relates to the incentives and disincentives contained in the bill package. Although the incentives and disincentives contained in the bill package are economically based, an approach that is consistent with our findings, namely that industry is motivated by economics to reduce its waste, the effect of waste and taxes, corporate business tax increases, and/or permit fees must be carefully considered. The Commission does not believe that sophisticated economic analysis necessary to compare these alternatives has been performed. Therefore, we are unsure as to the collective impact these various approaches are likely to have. Caution must be exercised when attempting to arrive at a balance. Otherwise, disproportionately high disincentives may very well result in increased illegal disposal.

We have heard this time and again from small and medium generators of hazardous waste. While most generators acknowledge on one hand that economics is a driving force in the marketplace, there is concern that economic realities, from their point of view, will be understood prior to the induction of new taxes.

Fourth, Mr. Chairman, the broad category concerns reduction goals. The Commission urges the Legislature to avoid establishing broad, industry-wide reduction goals. Our research indicates that potential reduction levels vary widely from industry to industry. Arbitrary reduction goals, such as 10% a year for five years, may very well penalize those industries who took the initiative early, and reward those generators who continued to sit on their hands.

The Department and the Siting Commission agree that incentives should not be given to companies as an inducement to come into compliance with new or existing regulations. While we agree that both economic and technical assistance is necessary, they should not be offered as rewards to companies that have habitually been out of compliance with regulations.

Mr. Chairman, specific comments on some of the bills-- I would like to offer just a few.

First, the Commission does not believe there is a need for either the Office of Waste Minimization or the Hazardous Substances Source Reduction Science Advisory Board. The Commission, the Task Force, and the Department have been working cooperatively in an effort to develop a comprehensive waste minimization program. Imposing additional levels of bureaucracy will not only serve to delay, but to confuse. We would ask that the Commission, the Task Force, and the Department be permitted to distribute the various responsibilities referenced in these bills as necessary. We will be only too happy to work with the Legislature, especially the sponsors of this legislation, in identifying the responsibilities and that agency of State government most appropriate for completing those responsibilities.

We also believe that the Source Reduction and Recycling Task Force could, and should, be expanded, and it would be in a position to perform all the duties proposed for the new Science Advisory Board.

Secondly, several of the bills are too narrow under definition of hazardous waste generating industries. For example, Senate Bill 13094 and Senate Bill 2989 define generating industries as, and I am quoting: "A facility or industrial establishment if they are in some specific SIC code." Although SIC codes in S-3094 cover all manufacturing establishments in this State, they do not cover a substantial number of hazardous waste generators that are producing large amounts of hazardous wastes. These generators are tracked by the Commission and the Department annually through the Hazardous Waste Manifest System.

For example, Mr. Chairman, 26% of all hazardous waste produced in New Jersey in 1982 came from service-related industries. Such industries would not be covered under either of the two waste minimization bills I mentioned earlier.

Thirdly, there are three bills that offer tax exemptions for various equipment purchases. These tax exemptions appear to cover on-site commercial treatment facilities, as well as off-site facilities. We noted earlier our concerns about this approach. These particular bills, however, do nothing to encourage companies to adopt what we will call "the low tech" alternatives to reduction, such as better housekeeping, product substitution, or better inventory control. All the studies we have reviewed indicate that these are very effective source reduction techniques, which may very well be ignored as companies pursue those activities which grant them some sort of financial reward. In fact, if a company does not purchase some sort of source reduction-related equipment, it does not benefit from the economic incentives offered in this package.

Before this State begins to subsidize these industries generating and managing hazardous waste in this way, we should be sure that everything is being done on the low tech side. We would, therefore, support the bills calling for waste audits and technical assistance programs.

Finally, we also question whether the benefits derived from waste minimization under S-2990 will, or should, offset the losses in property taxes. Taxes are so important for local municipalities that I am not sure that is an important or appropriate trade-off. In fact, I understand, as Senator Gormley mentioned this morning, that there is Federal legislation being proposed that would provide a host of tax exemptions for waste reduction and waste treatment activities. Perhaps, as the Senator has suggested, such exemptions should be implemented on the Federal level.

In conclusion, Mr. Chairman, the Commission favors the approach outlined in Senator Gormley's bill, which recognizes the need to examine these issues in greater detail prior to proposing specific policy options. We are also encouraged by the recognition that a cooperative effort on the part of the Commission, the Task Force, and the Department of Environmental Protection, as well as other State agencies, is required if this new initiative is to bear fruit.

We have all witnessed the difficulties that arise in public policy when the intentions of the Legislature are at odds with the State agencies' ability to deliver. ECRA is a case in point, and I don't say that to be in any way critical of ECRA. Let us not repeat, however, the problems that have arisen as a result of the divergence between the legislative intent and our agencies' ability to deliver.

Hazardous waste generation and management are currently experiencing a dramatic change, a change brought about, in large part, by recent amendments to the Resource Conservation and Recovery Act. A very basic fact that must be understood, Mr. Chairman, is that RCRA is working. It is forcing every generator of hazardous waste to rethink basic operating procedures. We urge the Legislature to give us the time necessary to accurately measure the impacts of RCRA. If we are to create a new policy emphasizing reduction of waste generation, let us take the time to do it correctly.

As Senator Hurley indicated in a recent television debate that he and the Chairman of the Commission participated in-- Senator Hurley stated, as he did here today, that an important factor that his bills have triggered is an increased debate on this issue, and in that spirit, Mr. Chairman, we would like to continue to debate, to make sure that we get the answers correct.

SENATOR DALTON: Senator Gormley?

SENATOR GORMLEY: I would like to get some basic parameters in terms of volumes in these individual industries. What are your numbers in terms of what is produced in New Jersey in a year, in terms of the waste that comes under your purview?

S U S A N B O Y L E: In 1983, which was the last year we included in the management plan, total generation was 12 million tons. Of that, 500,000 was going to commercial facilities for management.

SENATOR GORMLEY: Five hundred thousand was going to disposal sites?

MS. BOYLE: Off-site disposal sites, that's right.

SENATOR GORMLEY: With the 500,000 tons, what was the nature-- How were they disposed? How was that bifurcated?

MS. BOYLE: Every way, no, it was across-the-board.

SENATOR GORMLEY: Do you have any idea?

MS. BOYLE: There was a lot of recycling -- off-site recycling -- and treatment, a substantial amount of land disposal, incineration--

MR. GIMELLO: We could break it out, Senator.

MS. BOYLE: Yeah.

SENATOR GORMLEY: What I am trying to do is get a definition, or define the parameters. Do you think the numbers are about the same today?

MS. BOYLE: They are about the same.

MR. GIMELLO: In the commercial area.

MS. BOYLE: Right.

MR. GIMELLO: In the commercial area. I think there is one thing--- While I appreciate the Chairman's desire to have us focus on the bills -- and I have tried to do that -- it is important that this issue be put in the context of the bigger picture. A lot of enforcement activity that the Department has been successful in implementing this year, has forced some companies to change their practices or, in a couple of cases, pick up their marbles and go somewhere else. A resulting reduction in the amount of waste has certainly occurred. I wouldn't call it source reduction.

SENATOR GORMLEY: Let's deal with the 500,000 tons of waste. Let's face it, we don't want to limit the siting process, but, at the same time, that obviously is a motivator to show our good faith to those people who may or may not have a site near them, that someday down the road we-- Maybe it is not feasible in the near future, from what you said, but we would like to eliminate the need to place that waste in the ground or incinerate it in anyone's vicinity.

Of the 500,000 tons -- okay? -- among the major corporations of the State-- Do you have a break-off point of, let's say, 98% -- or 25 companies generate 98%? Are there any numbers of that nature, as to individual corporations?

MR. GIMELLO: Yeah.

MS. BOYLE: We have, but I don't have that with me.

MR. GIMELLO: I don't have that at my fingertips, but of the 12 million that Ms. Boyle mentioned earlier, the vast majority of that number -- if you will allow me some flexibility -- about 11 million tons of that were generated-- Maybe less than that, maybe about 10 million tons were generated by three of the major chemical industries in the State. It is mostly aqueous waste, Senator, that inflates these numbers -- dirty water. A lot of the chemical companies have discharge permits, and they are taking care of that wastewater on their own. So, we do have a feeling--

SENATOR GORMLEY: But, of the-- Let's get to the--

MR. GIMELLO: Of the 500,000--

SENATOR GORMLEY: --primary concern of many residents -- and we can understand their concern -- how is that broken down among the major companies? Do you have that breakdown?

MR. GIMELLO: We could do it. I don't have it at my fingertips.

SENATOR GORMLEY: For whatever we are going to be doing in the future, obviously that breakdown is important. How is that broken down?

With regard to your endorsement of reporting, what gaps are there now in reporting, that you don't have available to you that would have been of assistance to you in the past when working on a source reduction program, or any of your needs?

MR. GIMELLO: Well, three big ones, and, Susan, cover me here in case I miss a few. Okay? Air emissions-- Not that their data base is not complete, it is just that it is not yielding the kind of information we needed. It was devised to do something else. So, if we are going to have a multi-media approach, we need to look at how we are going to measure and define air emissions. There was an original attempt in this State back in 1979, through the industrial survey, to get a handle on this. It happened for only one year at some old data. We need to tighten that aspect up.

Another big area is cleanup wastes. It is very difficult to determine how much waste is in the ground in a State like New Jersey, given its past history. So, while we make projections, how we fine-tune, if you will, our projection ability as it relates to that waste stream, is going to be very important, because that is going to be a major impact on capacity. Also, ECRA is yielding some waste.

SENATOR GORMLEY: When we are talking about cleanup waste, we're talking about waste -- correct me if I am wrong --

that traditionally we had tried to move to other areas, in certain circumstances?

MR. GIMELLO: Well, we're playing checkers with some of the waste, simply because capacity isn't available everywhere you want it to be.

SENATOR GORMLEY: Do you have any estimate on volume of the waste that is in the checkers system?

MS. BOYLE: We estimate it is 76,000 tons a year that we expected would move from cleanup sites and require commercial treatment capacity.

MR. GIMELLO: Frankly, Senator, I think that is an underestimation.

SENATOR GORMLEY: Are we talking soils?

MR. GIMELLO: Soils, drums, you know, this kind of stuff, but John Gaston will certainly be able to give you a little more feedback on that. But, absolutely, the spectrum. I mean, there is a debate breaking about to what degree we are going to bring the technology to the treatment -- I mean, the technology to the waste, or the waste to the technology. Until some of that is sorted out--

SENATOR GORMLEY: We are all trying to get a focus on this in terms of that waste. We are obviously not talking about tax incentives or anything being of assistance, because usually they have rung--

MR. GIMELLO: Right, exactly.

MS. BOYLE: Right.

SENATOR GORMLEY: --the gong on Chapter 11, or whatever, those people who have left the drums, or people who have dumped it illegally, and now we are stuck with the cleanup.

MR. GIMELLO: The way they impacted the debate, though, Senator, is that to the degree that we have a process that stimulates the development of some kind of new facilities, or some sort of new treatment capacity, or frees up treatment that exists, that will impact where we take that waste,

irrespective of who pays for it. How we manage it will be impacted by what we do on the front end of the pipe.

SENATOR GORMLEY: Well, I don't disagree with you. It is a part of the overall problem, but in dealing fairly with those for whom we are saying, "You need an incentive," part of their incentive is-- Obviously, you know, we might call it something else, but they are obviously going to wind up paying to clean up that other waste in some format, because there is no other source of funds to do it. That is just reality, I mean, you know, the way we have had to go to other measures to raise money for cleanups, and whatever. Oftentimes, they are not related to those people who caused the initial problem..

You cite four specific categories of industries that you are studying.

MR. GIMELLO: That we looked at.

SENATOR GORMLEY: In terms of tons, could you level a problem? Could we go through the individual industries, to get a better perspective?

MR. GIMELLO: I hate to look like-- I am just not prepared with the numbers.

MS. BOYLE: We have that, and I will be glad to provide it to you.

SENATOR GORMLEY: All right. I think it would help our understanding a little bit more.

SENATOR DALTON: Just to amend Senator Gormley's question request, that information should be supplied to the whole Committee, as well.

MR. GIMELLO: We will be glad to follow up immediately with this. It won't be difficult.

MS. BOYLE: We have it.

MR. GIMELLO: We have it; it is just not here at our fingertips.

SENATOR GORMLEY: You cited, on page 5, a line from Senate Bill 2987: "A serious source reduction program would

significantly reduce future disposal costs. It would also alter the major public investment to be made for new hazardous waste disposal facilities. What was your specific problem with that?

MR. GIMELLO: Well, in and of itself, Mr. Chairman, the language-- I wouldn't disagree with the first part, frankly.

SENATOR GORMLEY: The first sentence is okay.

MR. GIMELLO: That is why we are here.

SENATOR GORMLEY: Okay.

MR. GIMELLO: I mean, I hope that--

SENATOR GORMLEY: So, we are just talking about the second sentence.

MR. GIMELLO: Well, I think I was just trying to put into context the fact that these are expectations we all have. We are not sure we can get there. It will certainly alter the major investment. If we thought we needed a 100,000-ton incinerator, and after some source reduction activities we have a need for only a 50,000-ton incinerator, that is certainly something we want to encourage. But, what it doesn't obviate is the need to have that incinerator have a place to put its pilings in the ground. It needs a site. So, in the context that people read this, and misinterpret it that this means we don't need new facilities, I am worried.

SENATOR GORMLEY: Let me ask you a question on my particular piece of legislation, which is not specific as to goals, which leaves the goals back in your court, and then it comes back to the Legislature. Hypothetically, if the bill were to pass, would you be able to meet the time frame in the bill? Would you be able to come back with a schedule?

MR. GIMELLO: In 18 months?

MS. BOYLE: Is it 18?

SENATOR GORMLEY: It's three initially; it's 18 months before implementation. It is a shorter time frame.

MR. GIMELLO: Senator, what I have learned in this business since I have been doing it for the past five years, is that we always need more time. I don't want to sound like a whiny bureaucrat, but, no, I don't think three months is going to be enough. We are working on the outline for the Task Force's goals for '87 as highlighted here.

SENATOR GORMLEY: I would assume that when you get your report in this summer -- by the end of the summer -- that would basically be a blueprint--

MR. GIMELLO: Yes, sir.

SENATOR GORMLEY: --for you as to how you would set the goals if a measure similar to mine were to be implemented. Is that--

MR. GIMELLO: With any luck, we might even get a little closer, and maybe suggest some goals for you.

SENATOR GORMLEY: Well, as I said, we are all trying to strike that balance of not putting in an unreasonable goal, but, at the same time, setting up a process that makes it a meaningful incentive program. So how -- as a guesstimate, not to be held to a time frame, because we wouldn't want to set a precedent of a binding time frame--

MR. GIMELLO: I think end of the summer or early fall is doable.

MS. BOYLE: For the report?

MR. GIMELLO: For the report?

SENATOR GORMLEY: For the report, and if a measure such as mine, where you come back to the Legislature, were to be implemented? How long after that?

MS. BOYLE: Oh, I think you would need at least six months. At a minimum, you would need six months to do that, if you are talking about industry by industry in this State.

SENATOR GORMLEY: Well, the way the bill is structured, it basically puts it in your court to set up how you would do it. That is apparently how you are suggesting to

do it. That would be by the four categories of industry that you--

MR. GIMELLO: Well, not just these four. Certainly there are categories of industry that--

SENATOR GORMLEY: You would do it by category of industry as to how the tax incentive, of whatever nature -- how it would work.

MR. GIMELLO: That is certainly an element; that is correct.

SENATOR GORMLEY: I have no other questions.

SENATOR DALTON: Rick, the concern, in some areas, is with regard to New Jersey taking this obviously fine public policy step, as far as encouraging waste recycling and waste minimization, and setting up its own disposal facilities, and then having out-of-state waste come literally pouring on into the State. How do you reconcile all this? In other words, if, in fact, we go ahead -- and, you know, we are going to move ahead in some way, shape, or form -- in establishing a program, and you have Pennsylvania, New York, Connecticut, and the rest of the other 49 states not, doesn't this set us up?

MR. GIMELLO: I don't believe it sets us up, because the premise is-- I can't endorse the premise of the question. There are three components to the answer. Although it appears, and we like to note for the newspapers and for ourselves that New Jersey is out in front on these issues -- and that is absolutely the case -- we are not the only state looking at these issues. Major states, like New York and Pennsylvania and Ohio -- states that we exchange waste with -- are locked in the throes of the early policies that we have already struggled through. There is a general acceptance out there, Mr. Chairman, that each state, especially major generating states, is going to have to go it alone. They are going to have to take care of and build the capacity they need to take care of their own waste. The compact approach that low-level and

high-level radioactive waste is going through leaves a bitter taste in a lot of people's mouths. I am involved on the Federal level with every state that has an agency like mine, and their basic assumption is that they are going to have to take care of their own waste.

SENATOR DALTON: Why is that a basic assumption?

MR. GIMELLO: Well, the fear is that without that sort of control, things that have happened to us, such as the shutdown of Superfund sites because one site in one state where we had previously sent it decided they didn't want it any more-- You can't, in this business, be in the position of having to rely on someone else who has their own agenda.

SENATOR DALTON: Well, I am not so much saying we are relying-- I mean, the economics may be a driving force, as well.

MR. GIMELLO: That's true, and CERCLA.

SENATOR DALTON: I mean, obviously. Look at the solid waste situation, when Pennsylvania filled up our landfills. I mean, can't those same economic factors do the same thing with hazardous waste?

MR. GIMELLO: I don't think so, for two reasons, again. One, there are steps we can take to limit the impact of out-of-state waste in this State. It is very simple. We have already done that. In our capacity projections, we say, "We need a new incinerator and it has to be this size." We have limited the amount of out-of-state waste that has been calculated into that capacity determination. That puts us in compliance with recent court rulings, which say: "You have to treat all waste equally," and then a state agency or a state can take some proprietary actions to protect this resource. So, that is one way.

The second way is to add some excise taxes.

SENATOR DALTON: All you are doing there is saying, "We take our own waste first."

MR. GIMELLO: Right; exactly. But if we permit a capacity in this State that is meant to address New Jersey's need, with a fraction of expansion for flexibility, we have prohibited us from becoming the dumping ground. If the capacity isn't there to dump on us with, then you can't bring it here. That is why you are absolutely correct, as is Senator Hurley.

How we measure the size of capacity is a determination still to come, which is bound to be impacted by what we do on waste minimization. But, we are three years away from giving someone a permit that says, "This is the size of the facility you are going to build." So, we have the time and the flexibility to take the steps we think are necessary to check out-of-state waste.

SENATOR DALTON: You are suggesting that the permitting process will preclude New Jersey from becoming a dumping ground.

MR. GIMELLO: I think so, absolutely.

SENATOR DALTON: Okay, and that has been tested in the courts?

MR. GIMELLO: Well, in South Carolina-- That is one specific instance where it has. Also, looking at the rulings, the Pennsylvania vs. Burlington and Pennsylvania vs. New Jersey court rulings, our legal interpretation and advice on those is that what they said was, "You've got to treat all waste equally, and then you can take some measures." I'll give you an example, last week Rhode Island took steps within their own legislature to designate hazardous and solid waste capacity as a state resource, so they can control completely the use of that resource. Those are actions we ought to explore, and the things that other states are doing, as well.

SENATOR GORMLEY: Has that been challenged in court?

MR. GIMELLO: I don't know.

MS. BOYLE: I'm sure it will be.

MR. GIMELLO: I am sure it will be. I don't mean to give you a glib answer as though we are 100% sure, but what I'm saying is, the premise that we will automatically become a dumping ground for the surrounding states is not one I am willing to accept. There are a number of measures we can take to prevent that from happening.

SENATOR DALTON: It is not one that you are willing to accept. If I were in your position, I would be saying the same thing, but, at the same time, it is somewhat speculative at this point -- okay? -- that premise. I think there is a concern out there that that premise needs to be explored much more before we move forward. I understand your concern that we have to move forward, because of the State's needs, but there are skeptics everywhere. I suspect that I am becoming one of those skeptics in many ways. What we have seen happen in solid waste, we want to make sure doesn't happen in hazardous waste. That is a concern.

MR. GIMELLO: I think it should be. We ought to be able to work through this, with your assistance, and if we can't answer your questions we should-- We always have the option of State ownership. If we own these facilities, and operate them, then we completely exclude anyone's waste but New Jersey's. That option has been explored. There is paper on it. Perhaps we ought to go around that route one more time.

SENATOR DALTON: But, at the same time, you haven't, at this point, locked yourself into State or private ownership?

MR. GIMELLO: We have not. We also have not rejected it totally.

SENATOR DALTON: Okay. Bill, on that subject, do you have a question?

SENATOR GORMLEY: I was going to say, I think the primary goal is the objective you are bringing up, Mr. Chairman, that the out-of-state waste cannot be brought in. I think your fear is-- You know, it will hit a Federal judge,

and he will order it over the bridge. And there won't be anything we can do about it.

I would be curious to know if we could check out the Rhode Island bill, because I assume that bill could move rather rapidly, and have counsel check out as to the territory judgment actions on some of these measures, so we can get a feel for it right now. We will go to Federal court now, and we will lose the hypothetical, instead of a real case. We ought to review a declaratory judgment action on the Federal level, or something of that nature, to get a readout on this, because we wouldn't want someone to say emphatically that something won't happen, and then four years later it happens.

MR. GIMELLO: Believe me, no one I work for, or anyone sitting before you today, wants to see that happen either.

SENATOR GORMLEY: I think it is really worth exploring now, especially-- If it is State ownership, fine, then we will just do it and get it out of the way now, and set up some form of capacity on the State level. But the Chairman brings up an excellent point.

MR. GIMELLO: The other driving force, Senator Dalton, is the recent CERCLA amendment, which says that each state -- in the next three years -- must certify capacity to treat and manage its own waste, or no more Superfund money. So, I think you will see some of our sister states, if you will, move up a gear in terms of--

SENATOR DALTON: Let me explore that just a little bit. Does that mean that each state has to set up a disposal system to take care of its own waste with regard to its Superfund sites?

MR. GIMELLO: No. It says you have to be able to certify capacity. How you do that, whether you do it through cooperative agreements with other states, or building your own capacity, or expanding an existing--

SENATOR DALTON: What is it based upon? Is it based upon all waste? Is it based upon Superfund waste?

MR. GIMELLO: All waste, including Superfund waste.

SENATOR DALTON: Okay. The second question I have deals with this issue: One of the problems I have -- one of the many problems I have with our present solid waste program, or non-program -- is the fact that-- What we have done is allow people to go out and site and size facilities for the disposal of solid waste, in many cases before we have come up with an effective recycling program. In other words, we have put the cart, in many cases, before the horse. Aren't we doing the same thing in this instance?

MR. GIMELLO: It has been something that Senator Hurley has brought to our attention, and we have tried to respond, as follows: The decision about where a facility is going to be is in the legislation that we operate under, separate from the permitting activity, which goes to how big that facility is going to be, and how it is going to operate. I don't think we have put the cart before the horse. As you can see, deciding where these facilities should go, as a goal in itself, has been a very laborious process. It is not finished yet. I don't think there is any reason to stop that process, because we know there is going to be quite some time between "This is the appropriate site," and "Here is your permit, Mr. Operator," and the key to turn the facility on, for us to work through these issues of how big it should be, and to address out-of-state and these other concerns you raise.

So, no, I don't think we have put the cart before the horse. The Legislature, in drafting S-1300, was very clear. They said this activity first. They even limited our ability to acquire a piece of property, based on the philosophy that these have to be separate, knowing that in this world of siting there is going to be a lot of time. You are hitting a moving target, and you need the flexibility to be responsive.

SENATOR DALTON: Haven't you taken that flexibility away from yourself by indicating publicly that there is a need

for "two incinerators and one encapsulation facility," without determining what can be recycled first?

MR. GIMELLO: I don't think so, because in the management plan what we said was, "These are projections that are good through 1988." We know they are going to have to be reexamined, and a management plan update, which is required as a second step to follow-up, is being performed beginning this summer. So we know, okay? And the management plan language-- I will grant you, it doesn't come across in newspaper articles, but in the management plan options and the Commission's pronouncements and distribution of information, we indicate that that number is good through 1988, and we have to keep looking at it. It could change. It could dramatically reduce or increase, and we have noted all that.

SENATOR DALTON: In other words, in many cases where the-- I don't know how many sites you have left. I know a couple, however. Where those sites are presently being considered, the premise that some of the people locally are working under may be a false premise. In other words, the technology that they are assuming at a specific site may, in fact, not be the technology.

MR. GIMELLO: No, I think we can be sure that we are going to need some sort of thermal destruction unit for the waste in New Jersey. We know that there is a capacity shortfall. The question--

SENATOR DALTON: An incinerator.

MR. GIMELLO: An incinerator. But there are a lot of different--

SENATOR DALTON: I love that, by the way.

SENATOR GORMLEY: That is like revenue enhancer for--
(remainder of comment lost to transcriber; everyone talking at once)

MR. GIMELLO: No, no; no, it isn't. I apologize.

SENATOR DALTON: You're having a thermal destruction unit here.

MR. GIMELLO: But the reason I used the term was because--

SENATOR GORMLEY: Get Spielberg out here.

MR. GIMELLO: There are things coming off the drawing boards now that aren't really incinerators in the way we view them. They limit the amount of oxygen, and they do things differently from incinerators. So, I am not trying to be glib. It is really-- We know we need that kind of capacity, and we certainly need some sort of final resting place for their treatment residues. We do not have that technology in this State. Every time we find residue, or we are successful in reducing toxicity or volume-- You will hear today, I think, from some of the representatives who manage this stuff. That has to have a resting place. So, we don't have one of those in New Jersey. So, it is a degree, Senator. It is not the fact; it is the degree of the issue.

SENATOR DALTON: In other words, are you suggesting that the by-product of the incineration process will go into the encapsulation facility?

MR. GIMELLO: That is certainly something that we have envisioned. That is correct, Senator. But it is not the only kind of waste. It is one of the kinds of waste. Let me give you an example: We have sitting, in the City of Newark, a mound of dioxin contaminated soils. It is sitting there. DEP signed a consent order. They are going to entomb that, encapsulate that, cover it, leave it there. Why? Why in the middle of Newark? Because there isn't an alternative right now to treat that waste. Those kinds of waste have to have a home, especially if they are being regularly generated. So, incinerator ash is but one example.

SENATOR DALTON: The criticism that I have heard again and again is that you are locking yourself into that technology. You are locking yourself into encapsulation. You know, how do you respond to that type of criticism?

MR. GIMELLO: We have tried not to. It is an interesting line to have to walk, Senator. If we go to a public meeting attended by 5000 people, they want to know what the technology is, because there are risks associated with them that they want the right -- as they should have -- to evaluate.

SENATOR DALTON: Right.

MR. GIMELLO: We have tried to indicate that we need to be flexible for all the reasons we are discussing here. Unfortunately, the criticism we get from there is, "You don't even know what you want." So, it cuts both ways.

MS. BOYLE: We know we want it to be above ground. The legislation is specific that it cannot be a traditional below-ground landfill, so we know we are looking at an aboveground technology.

SENATOR DALTON: What leads you to believe that you are looking for an aboveground technology, when you have already admitted that the technology is changing, and it may change prior to the actual facility being erected?

MR. GIMELLO: We were directed by the Legislature in S-1300 that these facilities must be -- I'm quoting -- "totally or partially above grade and be physically accessible to inspection."

SENATOR DALTON: But what I am suggesting is that an aboveground facility-- Could an aboveground facility be defined as an incinerator?

MR. GIMELLO: Yes, I guess so.

SENATOR DALTON: What I am suggesting then is-- I have no quarrel with that aboveground definition. However, what I have a question about is, now you are considering sites for encapsulation -- okay? -- and those sites may not be really relevant to the technology that is available at the time you are ready to go forward. Do you understand my question?

MR. GIMELLO: I do, sir; I do understand. I would suggest that if we have found a location that meets all of the

siting criteria, given that they were designed to give you the maximum protection, that what we put on that site-- Let's assume that an aboveground facility after we have done everything is not what we want to go with. It is too expensive, given the kinds of waste, which I am assuming is the suggestion in your question. We might build another technology, but the site, because of the parameters that we understand regarding hydrology and geology and proximity to population and discharge, is still a good location on which to put that technology-- If it is a little bit different than what we envisioned four years ago, that's fine. I think progress ought to be factored into it. But again, my point is, where the best location for the technology is, we believe, is a separate point.

SENATOR DALTON: It is a separate point, regardless of the different types of technology that may be available.

MR. GIMELLO: If anything, we have erred on the side of caution.

SENATOR DALTON: Bill?

SENATOR GORMLEY: The aboveground site-- What do you estimate to be the long-term tonnage that would be taken to this site before it would become filled up?

MR. GIMELLO: Well, the projections in the management plan indicate that if we were to find an 80-acre site on which to build these aboveground facilities -- these mounded facilities or entombed facilities -- it would take 110,000 tons a year for somewhere between 15 and 20 years.

SENATOR DALTON: What sort of recycling program do you have factored into that?

MR. GIMELLO: The 7% waste reduction factors that are in the management plan today.

SENATOR DALTON: The 7% waste minimization factor?

MR. GIMELLO: Yes.

SENATOR DALTON: Seven percent per year?

MR. GIMELLO: That is correct.

SENATOR GORMLET: So that will be compounded?

MR. GIMELLO: I'm sorry, it is not per year. It is over -- from '85 to '88. It is not every year.

SENATOR GORMLEY: It's 7% every three years.

MS. BOYLE: It ends up being about 1-1/2% per year. It was 7% for five years, from '83, when we started to our projected target of '88.

MR. GIMELLO: But remember, that is without us stimulating additional activity.

MS. BOYLE: And that was before the RCRA amendments kicked in.

SENATOR DALTON: That is without you stimulating additional activity?

MR. GIMELLO: That's right.

MS. BOYLE: That's right.

MR. GIMELLO: So, we know we can do better than that, without question.

SENATOR DALTON: So you may have a siting problem. You might have a sizing problem.

MR. GIMELLO: In that it may be too large? Perhaps. Or perhaps it gives us capacity for 40 years, instead of 20. Or perhaps we build something smaller on the same location.

SENATOR DALTON: You know, I'm sorry. I broke my own rule.

MR. GIMELLO: I understand, Senator; I understand.

SENATOR DALTON: There is -- as Senator Gormley would advise me -- a nexus to the issues.

SENATOR GORMLEY: If he remembers nothing else, he'll remember nexus.

MR. GIMELLO: I appreciate it. I understand the issues perfectly.

SENATOR DALTON: Okay. Bill, anything?

SENATOR GORMLEY: What is the land mass for the incinerators?

MR. GIMELLO: Five to ten acres.

SENATOR GORMLEY: What is the cost of construction of the incinerators today?

MR. GIMELLO: Somewhere in the neighborhood -- depending on all the different technologies, and we'll look at that-- I think we have seen numbers anywhere from \$20 million to \$100 million.

SENATOR GORMLEY: When you explore an aboveground site, as it pertains to out-of-state use of a site, I assume you would also be looking at the incinerators. They would also be-- I assume you would merge that review of both incinerator and aboveground site. I have no other questions.

SENATOR DALTON: Thank you very much. We appreciate it.

MR. GIMELLO: Thank you.

SENATOR DALTON: Next on the list is John Gaston, Assistant Commissioner, Department of Environmental Protection. John?

ASSISTANT COMMISSIONER GASTON: Please bear with me for a minute until we get set up here. (referring to slide projector)

SENATOR DALTON: Sure.

ASSISTANT COMMISSIONER GASTON: Dewling is going to give me an "F" for failing projectors, so let me go ahead without it.

SENATOR DALTON: Okay.

ASSISTANT COMMISSIONER GASTON: If you will bear with me today, the context of Rick's presentation is a good--

SENATOR DALTON: Will you please speak up, John, just a little bit. Move that mike forward, if you would.

ASSISTANT COMMISSIONER GASTON: Senator Dalton, thank you very much for the opportunity to appear here. The context of Rick Gimello's presentation, I think, complements what we have to say in terms of the Department's presentation. If you

can bear with us, our presentation is a little bit broader than the specific focus of the bills, but as the conversation went in questioning Rick, you just have a natural tendency to move beyond the simple context of the bills.

I gave you a package today of really four things. We haven't been here for quite some time, so we wanted to share our share of paper with you for reading purposes. Our formal remarks are part of our program of promoting minimization. We put together an information series on waste minimization. You have a copy of that. There was a seminar held in 1985 on source reduction that the Department and a variety of other agencies cooperated in putting on. You have that. And, most recently -- we had separately given you this -- this is an update on where the program is in March, 1986. And we intend to furnish you and Assemblyman Bennett, and a variety of other parties, six-month updates with respect to where the program is, so the complexity that we are all fighting under can be dealt with.

I am not going to read this testimony. I had hoped to have the overheads to run through it, and attached to the actual speech are the overheads. I am going to speak from them after I get started.

I am here today to provide testimony to the Committee on a series of waste minimization bills proposed in response to public concern, and which we trust will augment the existing initiatives for the comprehensive waste management program within the Department.

I would like to thank you, Senator Dalton, and the other Committee members as well -- Senators Gormley, Bassano, Dorsey, Hurley, Cardinale, Bubba, Connors, Gagliano, DiFrancesco, Garibaldi, Brown, Dumont, and Haines--

SENATOR GORMLEY: Did you really mean that thank you? Was that sincere? (laughter)

ASSISTANT COMMISSIONER GASTON: --for actively soliciting the Department's response in this area, and setting the foundation for an effective and comprehensive program to be established that can meet all concerns fairly and equitably. In order to achieve what we would call a comprehensive hazardous waste management program which protects public health and the environment, we must do three things: We have to address the mismanagement of the past, which, in a financial sense, we did last year; we must maintain a strong regulatory program to control current practices under any scheme of management of all of this waste -- that is an essential ingredient; and, of course, we have to prevent the creation of new contaminated hazardous waste sites.

In my testimony today, I will address each of these issues and outline legislative needs to assure the success of our comprehensive program, an important component of which is minimization of future hazardous waste.

Now, there is no need to go into great detail. We are all aware of the fact that with respect to the remediation of past practices, the \$1.6 billion program articulated by the Department was dealt with by the Legislature last year in the form of State funding. We are now actively seeking our Federal portion of that funding, and, of course, we have responsible parties to deal with. The tools we are using are the CERCLA law and the new Superfund law -- SARA, the amendments of 1986 -- which I think on another occasion we are going to have to talk about because, quite frankly, they have serious impacts with respect to the future of our program. RCRA corrective action-- Only two years ago that came on the scene, and it also has serious impacts and implications. And, of course, the New Jersey Spill Act has been instrumental in driving forward a lot of the activities in this State, that haven't moved forward as quickly in other states.

SENATOR DALTON: John, we may have you in, in the near future -- at a Committee meeting -- just to deal with that.

ASSISTANT

COMMISSIONER

GASTON:

Right.

Parenthetically, I might say that New Jersey has done very well under the state of suspended animation of Superfund last year, and now this year, and we expect, over the two years, to get 20% of the national money that is available coming to New Jersey to do RIFSS, designs, and cleanups.

Commissioner Dewling's very own pie diagram is showing more black areas, which indicates that the program is, in fact, moving forward.

The second element of a comprehensive program deals with regulation of current practices. Just to put the regulation of current practices into a context, there were 9700 notifiers under the RCRA Program. That is Exhibit 7, attached to my speech. There are 4200 active handlers today that we are keeping track of. There are 260 active treatment, storage, and disposal facilities in New Jersey, and 164 facilities that require permits, plus another 200 additional facilities pending enforcement resolution. And there may be about 640 facilities that require corrective action. So, the universe of RCRA and RCRA regulation is fairly significant, and the number of active handlers is also, you know, a reasonable number.

With respect to the complementary part of the minimization program, the Department's efforts in promoting and gaining compliance in the enforcement arena, we want to emphasize that we put ourselves on the hook in the five-year plan for \$520 million worth of money coming from the private sector. Thus far in 1986-'87, we have gotten about \$14 million worth of commitments. So, in half of the year, we have gotten about one-fifth of the commitments, and we are optimistic that we are going to move forward. However, we do realize that we have work to do.

That kind of activity, to us, is the driving force to have the outside industry pay more attention to the minimization program. If we are tough, minimization makes more

sense, because it is, perhaps, a better avenue to follow than dealing with us in the ugly enforcement mode.

We gave you a quick summary of what the ECRA Program has done. We are most optimistic this year that when the Siting Commission does its reanalysis of what the figures are, we are going to see some changes with respect to what kinds of waste are being produced and where they are going. ECRA numbers are staggering. Approved cleanup plans in the six months since October of '86, \$2.2 million. Consent orders in the six months since October 1-- One hundred and twenty million dollars of financial assurances have been put forward in signed consent orders, and that doubles the amount of money that occurred in the previous six-month period. So, last year, ECRA brought \$240 million of financial assurances to the table, and the mortgage, if you will, to clean up literally hundreds of facilities.

Our target in 1987 -- calendar '87 -- is to get the cleanup plans developed, approved, and implemented. We feel that ECRA, while it certainly has been criticized because it has been slow in meeting the tremendous demand that has gone along with it, is beginning to get to the point where we are seeing the routine things done on time. We expect, in 1987, to see the more complex things done in a reasonable time frame. The reasonable time frame is going to produce more waste. It is also passing the recognition down through the regulated community that, "You have to do something with this waste, rather than just leave it on your site, dump it on the ground, and then pay big bucks at a point in time when you are trying to sell your property."

The third element of our comprehensive waste management program deals with the prevention of new sites. Three elements: The minimization of waste, enhanced regulatory and enforcement controls, and program support through a fee schedule -- three critical elements in the prevention of new

sites. The prevention of new sites is, I guess, the Department's lexicon for the minimization -- or an element of the minimization program.

In Attachment 12, New Jersey's accomplishments in waste minimization over the last few years are articulated. We have been involved with the Household Hazardous Waste Collection Program. It provided for the removal of 10,000 gallons and over 2400 pounds of household hazardous waste from the environment. They are insignificant numbers, but what they do, and what we have heard they have done, is promote a consciousness of the importance of hazardous waste in the community, and a good deal of the business of dealing with hazardous waste is having a greater consciousness and appreciation for it.

The hazardous waste reuse facility regulations have been amended to allow generators of hazardous waste to send their waste for reuse, rather than disposal. That is something we have taken the initiative to do under our State program, and it is one example of one of the ideas that are in the bill package before you. Look at your regulations, and do something about them.

The Hazardous Waste Source Reduction Seminar: Two hundred and twenty representatives from industry came in. The report before you is the result. The hazardous waste information series-- Again, I showed you one of the documents we put together. We are in the throes of doing a waste minimization survey, distributed through the Manifest Program.

Last, but not least, we have developed six points in the minimization initiative that the Department is actively promoting. The six items shown in Attachment 13 begin with the hazardous waste fee schedule. In order to enact a hazardous waste fee schedule, that would be somewhat analogous to the NJPDES system that exists. The Department would require legislative authority from you, the Legislature, Mr. Chairman.

We intend, if we are given the kind of authorization we are seeking, to base the fee schedule on the volume of waste generated, the toxicity of the waste, and the type of facility, a/k/a land disposal, incinerator, etc. The incentives and the cost that went along with that would reflect the environmental concern, that certainly gets expressed time and again for each of those characteristics.

The second element would deal with waste audits. The waste audit idea is an idea whose time has come, and really it has come for two reasons: One, waste audits, I think, can be very helpful in assisting in minimizing the amount of hazardous waste, particularly when it comes to the no-tech or low-tech solutions to hazardous waste. In other words, doing the things that make common sense that do not result in hazardous waste problems.

Secondly -- and this is a general concern again -- the issue of compliance -- environmental compliance -- is, I think, something that we are repeatedly criticized for -- for not carrying out enough enforcement actions and, quite frankly, the criticism is somewhat justified. But it seems to me that the issue of compliance needs to be looked at in a broader context, and the idea of having assistance in the form of some field auditors -- trained people -- who would get to problems before they were problems to the Department, is something that could be evaluated. So, a waste audit program that was non-regulatory in nature, done by certified auditors, involving either Rutgers or NJIT in the training program, would make sense to us as a complementary program to assist in minimizing hazardous waste, and also assisting businesses with identifying very early compliance problems and correcting them.

The third area: Research on innovative technology. The new SARA amendments make it absolutely clear that we are going to have to have better technological answers, whether they be the technological solutions that the Hazardous Waste

Siting Commission implements, or the technology that is applied now at the 100 existing or proposed Superfund sites in New Jersey. We need to have more resources put into the research of innovative technology. A bill is moving through the Legislature -- A-2536 -- which would effectively amend the Spill Fund to provide for the use of interest moneys on the Spill Fund for a broader set of purposes. The broader set of purposes would be source reduction, minimization, and improved technology in all areas, not just the marine environment. If you recall when the research moneys were decided in Spill Fund, it was kind of with the direction that they were to be oriented to oil research in the marine environment. We would like to see that unfolded in light of what today's needs are, to represent a broader set of needs.

SENATOR DALTON: I'm sure Hal Bozarth stands ready to support that concept. (laughter)

SENATOR GORMLEY: Would they raise the Spill tax, or use the existing?

ASSISTANT COMMISSIONER GASTON: No. It would be an allowed use for interest moneys that are earned on Spill Fund. They are put into a separate account for use on research purposes.

SENATOR GORMLEY: What have we done with the interest to this point? Did we plow it back into the Spill Fund?

ASSISTANT COMMISSIONER GASTON: No. The interest has been in an aside for the purpose of doing research of a variety of natures. But the research has been directed more toward the marine environment. For example, a couple of years ago, the study of PCBs in bluefish and stripers.

SENATOR GORMLEY: You credit environmentalists.

ASSISTANT COMMISSIONER GASTON: Yeah. Well, I haven't caught one for such a long time that I forget what they are like.

SENATOR DALTON: Is that information with regard to the amount of interest you earn each year available?

ASSISTANT COMMISSIONER GASTON: I think so. It should be in the report.

SENATOR GORMLEY: About how much is it?

ASSISTANT COMMISSIONER GASTON: How much has been spent? I don't have that at the tip of my tongue right now, excuse me.

SENATOR DALTON: If you had that at the tip of your tongue, I was going to ask several other questions about the Spill Fund.

ASSISTANT COMMISSIONER GASTON: Well, sometimes it is best to take the Fifth Amendment early.

SENATOR DALTON: The old "tip of the tongue" approach.

ASSISTANT COMMISSIONER GASTON: Financial incentives evaluation, you know, the issues of what kinds of taxes -- as Senator Gormley has suggested -- or grants or loans, need to be carefully looked at. The point that Mr. Gimello made-- There should be, in any kind of a financial incentive, clearly no reward or credit for noncompliance, and the correction of noncompliance.

The Department's Technical Advisement and Assistance Program will be promoted, information sharing between industry and DEP, and, sixth, on our own, we have taken the initiative, and certainly would welcome the direction, to look at the regulations that we in the State have. But, also, as one of the concurrent resolutions says, we have to look at Washington, at the ECRA Program, because a good deal of what our New Jersey program consists of is mandated by Washington. I would say 95% to 98% of what we have comes out of Washington.

Enhanced regulatory enforcement tools are going to drive more people to be serious about the issue of minimization. Legislation to place penalties in the Hazardous Discharge Cleanup Fund, I think, will be before you at some point in the near future. Legislation to provide oversight costs for ACOs that are entered into as a means of having the

costs of an expanded enforcement program covered-- We would propose and suggest that. And an enactment of stiff legislation to increase penalties and criminal liabilities for polluters ought to be done. Just parenthetically, I think that in recent weeks and recent months, the issue of criminal liability is becoming more and more an issue that the regulated community has to pay attention to. It is not just the dollar liability that is out there. Routinely, cases that we are involved with are referred to the Division of Criminal Justice. We don't know what happens to them once they go over there, but we are beginning to see in the newspaper that some action is being taken. Cases that were perceived at one time to be strictly civil cases, are now being looked at through another set of glasses. I just think that that, among other things, is a serious initiative that changes the stakes with respect to why minimization makes sense today.

Program support for a lot of the minimization initiatives and the complementary enforcement regulatory initiatives would come through a fee program, which we think is critical at this point in time for the hazardous waste program. The results we are looking for from enactment of a fee program that would generate some \$8 million to \$10 million -- our current program costs are about \$8 million, just to have a jumping off point -- are waste reduction, integration of the program, funding for the enforcement initiatives we have committed ourselves to in our five-year plan, and ensuring that the costs of the program are, indeed, shifted to those who are the causes of the problem. I don't want to say the word "polluter," because it is not totally a fair word to use, but those who are handling, treating, storing, and using hazardous waste.

It would very much be a statement to strike a balance between the over \$1.5 billion that we have committed ourselves to in the next five years in cleanup, with a comparable program to avoid or prevent pollution from taking place.

Our last exhibit, in effect, summarizes what we have said. Remediation of the past has to take place. Waste minimization-- Wastes that are not generated do not have to be treated, stored, or disposed of. The logic of that, you know, is just compelling to you and I, and we hope that as time goes on, it will be compelling to the regulated community. Regulatory control is absolutely necessary for waste that cannot be minimized or reduced through permitting and enforcement.

The siting process and the siting program and the location of facilities is inevitable for residuals that must go somewhere. Your conversation with Rick about the SARA requirements on capacity assurance is something that we are obviously very concerned with, are going to look at carefully, and participate at the national level in shaping the form of what capacity assurance means, because no one knows the answer to that right now. We know what Congress has said, but we don't know how it is going to be translated into reality.

Lastly, the hazardous waste fee schedule where the "polluter" does pay for the program, provides an incentive for reduction, and does support broadly the regulatory enforcement and minimization program.

The remarks we have made and the position we have tried to lay out here suggest that we really are dealing with the whole -- a whole that consists of cleaning up the past, regulating the present, and having a stern set of initiatives to deal with minimizing and preventing future problems through a reduction, or whatever program.

With that, I will stop my 10 or 15 minutes. It is all in black and white in terms of the specifics of our presentation. Dr. John Trela, Director of our Division of Hazardous Waste Management is with me today, as are Michele Putnam and Frank Coolick, who are Assistant Directors in John's Division. So, we would be glad to answer your questions.

SENATOR DALTON: Thank you, John. Bill?

SENATOR GORMLEY: Back to the Spill Fund money. (laughter) He brought it up. The expenditure of the money to date-- Has it been spent on research at all? I am just curious. You mentioned research, and I looked in your remarks, and specifically--

ASSISTANT COMMISSIONER GASTON: Well, in your package, just to have some defense in dealing with specific numbers, we have-- In the update, the first couple of pages give you a listing of where the money in Spill Fund has come from, and there is some \$96 million available in the Spill Fund as of December 31, 1986. Interest that has been earned on funds that have been deposited in the Spill Fund has been available to do research in the past. I will have to get you a specific number about how much of that.

SENATOR GORMLEY: All right. Let's forget the dollar amount.

ASSISTANT COMMISSIONER GASTON: Right.

SENATOR GORMLEY: Is this in-house research, or external grants?

ASSISTANT COMMISSIONER GASTON: It is a combination. The Office of Science and Research is generally considered to be -- is the caretaker of the dollars there. They have some money being spent internally for research they are doing, and they have some being done on contract.

SENATOR GORMLEY: What I don't want to see is that we have created-- Obviously, we need money for research. There is no question about it. You want to see grants appropriately expended. It would seem to me, however, that the amount of money needed to do this type of research goes far beyond the amount of money-- You are in the right direction. I am agreeing with what you are doing.

Has there been any initiative on the Federal level where this State money -- if you had a pool of money to serve

as a 10% match, or whatever -- would serve as a match for a heavy-duty, if you will -- for lack of a better phrase -- Federal program to really get into this research? I think this research initiative-- You know, they have the Star Wars Initiative, and whatever. I think this is the type of initiative we are looking for in this area, and enough money isn't being spent. I don't think New Jersey can bear the burden for the type of research that is needed.

Is there a Federal initiative where this amount of money that we are setting aside -- the \$5 million a year, the \$3 million or \$4 million a year, or whatever it might be-- That is all it could be. If it is only \$96 million in principal that has been generated, maybe it is only \$1 million. Is there some form of Federal program we can tie into?

ASSISTANT COMMISSIONER GASTON: Well, the tie is not direct, but last year the Feds came up with what they call their SITES Program -- S-I-T-E-S -- which means something, but basically what it is, is a process of approving technology -- prior approval of technology -- for use in field applications principally associated with the cleanup of hazardous waste sites around the country.

SENATOR GORMLEY: But that is not for what we are talking about today -- source reduction and mitigation. There is not a Federal program to tie into State or private research? They haven't, on a Federal level, made the reduction in advance any form of priority on the Federal level?

ASSISTANT COMMISSIONER GASTON: They just did their report last year, as everyone else did, on reduction and minimization. I guess a distinguishing feature of the Federal program to date has been that it has been related to Superfund cleanups on one hand, and the implementation -- the very slow, arduous implementation -- of RCRA on the other -- the regulatory components.

SENATOR GORMLEY: But, simply stated, they have not even put dollar one into the area that is the subject of the hearing today?

ASSISTANT COMMISSIONER GASTON: Well, they might have put dollar one, but not dollars two, three, or four, you know, in a symbolic sense.

SENATOR DALTON: The base line data-- You indicate here that we just don't have that at this point. Is that correct?

ASSISTANT COMMISSIONER GASTON: Well, we are moving to improve the quality of our data base. Our manifest data base-- For example, in the past, site cleanup data had been manifested to a single number, so we didn't have site-specific information -- site cleanup information in terms of volumes and characteristics of the waste. We are now changing that around to put the manifesting of site cleanup information on a site-specific basis. We are doing the same thing in the ECRA Program. They are, you know, two areas where the first version of the management plan -- the Hazardous Waste Siting Commission Management Plan -- took and put it off to the side and said, "Next time around, we are going to improve the information and the quality of the information." So, we are working to try to get our manifest system in shape to do that.

SENATOR DALTON: But the answer to my question is no, is that correct?

ASSISTANT COMMISSIONER GASTON: It is not as good as we would like it to be, that's right. I don't want to say that that is an absolute no, because our manifest system is considered to be among the top around the country with respect to the kind of information that is available, relatively. But if you ask in absolute terms, "Does it give you the kind of information -- the three significant figures you might like to have to assist in some of the policy making here?" the answer is probably no.

SENATOR DALTON: My second question deals with the whole issue you touched on, John, with regard to the enhanced regulatory enforcement controls. What you indicate is that there is going to be a lot -- not a lot, I don't want to-- There is going to be waste that cannot be recycled or minimized. As a result, what you're saying is, there has to be a regulatory approach to ensuring that that waste is, I suspect, disposed of properly. Is that correct?

ASSISTANT COMMISSIONER GASTON: That's right.

SENATOR DALTON: What do you foresee DEP's needs in this area as being?

ASSISTANT COMMISSIONER GASTON: Well, one of the three things we suggested was to have the last first. The stakes of noncompliance ought to go up. That means in the form of penalties on one hand and criminal liabilities on the other. There ought not to be anything other than the sternest signal given that compliance is the way things ought to be.

Two other things that have been suggested that we think are meaningful if, in fact, there are going to be any penalties, as was the case last year with ISF -- a one and a quarter million dollar penalty-- Those things, logically, ought to go back into the Hazardous Site Discharge Cleanup Fund for purposes of expanding the resource base available to cleanup.

The other thing, from a programmatic standpoint, that would be helpful, would be to make it clear that when we enter into enforcement agreements -- administrative consent orders -- the costs of overseeing those agreements are the costs that ought to be paid by the persons we are dealing with. It ought not to be the public at large that deals with that. That would assist us in supporting the gradual development of our enforcement case management program, to provide the resources to reel the rest of these guys in and, in fact, to put us on a schedule to meet the commitment we have made -- the planning

commitment we have made -- to do \$500 million worth of cleanups over the next five years. You know, we are not going to be able to come to you and say, "Senator, those weren't the numbers." The numbers are there, and you are going to be able to look at them just as we are going to be able to look at them. So, we are trying to say up-front one of the things that could be of assistance to achieving those numbers. Those are the three things that I think are of some value.

SENATOR DALTON: They are fairly general, John. I thought you had something more specific in mind. For instance, you seemed to indicate that there is a need for actual bodies out in the streets with regard to ensuring the disposal of those wastes that cannot be minimized or recycled. That is the type of data-- Or, you are not ready to give us that type of data yet?

ASSISTANT COMMISSIONER GASTON: No, not today.

SENATOR DALTON: Okay. I don't want to get into the whole issue of Superfund right now, but I think it is an important issue that we will explore with you, and I would like to do it as quickly as possible.

ASSISTANT COMMISSIONER GASTON: We have tried to take a first shot at the issues affecting the Hazardous Waste Cleanup Program, and in the report we have furnished to you, there are a couple of pages that articulate issues like: funding delays; the remedial process; the need for treatability studies; and the POTW problem -- which you are very much aware of; new limitations on how enforcement activities are conducted under the SARA Program, where both Washington headquarters and the Department of Justice become players; community relations; an old/new problem -- a site access problem; and the State's continued need to be in a position where we are advancing money to EPA to keep the program moving.

These are the kinds of things we have highlighted and are beginning to think about. We would be very pleased to come

in and talk to you, at your convenience, with respect to further applications.

SENATOR DALTON: Yeah, we will have you before the full Committee. That is important. Thanks, John. I appreciate it. Bill?

SENATOR GORMLEY: No further questions, thank you.

SENATOR DALTON: Okay, thank you very much.

ASSISTANT COMMISSIONER GASTON: You're welcome.

SENATOR DALTON: The next speaker on the agenda is a representative of the New Jersey State Chamber of Commerce, James Morford.

J A M E S C. M O R F O R D: Good afternoon, Mr. Chairman. I feel somewhat disadvantaged being the first generalist on the agenda after all that expertise you just heard. Perhaps my constituency might be best served if I simply, for the most part, seconded what Rick Gimello had to say, which I thought was very, very helpful, and very enlightening.

Members of the Committee, I am Jim Morford, Vice President for Governmental Relations for the New Jersey State Chamber of Commerce. The State Chamber is pleased to have this opportunity to share with you the views of our organization on the package of bills collectively dealing with the subject of hazardous waste minimization.

The New Jersey State Chamber of Commerce, which represents, among others, a broad range of chemical, pharmaceutical, and manufacturing companies, wholeheartedly embraces the concept of hazardous waste minimization. Many of our member companies create hazardous waste as a by-product of the goods and services which they provide. Our support for minimization is driven not by mere words, but by a record of actual accomplishment within industry. We believe that New Jersey industries -- through cooperation under a strict regulatory environment and dedication to the goal of good corporate citizenship -- have, over the past decade, achieved

remarkable success in the proper handling, minimization, and disposition of hazardous wastes.

In order to verify this fact, we at the State Chamber have begun an informal survey of our members to ascertain the extent to which hazardous waste minimization has, and is, taking place. The early indications are that industry is, indeed, working diligently to reduce the amount of hazardous waste it generates.

The New Jersey State Chamber suggests that legislative solutions to address the concept of waste minimization, such as the recently introduced Senate Minority package, may be premature. The current legal and regulatory environment in our State, combined with the economic forces of the marketplace, are major factors driving industry to decrease the generation of hazardous wastes. Disposal costs have risen as much as 100% over the past several years. The imposition of strict joint and several liability under the Federal RCRA and Superfund programs has dramatically raised the corporate consciousness about the need to minimize hazardous waste.

Before New Jersey moves to adopt any new controls in this area, the State Chamber recommends that the Legislature first determine the need for additional legislation. Our members tell us that they are willing to share information about their experience and activity in waste minimization as far back as 1980, the first year in which hazardous wastes were required to be manifested. We believe industry can demonstrate the great strides that have been made in waste minimization and that the current marketplace and legal climate are already producing many of the results sought in the proposed legislation. The State Chamber has established a Waste Minimization Task Force. The Task Force's views are being shared with you today, but we are still in the process of analyzing each of the bills.

A number of bills on today's agenda offer positive incentives and, to the extent that further hazardous waste minimization may be achievable, will encourage companies that can do so, to further reduce wastes. Specifically, S-2990, S-2991, and S-2992 offer tax incentives. Senate Bill 2995 offers relief from the regulatory mire by attempting to establish a "fast track" permitting system for certain qualified pollutant discharge permits and is, in concept, a good idea. Another proposal -- SJR-60 -- would be a good idea, if resolutions to memorialize Congress had any meaning or effect whatsoever.

The proposed Corporation Business Tax penalty bill -- S-2728 -- would, in our view, be inappropriate and ineffective in producing government-dictated levels of waste reduction. We applaud that portion of Senator Gormley's bill that calls for a careful, detailed examination of the issue before introducing specific reductions or mandates or tax penalties. The legislation does not allow credit for the significant reduction efforts that have already taken place in industry. It cannot increase the tax of a company, no matter how much hazardous waste it discharges, if that company is, in any given year, in a loss position. A convoluted regulatory structure would set levels of waste reduction to be achieved by generators. We believe that this legislation, while well-intentioned, and the first bill out of the gate on the subject, would, in its present form, act as a deterrent to industrial growth in our State. An approach that would reward business for making reductions when reductions can appropriately be made, might more likely achieve the desired result, in addition to encouraging a healthy economy.

As Rick Gimello stated, disproportionately high disincentives may very well result in increased illegal disposal. We have heard that this is the case now in California, for instance.

With respect to S-2989, which establishes a program of hazardous waste management practices and requires every generator to employ an outside auditor, we object to the cost that would be imposed by this legislation and the fact that there is no provision for a company to demonstrate hazardous waste reduction achievements it has already made.

Senate Bill 2988 requires the submission of waste minimization plans. Mr. Chairman, we respectfully plead with this Committee, and the entire Legislature, not to add to the regulatory responsibilities of DEP. That Department, in our view, is overwhelmed by the responsibilities it currently has, which are not being adequately managed. To add to that situation by authorizing still more regulatory procedures -- absent a clear emergency -- would not be the most responsible course the Legislature could pursue.

We suggest that S-2988 might require that generators of hazardous waste have a plan for waste minimization and also certify to the State that they, in fact, have such a plan.

Senate Bill 2984 creates an Office of Hazardous Waste Minimization within the Hazardous Waste Facilities Siting Commission. With respect to this proposal, we find ourselves in something of a dilemma. As stated before, we feel that DEP cannot handle, and should not therefore be burdened with, additional regulatory obligations. However, the Hazardous Waste Facilities Siting Commission was created to do a specific job and then go out of business. The Commission has worked long and diligently and may be nearing the actual siting of facilities. It should not be deterred.

The Source Reduction and Recycling Task Force working under the auspices of the Commission is doing an important job. Indeed, the State Chamber is proud to participate on that Task Force. We do not object to S-2993, which appropriates an additional \$50,000 to assist that effort.

The State Chamber finds that there are forces that are actually working against hazardous waste minimization. Those

forces include: The changing definitions of hazardous waste. Both EPA and NJDEP can effect an increase in the amount of wastes generated in New Jersey simply by identifying new materials as hazardous waste in New Jersey and not elsewhere in the United States. So, even though companies may be successful in reducing hazardous wastes in one area, their overall waste production could actually increase; and, the aggressive cleanup of Superfund sites and cleanups required under New Jersey's ECRA Program -- as you have already heard -- have increased, and will continue to increase the hazardous waste load.

Another major concern of the State Chamber is that, while the State may be shifting the emphasis to minimization, reduction, and recycling, the Legislature should guard against pursuing these goals as a substitute for disposal. Minimization efforts must remain compatible with the ultimate necessity for siting hazardous waste disposal facilities.

The progress made by the Hazardous Waste Facilities Siting Commission thus far is admirable. The State Chamber questions the need to create additional layers of bureaucracy that would duplicate the existing responsibilities of the Commission or burden it with new tasks that would result in little overall benefit to the State or to industry. We are concerned that the proposed "Office of Hazardous Waste Minimization" to be established within the Siting Commission could become another exercise in State oversight of industry that proves to be costly and difficult to manage efficiently.

The State Chamber believes the resources within the Siting Commission might be most effectively used if the Commission were authorized to gather data on the sources and current methods utilized by industry to minimize hazardous waste. The Commission could act as a central resource for the channeling of technological information among affected industries -- indeed, has already begun doing some of that through the Task Force.

The State Chamber firmly asserts that hazardous waste minimization is being addressed in a professional and responsible manner in New Jersey. We are committed to strengthening the partnership between government and industry, so that collectively we may correct inappropriate practices of the past and encourage new technologies to manage future hazardous wastes that will be generated in a healthy New Jersey economy. This partnership can be successful by ensuring that the work of the Hazardous Waste Facilities Siting Commission continues -- without excessive additional burdens or constraints.

We believe there is much to be learned about the subject of hazardous waste minimization, including what industry is already doing and the technologies available to accomplish waste minimization. To that end, the New Jersey State Chamber of Commerce cordially invites you, Mr. Chairman, the members of the Committee, Committee staff, and bill sponsors to an industry briefing session on hazardous waste minimization at a date convenient to you. Exxon Research of Florham Park has graciously offered its facilities for the briefing. We look forward to your response.

Thank you.

SENATOR DALTON: Thank you, Jim. Bill?

SENATOR GORMLEY: My version doesn't have the "We applaud Senator Gormley." I guess that was amended at the end. (laughter)

MR. MORFORD: Is that permissible?

SENATOR GORMLEY: Yeah, I guess that came in at the end. I think there is a little bit of confusion on my bill and the other set of tax bills. Your specific objection to my bill was the fact that it does not allow for prior initiatives to be taken into consideration.

MR. MORFORD: That is a concern.

SENATOR GORMLEY: It does, because it leaves it open to the Commission to review that. It does not preclude it, whereas the tax bills that you endorsed specifically preclude--

MR. MORFORD: We recognize that that is a problem.

SENATOR GORMLEY: Okay, but you didn't mention it for them. I was just confused about that. Thank you.

MR. MORFORD: Nothing personal intended, Senator.

SENATOR GORMLEY: Nothing personal, except the objection to mine is in the other bills. That is a matter of fact. That is as the bills read.

MR. MORFORD: As I said, in concept, Senator -- through you, Mr. Chairman -- we support the tax incentives offered by those bills. We do not attempt to suggest that we feel those bills are perfect as presented. They do not take into consideration past efforts. At some point, you have to make a cut. I recognize that. The bills have some question as to whether they apply off-site, on-site. There are things to be resolved in those bills, too.

SENATOR GORMLEY: What I'm saying is, what is set forth as the objection to my bill, is only set forth in the bills that you endorsed. I just wanted that to be on the record. Also, I am still waiting for our meeting, that was offered--

MR. MORFORD: I am still waiting for the completion of the work of the Task Force, to be followed up with that meeting.

SENATOR GORMLEY: Okay, but that was offered--

MR. MORFORD: Senator, we do have some positive suggestions we think we can offer on your legislation.

SENATOR GORMLEY: Okay, fine. Thank you.

SENATOR DALTON: Jim, I have no questions. Thank you very much.

MR. MORFORD: That is a sincere request. I will put it in a formal, written format, if you would care to have it that way. We would like to do that.

SENATOR DALTON: Either way is fine, and we will consider it, Jim. Thank you.

MR. MORFORD: Thank you, Mr. Chairman.

SENATOR DALTON:-- The next person on the agenda will be a representative -- I don't know exactly who -- of the New Jersey Business and Industry Association. I now know who. (said as witness approaches the witness table)

J A M E S S I N C L A I R: Let me get my reading glasses on. I promise not to read, but I just--

My name is Jim Sinclair. I am with the New Jersey Business and Industry Association. We, like the Chamber, have a broad constituency. We have 11,000 companies across the State that are members of the Chamber. A lot of them are manufacturers; a lot of them use hazardous chemicals; a lot of them have by-products that have to be disposed of. A lot of them are involved in waste minimization, for all the reasons that have been put forth before.

There are really three issues I would like to get to you today -- I will probably take about five or 10 minutes of your time -- and they are three really important issues. They center, not only for the Business and Industry Association, but for me personally, because I have been involved in this process for the last 10 years, and I have seen it on the side of government-- When I was in the Department of Environmental Protection, back in 1977 and 1978, we saw this problem emerging in New Jersey. Back then, in the Department, we may have had one or two experts in the Department who were looking at hazardous waste, toxics, and stuff like that, but now we have an Assistant Commissioner, and, you know, a staff of 100, fully occupied in something that was-- We looked for a funding package last year for just one part of our billion and a half dollar program.

The three things I really want to talk about are: 1) the siting issue; 2) the Department's capacity; and 3) sort

of the fairness and equity issue here. I won't get into the specifics of the legislation, but we will offer comments on all of the bills, and give it to you.

This siting process we have in New Jersey for hazardous waste siting is important to the business community. I just want you to understand that we stand fully behind the integrity of the siting process. I know the disclaimers are out there that really nothing in the waste minimization process is to interfere. It is really a questioning and a double look at policy. But, back in 1978, Commissioner O'Hern met with the business community, and said, "Look, we see this as a growing problem. We have Kin-Buc; we have Love Canal in New York State. We see this process as increasing government involvement in the handling of hazardous waste. We are going to see this at the Federal level; we are going to see it at the State level. We are going to do a manifest system. The manifest system is going to start to track hazardous waste, and there will be more and greater government involvement."

Industry said, "Yes, we see that that is necessary." The Commissioner said, "What do you need from us? What can State government give you?" Industry said to the Commissioner, at that point, "Just one thing. What we need in New Jersey is a process of locating, building, siting, and operating state-of-the-art facilities for handling hazardous waste -- the by-products, the end products." That was the only thing that industry asked for.

The Governor then put together an Executive Order, and met with the environmental community, met with local government, met with the League of Women Voters -- everybody who was involved in the process; everybody who had a concern for safe siting. That is the process which gave us the bill which you passed in the Legislature -- that the Legislature passed that set up the Dodd Commission. This is model legislation. This is the most citizen involvement in the

process. This is an open process of dealing with a public issue. This is a process that has the support of all these constituencies. This is a process that we stand behind.

It is important, at this point, when we are down to selecting a site -- or getting close to the Commission getting to the end -- that we do not obscure what it is they are going to do. I have talked to a number of the sponsors of these bills, and they said, no, that was not really their intention. We believe that is probably the case. This is going to be a very tough time, when push comes to shove. The process allows for local representation on the board, and it has been an open process all the way through.

I just want to tell you about our concern. It is really on the top of our agenda that the integrity of this siting process be maintained, not that it shouldn't be questioned. Waste minimization is something we support. Waste minimization is something-- If you can take it out of the waste stream, fine. We talk about a decreasing amount of waste. Part of the decreasing amount of waste in New Jersey is better practices. I spoke, this morning, to a fellow from a major chemical company; maybe they are a petroleum company. They reduced their waste over the past six years by 90%. They are running at 10% of what they were before, which is significant. That is the cost of economics; it is the environmental regulations; and a variety of things that are driving that.

We have also lost 100,000 jobs in New Jersey. We have closed down 1000 facilities in the State in the manufacturing sector. These are jobs that we are probably not going to get back. Now, we can talk about going to a service economy, the service sector, and all those things, but I think that the long-term strategy for the State is to have a balanced economy. We need manufacturing. We need to export something overseas to pay for all the televisions and Datsuns we are bringing in. That is number one -- the siting process.

Two is the Department's capacity to administer programs. I am a strong believer in the Department of Environmental Protection. I personally believe that they are on a mission from God. They are out there to protect the environment. There are people in the Department who are probably the best and most dedicated public servants. They are really looking to do the right things to protect the environment. What they don't do well is manage programs. They are not administrators. They are not, you know-- Part of this package of bills calls for the Department to provide technical assistance to industry. It is really sort of foolish, now when I think in retrospect, the whole question of the Mandatory Recycling Program being in the Department of Environmental Protection, now that it is a market-driven program. Really, these programs, if we are going to provide technical assistance to industry, and we really mean that we are going to do that -- provide grants, and all that kind of stuff -- then why don't we structure that part of the program -- whatever program we come up with, if we do come up with a program -- structure it in Commerce? Let the Department of Environmental Protection do what they do best, or what they should do best, and that is regulate and enforce. Let's separate those two things. I think it would be a lot clearer and cleaner for the business community to have it that way.

The last thing is the equity issue. I think about the person who said that his company has reduced their waste by 90%. Whatever way we set base line data in this process, we have to take into account, one, what it is that people have done? Let's not penalize them. And the second thing is, I don't see in this process-- I would love to see a process where a company could reduce waste, but increase production. There is nothing in this program that talks about people increasing their production which, in fact, may cancel out the waste reduction. They might wind up with the same amount of

waste from a facility, but they may be producing more -- twice as much. It might be as a result of plant expansion; it might be, you know, more people working. We have to look at that in the process. I don't see that in the process, and I am concerned about it.

The last thing I will leave you with, in terms of my perspectives on this program -- and, as I said, I will provide you with the written comments of the Environmental Quality Committee of the Association on the bills -- is my concern about what happened in Minnesota. You may or may not know that Minnesota sort of modeled their hazardous waste siting process after New Jersey's. New Jersey is leading the nation, and does have the model bill. But what they did was, they failed. They failed to site hazardous waste -- a modern, advanced, technologically capable and efficient safe facility in Minnesota, and their answer was waste minimization. So now they have a waste minimization program that is pretty good, but they are still trucking their waste to Michigan -- what they are not reducing.

So, the Superfund law requires that each state have the capacity to deal with the waste generated within itself, and to deal with the stuff that comes out of the Superfund sites. There is a demand that the stuff at the site be dealt with, you know, permanently. That is something that really cries out for having facilities.

We would like to be a part of the process. We would like to see a reasonable waste minimization program that didn't put too many additional regulations on industry, something that was really productive and efficient; something, in fact, where we could measure the progress at the end, and say, "Look, we really reduced the waste, and it was a cost-efficient and effective way of doing it." That should be built into the philosophy of the program, something, you know, that the Legislature should be able to monitor.

That is all I have to say.

SENATOR DALTON: Jim, I look forward to your specific comments with regard to the bills. Thank you for your participation today.

MR. SINCLAIR: Thank you.

SENATOR DALTON: The next speaker will be Hal Bozarth, Chemical Industry Council.

H A L B O Z A R T H: Thank you, Mr. Chairman. Before I get into some of the specific problems with the bills, as you have asked us to do before you today, I would like to echo some of the things that have been said by the other speakers. I will try to be as brief as I can. I do want to leave you some food for thought as you deliberate -- you and your Committee -- on this package.

I don't think it can be overemphasized enough, the need to understand that there will be those who look at this package and this issue of waste minimization as a hook to avoid the siting process. For all the good reasons pointed out by previous speakers, I caution the Committee to think that this will obviate the need for siting new facilities, thus saving political problems within people's districts.

The issue of waste minimization is a very sexy issue, frankly, and on its face it is easy to say, "Yes, we should do everything possible to reduce these wastes." As you have heard, it is not that easy. I would refer you again to the excellent comments by the Siting Commission as to the problems they have found in their Source Reduction Task Force and dealing with this very complicated issue.

Let me just say that there have been studies done -- and I will quote from one -- on a nationwide basis, on approximately 324 plants, by those manufacturers in the chemical and allied products industry. I think it is instructive to see that their trend analysis over a four-year period shows a decrease of about 16% in hazardous waste

generation. Again, numbers in this area are very hard to come by. However, from the trend itself, you can see that companies have taken the first steps down the road for minimizing waste.

The question is, if they are minimizing waste at this point, why are they, and what else can we do to help them along in a positive way? I think -- again, as other speakers have said -- if you look at the cost of disposal, the lack of available disposal at close range, you see that that is an disincentive to produce the same amount of waste. If you look at the lack of disposal options even existing, that is a disincentive, and, very frankly, the accruing liability to every shipment of manifested waste. New Jersey does have the best program in the nation. I think that is one of the things that bodes against some of the theory in these bills we see, that the continued generation of hazardous waste poses a health problem and an environmental problem.

We have very stringent regulations, as you know, Mr. Chairman, providing stiff penalties for people who violate those laws. So I think that we can safely assume that the people who are in the manifest system now in New Jersey generating their waste and shipping it either in-state for disposal options, or out-of-state, have an awful lot of concern that that material is disposed of correctly. If it is not, they suffer enormously, as we have seen in case after case from prior practices that weren't up to the standard of today.

So I think that is a major incentive, that business doesn't frankly need any help from government to tell them that they've got to do whatever they can to minimize waste. I think if you look at the basic -- as Jim Sinclair pointed out -- the basic process of manufacturing, the trick is to take the raw material, make the product, and, in fact, minimize whatever is in the midst of that process which doesn't become a final end product, and thus salable goods -- to minimize that, because that is a cost factor. As you know, Senator, things that drive

businesses are those things that will help them save money for themselves. We are not saying that is good or bad. I am just saying that those things exist to make sure that a lot of people are looking at waste minimization. I don't think it is fair to say that waste minimization is a new process. It has been going on for a long time in many companies. I am the first one to admit that it probably hasn't been done in some companies because of external factors that they cannot control -- the cost of reducing, putting in waste minimization equipment, for one.

What I would like to do now is read from a study put out by the Office of Technology Assessment on the serious reduction of hazardous waste. This is a group at the Federal level which has been looking, for a couple of years, at the issue of source reduction and waste minimization. Some of the people on the Advisory Council included in the OTA report were Greenpeace, Clean Water Action, FORUM, and other public policy type groups. These are some of the things that have been said by the author of the report about the conclusions of the years-long study on this thing. I would just like-- I know it is probably not appropriate, but I think you ought to hear them:

"Even a simple step toward waste reduction can seem difficult to a company with few technical resources and no obvious place for guidance." The second quote: "Reducing waste in an industrial process requires intimate knowledge of all aspects of that specific production process." Third, "The OTA finds that it would be extraordinarily difficult for government to set and enforce waste reduction standards for the myriad of industrial processes. The impact on industry, especially on troubled manufacturing sectors, could be substantial."

The next quote: "Government leadership and assistance, rather than on a prescriptive requirement is most effective."

"Some types of mandatory waste reduction regulations with enforced penalties for noncompliance could harm international competitiveness to some industries, because they will be too inflexible and inattentive to site specific constraints, or ignore control investment needs. If goals are to be set, it should not be as a regulatory requirement."

Continuing the quote, Senator Gormley, from the Office of Technology Assessment study on this issue: "As long as waste reduction is a voluntary effort by industry, the site specific character of waste reduction can be handled by the individual waste generator, but if government were to require waste reduction, it would face major difficulties in determining what is technically and economically feasible or practicable for a specific industrial operation."

I think those comments underline what Rick Gimello of the Siting Commission said. What he indicated was the vast complexity of this issue. It is not something to be ignored. I know that in some of the packages -- or some of the bills -- specifically Senator Gormley's bill, he has not attempted to ignore that.

I would like now to address some of the specific concerns on the individual bills, Senator, if you will allow me the time, keeping in consideration these overall generic problems of the whole issue of regulating this process.

Senate Bill 2798, the Bassano bill: We feel that the goals are pretty arbitrary. It is very difficult to establish specific goals, given the thousands of processes which would have to be put into the mix in order to come up with a level to tell them to reduce to. Although this bill relies on voluntary, non-punitive approaches, those problems still exist in how you would set the standards.

One of the things that the Bassano bill does is, it puts this office in the Department of Environmental

Protection. What I would like to do is echo the sentiments voiced by other people, by saying that we would much prefer to see the Siting Commission handle this, since they are already down the track in dealing with waste minimization.

I would like to spend some substantial time, if I may, on S-2989, the Senator Bubba bill, which calls for outside auditors to come in to audit the facilities and the waste minimization process. If the sponsor's intention here is to do a full employment-for consultants bill, I guarantee you this is a good piece of legislation, but it is fraught with an awful lot of good intention and a lack of understanding of the process.

We've already got to do an awful lot. As previous speakers have said, we have to submit, with each manifest form, the fact that we do have a waste minimization plan in place. I don't think the consultants, no matter how well-trained, will know individual company's situations well enough to provide meaningful data. You can't bring someone in from the outside -- this is what we are saying -- and say, "Here is a process that may or may not be foreign to you. You tell us how we can do it better." Very frankly, the expertise within the company far exceeds that available in the ranks of the consultants. As I have said many times, a consultant is a guy who can take a watch, tell you what time it is, and tell you whether it is working, but he can't tell you how it works. That, he can't do. Those people who know how those processes work are the ones who are actively working those. They are actively trying to do as much in the area of waste minimization as they possibly can. The vast majority of information in that bill is presently required by DEP.

Senate Bill 2988, the Garibaldi bill, asks for a biannual report. We are now doing those reports annually. I think there is some confusion on the sponsor's part about exactly what the existing regulatory structure in this area is.

I would like to lump, if I may, the bills on giving exemptions from property tax, and say that while those would be very easy to support, we must caution that even with incentives and disincentives, it is difficult to establish what the base line is. It is difficult to establish what, in actuality, is a reduction of waste, and it is difficult to quantify that reduction. I found out something interesting the other day; that is, one pound of product -- a certain kind of product -- in the process may give you much in the way of waste generated, and the opposite is also true. You could have 100 pounds of product and end up with one pound of waste. How you can put all of those different scenarios, different processes, and different products together and come up with a flat rate for a whole industry, is going to be a very difficult task for anyone who attempts to do it.

Senate Bill 2994, the Haines bill, review of regulations: I think it is a good idea, and I think the Department has indicated that they are trying to look at ways to help their regulatory scheme not get in the way of source reduction. But I have to be very frank with you: Every time we would be in the process of modifying our facilities and their processes in order to reduce waste, it would mean that each company for each one of those changes would have to apply to the Department for a change in its permit. Right now, the Department has a 14-month backup in permits that are in the mill and waiting for attention. Right now, there are physically more than 3000 permits that are sitting in front of DEP's door waiting to move through, from major to minor. My point is--

SENATOR GORMLEY: Which types of permits?

MR. BOZARTH: Air, water, waste -- you name it.

SENATOR GORMLEY: You're talking cumulatively, not individual categories.

MR. BOZARTH: Yes. That is an awful lot of permits.

SENATOR GORMLEY: Average delay?

MR. BOZARTH: Fourteen months, and it's down. It's down from 18 months. The Department is trying its best to get a handle on the situation. What they have done is contract out to some consultants to do some of their easier permit work, and they are now down to 12- and 14-months delay. That's great. One of the bills in here talks about fast tracking. If we could fast track the permits we have, or just do them all on a nice even schedule, we would be very happy.

What you are saying to people is, "We are going to penalize you if you don't reduce your waste." However, what is unsaid here, is that in order to reduce your waste, you have to get permit changes, and then you are into the bureaucracy. So, even while Senator Gormley allows for a three-year phase-in of this approach, we are not going to be through with the permit backlog by then, and as more changes come into the mix, you are going to find a situation where more and more permits back up.

SENATOR GORMLEY: So, what you're saying is that if my bill, or bills similar to it-- If we are going to look to time frames, we should include the submission of a permit request as a possible consideration, as it pertains to an extension.

MR. BOZARTH: Well, we have looked at it from this view, and I think it is something to be considered if we assume for a second that that is the operative bill in this case, and putting the merits of the disincentive aside.

SENATOR GORMLEY: Given that I am the only Committee member now, that is the operative bill. (laughter)

MR. BOZARTH: That's why I'm talking this way.

SENATOR GORMLEY: Move the bill. You can vote today. (laughter)

MR. BOZARTH: I knew I liked the bill, Senator.

What we would suggest is that the sponsors look at a procedure whereby the Department could make a rule by petition,

and that if a change were sought by a company to lower its emissions, minimize its waste, that it could do it without waiting for the process of the bureaucracy to grind exceedingly small and long. And then, should the Department need to audit that, the petition would be granted automatically on its face, and should the Department finally get around to it, it could come in and look at it.

One of the problems I think you will hear more about later on in the afternoon is how to deal with research and development facilities. I will leave that to the people who are more expert in that. However, I must tell you, by not exempting R&D facilities from this overall package of waste minimization bills, you run into the effect of stifling R&D out there in New Jersey, which is one of the largest R&D states, because R&D people live and die by constant change. That is what they do. They are the ones who figure out how to minimize the waste in a process. They are the ones who develop the new products and figure out how to get the waste out of there. If you are saying to them, "You have to now come under a regulatory scheme," what you are going to be doing-- People are going to say, "Well, why develop that process here? Let me do it in Pennsylvania, where they are not doing this." Don't put the burden -- I guess this is my bottom line point -- on the R&D facilities.

SENATOR GORMLEY: Well, are you saying-- Is your premise that this is a disincentive on the goal we are seeking?

MR. BOZARTH: I think so -- a great disincentive.

SENATOR GORMLEY: Okay. Are you saying R&D in general, or R&D as it pertains to minimization?

MR. BOZARTH: Oh, I would say R&D in general, because what R&D does generally--

SENATOR GORMLEY: Well, then, it is a little broader than the premise you are attacking.

MR. BOZARTH: But I think it is instructive to note that you have to deal with R&D people differently than you do with manufacturers, because the R&D folks do impact greatly, not only in product development, but also in the areas of waste minimization. They are the ones who figure out how to minimize the--

SENATOR GORMLEY: What I'm saying is, if, in fact, the R&D is related to minimization, they would be exempt. That is the point. That was your premise. It goes a little bit beyond waste minimization research. But possibly a middle ground, that is unacceptable to you today -- and I can understand that -- would be that if the R&D be related to waste minimization, that could be a possible amendment. You know, we can see if they are in the business of trying to correct the problem-- I can see an exception.

MR. BOZARTH: Well, I understand your point, Senator. I disagree that that is a middle ground which is acceptable, but I think that at least you are focusing on that issue. I think a speaker to follow me will be able to give you even more information about the R&D situation.

SENATOR GORMLEY: If I may, just for clarification, tonnage-- Do we have any idea of tonnage that is R&D?

MR. BOZARTH: No.

UNIDENTIFIED SPEAKER FROM AUDIENCE: We might be able to find it.

SENATOR GORMLEY: I think obviously that is something-- (indiscernible comment from speaker in audience) Excuse me, Hal, but I think we might as well get those numbers now.

MR. BOZARTH: I think that is a good idea.

SENATOR GORMLEY: We might as well cross reference the amount of tonnage that is R&D tonnage, if we are talking exceptions.

MR. BOZARTH: I guess that leads me to a point about the whole concept, moving for just a second away from the obvious better bill in those discussed today.

SENATOR GORMLEY: I know you're moving places in the State. Go ahead.

MR. BOZARTH: What you have to consider is, when people do things to minimize waste and they change their processes, if they were then to get those incentives, very frankly there would be those people who could apply for incentives -- meaning the monetary tax exemptions -- for a whole host of things. The problem will come in who from the State government point of view decides what is acceptable for the exemptions -- the tax exemptions -- and what is not. Do we need a new bureaucracy to make that determination? Somebody has to do it. Who is going to do it?

Let's assume there are five people who will do it statewide. The problem then becomes my permit backlog, and the problem then also becomes, are the incentives large enough to make it viable for a company to go through that process -- however big or small it is -- in order to get that benefit, which may be relatively small? If it costs \$8 million for a new piece of equipment, and they have a \$50,000 tax exemption that everything accrues to through the different parts of the package, that is not going to be worth it for the companies.

I think what you have to do is understand the different classes of folks out there -- those who have the capital to invest to make waste minimization work, if they haven't already, and those people who, for whatever reasons, don't have that capital, and therefore are somewhat constrained as to the kind of waste minimization they will do.

SENATOR GORMLEY: Are you talking about a small business exception?

MR. BOZARTH: Well, it is not necessarily small, but it is certainly smaller than those people who have demonstrated

that they have reduced their waste over the last five or six years.

What I'm saying is, there should be a role for the bureaucracy in the State, maybe as a facilitator, to take good ideas where they exist and are not proprietary for a specific process or a specific substance, and then get that to those people out there who could not afford the R&D moneys in order to develop that on their own.

SENATOR GORMLEY: What mutual programs are you working with, with the Commission on Science and Technology, as it pertains to this? I know we are doing the waste minimization at our colleges now. That was a part of the bond issue as it pertains to toxic research, and whatever. But what is industry doing in terms of these joint ventures and, if you will -- I don't know if this has ever been done -- joint ventures as they might pertain to patents? If, in fact, you are asking for partnership money from the State, has it ever been explored that if there be a patent in this area, as far as minimization, would the profits be shared jointly by the State if it is going to be a partner in terms of cash?

MR. BOZARTH: I am not sure how to answer that, Senator Gormley, but I will tell you this: It was my understanding that most of that bond act money was for research for cleanup, rather than to minimize it. That may not be so. I will check into that. One of the speakers to follow me has a good idea about how industry can do that technology transfer. Maybe the State should be an intermediary.

I guess what I'm saying my bottom line here is, if the State is to have a role, it must accept certain givens; that is, the plethora of processes and companies out there do not lend themselves to an overall broad-brush approach. As I think you have pointed out-- You have tried to say that the Siting Commission will establish individual goals. I suggest to you that for one of my member's one facility, the number of

processes involved runs into the thousands. To establish goals for minimization at those kinds of facilities, let alone the easy one-process facility, is going to be something that must be considered before we put a program in place.

I realize you understand the complexity of that. I mean, there is not a bureaucrat alive who can go into a facility and say, "From all of the information you are giving me, I think you ought to decrease by 10% or 5% for these 200, and 8% or 9% for those 200."

SENATOR GORMLEY: In any process, you get to that portion where people will feel they are being dealt with summarily. I submit to you that this is the other end of the spectrum for the town or towns that are going to be dealt with, as they feel summarily when they are picked as the sites. That is the balance of this whole process, because we are not coming here today saying-- I am not saying, "Eliminate siting," which is the very simplistic and very populist answer to this type of a problem.

What it is going to take is-- Yes, those are problems, but let industry -- that is why I am encouraging; I think we are all encouraging -- come forward with, "How do you break it into categories?" Yes, it's hard, but if you just sit there and say, "It's hard," and not at least lend your expertise as to how we can cope with that, then I think you do industry harm because you lend credence to the more extreme views, and they specifically tend to limitations on siting.

MR. BOZARTH: Two points, Senator. I don't want to belabor this, because not everyone else has hit it. Even if you plug up every pipe which generates waste in the State of New Jersey from now until the end of time, and we produce not one ounce more -- not one ounce more -- we will need facilities in the State, and we will need to have them in place to do a couple of things to take care of the waste that we will clean up with Superfund sites and ECRA sites, and we will need them

to get the money. By pushing this together and saying, "This impacts the siting process, even in a bit of a way," frankly is not fair to those people in those towns, because you hold out a carrot to them and say, "We are going to do this to help solve part of the problem." I am here to tell you that the figures that I have seen are the same ones that Rick Gimello sees. We are going to have facilities, regardless of what we do with waste minimization.

SENATOR GORMLEY: We are going to have landfill sites in New Jersey, and hopefully we will have mass burn facilities or other facilities to limit that, and we are going to recycling. The approach that I have publicly stated to you -- and I have been quite clear on it -- is, no one is precluding siting, and not to preclude siting is, quite honestly, if you look at this-- The easiest view to take politically is to preclude siting. And, this is a balance. When I said we would ask industry, those of us who are trying to have a balanced approach, to look to how we can't implement this-- Yes, it is difficult, but it is just as difficult for those people in those towns to take the site. Yes, it is a fact of life, but at the same time, we have to say, "Well, maybe we can cut it down from 110,000 tons a year to 100,000 tons a year, and then maybe to 90,000. Although it seems impossible at this time, at least we have to go in that direction -- but not offering false hope; not coming up with criteria that say, "We will limit siting now. Siting will be based upon particular criteria." I don't agree with that. We know that.

So, I think we are saying the same thing, but I think you have to have the balance. We are saying to people, "Work with us on these goals," and we're using -- you can call it a tax, you can call it incentive, you can call it whatever you want to. The fact that some of us would call for that, I think is a very balanced approach, because it is sort of like a matrimonial agreement. (laughter) Neither side is happy.

That is what we are dealing with. People are going to be dealt with summarily at one point in the process on either end. What I am proposing-- Everybody is checking his agreement now. What we are proposing is a balance. Is it a nuisance for industry? I would submit-- Obviously, it is a nuisance to go over this and look at a tax and look at an incentive.

MR. BOZARTH: If we are talking about \$11 million, I submit to you that it is not a nuisance. Far from it; far from it. I mean, if you look at the moneys we put together for the cleanup of abandoned sites in the State last year -- which we were into only a part of -- you know that \$11 million is not an insignificant amount of money.

SENATOR GORMLEY: That's right. What I am saying to you is, we are talking about a body to review it, in terms of the Commission, that is as familiar with the process as a public body would be. It is not a group of people unfamiliar with the problem. I think that by making use of the talent they are developing on the issue, and merging that with the schedule, I think you are being dealt with fairly by using that as the body to do the review. Of course, I am talking about my own legislation.

MR. BOZARTH: I think with regard to your specific bill and from what you have said here this morning, that you recognize the need for flexibility in the approach to be taken. I think that is a key, because to put people into a position where goals are specifically mandated, with specific numbers for everything in a generic universe as part of the whole, you will never have anything but chaos and problems out there. I know you realize that.

SENATOR GORMLEY: Legislatively, I don't know how we could put in scales or particulars, because, as everyone has brought out -- it is quite clear to everybody -- there is such a divergent nature to the industries, and whatever, that even those that are on the opposite side of the issue with you would

agree that they would want something more specific in certain areas, that the percentages might be too easy. I know that seems impossible to you.

MR. BOZARTH: You know, as pointed out maybe before, look at this situation: A company brings a new product on-line in 1986. Okay? What it does by doing that is create more waste. So, its amount of waste manifested, let's say, over '85, could be 20% more. Now, what we can't get into a box is looking at the numbers at the end, or at anyplace along the multi-media process, and start looking and adding and subtracting and seeing whether or not we meet something. Because, very frankly, what people will do, rather than go through that exercise if they have a multi-state and multi-facility company, is move that new process elsewhere. That is not what you want either.

SENATOR GORMLEY: Well, I think what industry has to realize is, if there are going to be legislators who don't come up with simplistic approaches for the siting of hazardous waste sites, and don't come up with simplistic approaches and say, "There won't be any landfill sites in New Jersey," I think industry should be somewhat careful before it brings up the onus of moving to another state.

MR. BOZARTH: Oh, I don't think we are using it as anywhere near a threat. I am just saying that from a business point of view, if this is a program that causes them to rethink their decisions about where they have put the new process, added to the other problems we have, from a regulatory aspect in New Jersey, it is not a threat, it's fact, and we've seen that. We've seen a diminution of manufacturing jobs in the State of New Jersey over the last five years that is astounding. It is astounding. We have lost jobs tremendously here. I know that that is not what you want to do, and I know you recognize that the chemical industry takes care of fully 91% of all the waste it generates on site. I would assume you

would think that is a good point. I think those are the kinds of things we have to do, because, in effect, that is waste minimization. It is not getting out into commerce. It is being handled in an environmentally sound fashion.

SENATOR GORMLEY: We are taking it to another threshold. We are talking about the waste that has to be stored or has to be incinerated. We want to focus on that. You always have this balance. And, whatever the issue, someone will tell you how many jobs are going to be lost, and it always seems that it is over 3000. No matter what we do, it is always 3000 jobs. I think you will find that over the last decade or so in New Jersey, that every time New Jersey has been in the forefront on an environmental issue, there has always been a jobs report; you know, we are causing unemployment.

I would like to think that I have not taken the extreme on those particular bills, but rather have tried to be balanced on them. But we are dealing with only 5% unemployment in the State, and we are rated, I believe, in the top three in the country on environment issues. I think what we are trying to do is strike a balance. We are saying to industry-- I am not saying I am proposing dogma in this bill. I am proposing that you work with the Hazardous Waste Siting Commission to come up with, you know, reasonable incentives. Is it a hammer on our side? Yes, it is, but I think if you look at how we are dealing with this issue from "A" to "Z" in New Jersey, I think it is a fair approach to have some incentive at this time, and to say that no one wants to lose a job, no politician is going to be quoted on losing a job, and so on and so forth. Quite frankly, bringing up the jobs argument, is the opposite end of the spectrum over those who want no siting. There has to be a balance in the middle, and neither side is going to like it.

MR. BOZARTH: I understand that, and obviously, Senator, you have heard me on these issues before. Rarely do I talk about jobs because, frankly, it is an issue -- at least

from the manufacturing point of view -- that few legislators are willing to listen to. I understand your balance situation. But I think that what you're saying is, there needs to be a way to be flexible, and I agree with that. I think that is something that is very important in the whole scheme of things, because without that flexibility, what we get is a new bureaucracy, which will fail, as new bureaucracies we have seen in recent years have failed, and the excellent goal -- minimizing waste -- will not be taken care of.

I think you also -- through these hearings and through discussions -- understand that one of the basic issues here is base line. Where do we begin, and what do we take into consideration? An arbitrary date of 1980, when manifest supposedly started, or will it be '85, when the new survey comes out? That is one of the reasons why I think we need to wait for the Source Reduction Task Force to finalize their report -- wait for it to come out -- to see whether or not they have recommendations. I think there are a lot of activities going on now. I agree with the previous speakers, when they said, "Let's look at all of the facts first, before we legislate." I think most of the legislators have tried to do that -- have tried to understand the issue -- because this is so complex. This is not a black or white thing. I think it would behoove the Committee to wait those extra eight, ten, twelve months, to make sure what they are doing, if that is the time it takes -- to make sure that what they are doing is going to have a positive benefit, and not a negative.

I have to tell you that everyone in the business community, including the chemical industry, looks, with a great degree of skepticism, when we see proposals to create new bureaucracies and to staff them up by permit fees. Permit fees are nothing, frankly, more than taxes and, very frankly, I have a litany of three pages here of permit fees -- hidden taxes -- that we in the chemical industry pay. Frankly, I think that is

enough. I think we need, first of all, to be able to run the programs we have on the books correctly, before we buy into the new stuff, number one, and I really doubt whether or not there is enough experience, enough knowledge, enough know-how in the bureaucracies to say, "We are from State government. We are here to help you." I just don't think it is going to work.

SENATOR GORMLEY: Well, we could hire either a consultant or a lobbyist to cover that gap.

MR. BOZARTH: I doubt you would get any from the latter, and I know you wouldn't get any from the former.

Senator, thank you for your attention. As always, we will be glad to work with you on this package.

SENATOR GORMLEY: William Everhardt?

W I L L I A M E V E R H A R D T: Thank you, Senator. I appreciate the opportunity to discuss a very important issue such as this with you. At the risk of not being competitive, I am going to basically say that this is a rare moment when industry -- the regulated community -- and the regulators agree conceptually on an issue. What I hope to do here is to add a little bit of practicality to some of the topics that have been discussed today. I am going to keep them in a very general form.

My perspective on where I am coming from here is in two areas: Number one, I am Vice President of Technical and Regulatory Affairs for Advanced Environmental Technology Corporation, known as AETC. AETC is a service company. We service right now somewhere between 500 and 600 generators in the State of New Jersey in hazardous waste and other environmental issues. The scope of our clientele ranges from the homeowner to the Fortune 500 companies, so we see, on a firsthand basis, some of the problems of our clients as members of the regulated community.

I am also a member of the Governor's Hazardous Waste Advisory Council -- a recently appointed member. I am becoming more involved with the issues from that respect.

My areas of concern today are basically three: Number one, minimization is needed, conceptually. We have to minimize waste in order to thrive as an industrial community. Two, we should not penalize companies that have taken a conservative approach, either through their disposal options or through employing waste minimization practices well before them being mandated by law. I am going to get into some specifics on that. And number three, the siting issue and the waste minimization issue should be kept separate. We should deal with those two issues on a separate level.

In pursuing this, there are special interest groups that have been mentioned through some of the other speakers. These groups' interests have to be looked into in developing an effective waste minimization law and regulation. Number one, small and mid-size companies. This has been addressed, so I will not ponder the issue, but small and mid-size companies do not have the resources to effectively deal with the waste minimization issue when it comes to technology. They can deal with the administrative type issues concerning housekeeping, ordering procedures, and things like that.

SENATOR GORMLEY: Excuse me.

MR. EVERHARDT: Sure.

SENATOR GORMLEY: Are you talking about their in-house R&D capacity?

MR. EVERHARDT: Their in-house technical capacity, whether it is R&D or technical capacity of their processes, etc.

SENATOR GORMLEY: To do the actual minimization themselves?

MR. EVERHARDT: To employ the minimization techniques and design the minimization techniques that may be required when equipment is required.

SENATOR GORMLEY: Okay, but then we could get into an off-site minimization location.

MR. EVERHARDT: That is correct.

SENATOR GORMLEY: Okay. I'm sorry, I was just trying to clarify.

MR. EVERHARDT: Number two -- which has just been addressed -- R&D facilities. R&D facilities pose specific problems in two areas. When you get the numbers of waste generated from R&D facilities, they are going to be misleading, because R&D facilities pose different types of disposal problems in dealing with how to dispose of waste. The reason for that is, we have smaller quantities of different types of materials coming from R&D facilities. Those types of materials include highly reactive materials, and materials that need specialized disposal methods. So, the quantities may be very misleading if they are low, in that respect. We are not talking about the bulk quantities coming out of the large chemical facilities. We're talking about the lab pack and other smaller type quantities which pose special disposal problems.

SENATOR GORMLEY: They might not be high in tonnage, though?

MR. EVERHARDT: That is correct.

SENATOR GORMLEY: Okay.

MR. EVERHARDT: As a matter of fact, I am talking maybe out of turn, but they are probably going to be relatively low, when you look at the overall scope of the generated tonnage through the years.

SENATOR GORMLEY: Do you think R&D should be -- if there should be a minimization package-- Not even conceding that you would endorse a minimization package, are you saying all R&D should be exempt?

MR. EVERHARDT: Yes.

SENATOR GORMLEY: Okay, keep going.

MR. EVERHARDT: Not exempt only as R&D as it involves minimization, yes.

SENATOR GORMLEY: Okay, I understand.

MR. EVERHARDT: Next are the larger companies, or the companies with the means of employing minimization techniques. Some companies have been mentioned, and I have had firsthand experience with two of the companies mentioned -- 3M and IBM. There are several other companies -- in the hundreds -- that have already employed effective waste minimization programs.

Now, does that mean that they can't go any further? No. But we don't want to see those companies that have already employed effective waste minimization programs penalized when these waste minimization bills become law.

The next area is regulation. It has already been addressed. Regulations change on a daily basis. The types of wastes that are regulated under RCRA and are considered hazardous wastes, are also changed on a daily basis, for the most part, added. We have to be assured that if a regulation change affects the type of waste being generated, now being considered hazardous, that the waste minimization bill three years from now will not penalize these companies based on regulation changes.

The next issue is liability. Liability concern and the inability for companies to get errors and emissions policies, has drastically affected the way companies classify hazardous waste. Let me give you some examples. There are basically three ways to classify material as hazardous waste: Number one is the regulatory consideration, which is very easy. You determine whether or not your material is a listed waste, a characteristic waste, etc. That just goes by the regulation. There is the practical classification of hazardous waste. This is a material that may pose a substantial risk to human health in the environment, but may not be a true hazardous waste. I can give you some examples of those materials. Number one is asbestos. Asbestos is not a listed hazardous waste, either in New Jersey or on the Federal level. Asbestos may be disposed of at an industrial landfill or

similar type facility. Most generators in the State of New Jersey take a conservative approach when dealing with asbestos. They like to see it going to a permitted, secure chemical landfill. Another example would be PCBs. Although PCBs are regulated under TOSCA (phonetic spelling), they are not required to go to a RCRA facility for disposal. Because the TOSCA regulations are less conservative than RCRA, when it comes to closure, post-closure, and insurance requirements, several generators want to dispose of their PCBs at a RCRA facility.

The third, and probably most drastic, and tonnage-wise the largest quantity of material we are talking about here, are materials of consumer commodity origin. That would be off-spec pharmaceutical products, cosmetics, and materials such as that, which, for liability reasons, so the manufacturer won't see his products at the local flea market on Saturdays, or for other reasons -- for environmental or health reasons -- they choose to deal with these materials as hazardous waste. Let me say that I don't believe any of the numbers you will see will include those classes of materials because, although they are being manifested, they may be excluded from some of the numbers you are seeing.

The other issue I would like to discuss very briefly is the disposal options issue, and the potential of some disposal options to meet the true intent of an effective waste minimization program. I think we can exclude landfilling right away. Landfilling is always the least desirable and most environmentally unsound option for disposal. Some treatment methods can also meet that criteria, where the material is just going in, being neutralized, and going out to a subsequent facility for disposal.

But there are two other options we may want to consider as meeting the intent of minimization. Number one is recovery and recycling, and number two is incineration. Both

of these items keep the waste, number one, in the economic system for an extended period of time, and number two, allow the waste, in some cases, to be used as either a primary or secondary fuel in an incinerator, a generator of steam in incineration options, or for use in cement kilns or other manufacturing processes that have a permit. I think we should consider these options as meeting the intent of a waste minimization program, which, on the overall, we are looking at what is best for the environment. These materials are staying in the economic system and are being used for other purposes, other than just being disposed of as hazardous waste.

SENATOR GORMLEY: Simply stated, in terms of minimization, there should be a bifurcation between incineration and even aboveground storage.

MR. EVERHARDT: Well, I think what we should do is distinguish the two issues -- the materials that may be manifested to a hazardous waste facility that are being used for other purposes other than disposal.

SENATOR GORMLEY: Distinguish the hazardous waste facilities for purposes of any of these programs?

MR. EVERHARDT: Correct.

SENATOR GORMLEY: Okay.

MR. EVERHARDT: The last item I would like to address is the fast-track permitting provision in Senate Bill 2995. I think there are a couple of issues here that we have to look at. Number one, it has already been addressed that DEP is already backlogged in the normal permitting process. Number two, when it comes to RCRA permits, DEP is mandated by EPA to follow certain time frames and certain procedures before issuing a permit. Those two items will have to be addressed.

The third item we could potentially look at, which would also affect EPA's overseeing role, would be certain exemptions. Instead of a fast-track permitting program, exempt certain processes or certain items as they relate to waste

minimization from the permitting process. That could also be looked at, but I do say that there is a potential there for conflict between DEP and EPA mandates.

That is basically what I had to say today. I was very general. From a practical standpoint, I would just leave with the fact that disposal options should be looked at. The effects on the special interest groups should be looked at very closely. And one other thing, if I could just leave with this item. We kind of went off on a tangent a little bit before when we discussed some of the siting issues and the ability of New Jersey to accept waste from other states. I think we have to look at this fact. Number one, New Jersey has been an exporter of hazardous waste for several years. We have been exporting to such states as New York, Ohio, South Carolina, etc. Especially when we look at the R&D specialty type disposal that is needed for that type of material, we will continue to have to export some of our waste materials. We don't want to have to preclude certain states because we may exclude them from bringing waste into our State.

SENATOR GORMLEY: Well, if, in fact, the new facilities we are looking to would have the ability to take on this waste. Is that correct?

MR. EVERHARDT: If that is a factor, yes, but when we are talking about--

SENATOR GORMLEY: Let's check. What we are now exporting, would-- Are we assuming that other states down the road would be precluded from taking the waste, or wouldn't want the waste? Are we--

MR. GIMELLO (speaking from audience): We are assuming that we are going to be handling all the waste that New Jersey generates. Mr. Everhardt's point is well taken. There are very small quantities for which we may not build a facility, and it might make more sense to try to deal with a neighboring state. But, to the degree that that is the case, it is very small.

SENATOR GORMLEY: Well, you have to understand, I think, that Senator Dalton, who initially brought this up-- I understand what you're saying, but we're talking about being the large-volume recipient, because there is no alternative in another state. I can see minimal amounts in very specialized areas.

MR. EVERHARDT: This is what I am talking about -- the minimal specialty type disposal options that we may not be able to afford to bring into this State because of the quantities we are talking about.

SENATOR GORMLEY: What Senator Dalton was referring to-- To give a very sorry example in the State, all you have to do is talk to the people in East Brunswick with regard to their landfill site. While other counties are looking for a site, they have become filled up. So, we have experienced it throughout the State on a landfill basis. That is something I know that Senator Dalton is going to be talking to Mr. Gimello about, and I will be pursuing it also, as it pertains to setting the parameters now, by declaratory judgment, or whatever the vehicle might be. I think that gives everybody a lot of credibility all the way around. If there be an exception, then you will say, "There will have to be an exception," but at least it will be explained. To be the only site-- Believe me, we have seen it with counties, and we can assume they get elected by the same process in other states, and that procrastination would only cause, you know, an emergent order, and we would be the recipient for a period of time of a large volume of another state's waste. That is the fear.

MR. EVERHARDT: Senator, you said a very important word there. Mainly the focus of my comments here was flexibility.

SENATOR GORMLEY: Okay. Well, that is what we are trying to maintain.

MR. EVERHARDT: Thank you very much.

SENATOR DALTON: The next speaker will be Bob Hollenbeck, PSE&G.

R O B E R T P. H O L L E N B E C K: Senator Dalton, members of the Committee: I would just like to talk a little bit about the policy of the State, etc., and the commendable action, of course, that the Legislature is taking in trying to set the policy dealing with hazardous waste minimization. Unfortunately, when this happens, not all agencies of the government are aware of the policy that is being set by the Legislature. Just as a matter of interest -- although this package would not have corrected this situation -- Public Service, in their process of constructing the Hope Creek nuclear plant, saw the need for some minimization of our low-level radioactive waste, and some method of reducing that. They came up with a facility, and they spent \$64 million in doing it. The average saving would be about a million dollars a year because of that minimization.

Unfortunately, when that question came before the agency of the State that regulates it, they said that that was an imprudent expenditure, and denied us the recovery of that \$64 million in rate base. Then, on the other hand, they took the one million dollars of savings and charged us that on the revenue side of our budget. So actually we were being penalized \$65 million, and each year after one million dollars. It was a case of where someone tried to do something, and it didn't happen.

It happens an awful lot within bills when we try to deal with subjects, but it is an oversight. It is not done with malice. It is an oversight that happens.

Specifically, with S-2992, we are allowing credits against a corporate income tax, and varying types of things occur. This is where we are allowing in that bill a 50% reduction on a-- Fifty percent of that cost can be taken off

as a credit against your corporate income tax. The largest employers of the State, and the biggest corporations of the State, are utilities, and utilities do not pay corporate income tax. So, in that area, I would suggest that someone look into some other type of credit for the larger corporations. We also want to participate in this, but we want to have the same advantages as other businesses.

SENATOR DALTON: Maybe we could even set up an incentive to promote alternative forms of energy other than nuclear, Bob. That might be a way of getting at it.

MR. HOLLENBECK: Well, if it is a credit-- We will gladly take anything for credit. (laughter)

Thank you, Senator.

SENATOR DALTON: We will go on to New Jersey Health Products -- Dorothy Bowers and Jack Dalton.

J O H N D A L T O N: Good afternoon, Senator Dalton. My name is John Dalton. I represent Hoffman-LaRoche, a major health products and services company headquartered in Nutley, in Essex County. Today I am also representing the New Jersey Health Products Council, as Chairman of its Government Affairs Committee. The Health Products Council is a public affairs organization sponsored by New Jersey's research-oriented health products manufacturing industry. Our most recent survey showed that we employed over 50,000 New Jersey citizens, with a total payroll of over \$2 billion. New Jersey health products companies accounted for 24% of the national sales of the pharmaceutical industry, employed 25% of the national pharmaceutical employees, and were responsible for 29% of the industry dollars invested nationally in research and development.

Why do I relate these impressive statistics to you? To make you aware of the significance to New Jersey and our nation of the New Jersey health products manufacturing industry. Because we make so many health products here in New

Jersey, and because solid and hazardous wastes are unavoidable by-products of the manufacturing process, our environmental professionals and other specialists have been meeting informally over the past several years to discuss mutual problems associated with hazardous waste management. Because of our growing concerns about this and other environmental matters, we formed a special environmental subcommittee of the Council's Government Affairs Committee, and its members have become increasingly active on the Industrial Advisory Committees of the New Jersey Department of Environmental Protection and the environmental committees of our other industry associations.

We believe the bills you are considering today address a very complex matter, about which very little data exists. Although the goals which the Legislature seeks to achieve are highly laudable, we recommend that you do far more research to determine what is really happening in New Jersey with hazardous waste management, before proceeding with any specific bills on these issues.

The United States Environmental Protection Agency, in a report to Congress entitled, "Minimization of Hazardous Waste," in October, 1986, concluded that mandatory standards of performance and required management practices are not feasible or desirable at this time. EPA recognizes that, and I quote: "Measuring the effectiveness of waste minimization will be complex. Waste minimization measures are likely to be processed and industry specific, implying that different measurement techniques might be needed in different contexts."

Like Congress and EPA, the Health Products Council's companies believe that preventing the generation of waste, when feasible, is inherently preferable to controlling it after it is generated. For many reasons, we have been in the waste minimization business for many years.

Accompanying me today is Ms. Dorothy Bowers, Executive Director of Environmental Resources for Merck and Company, who is one of the Health Products Council's Environmental Subcommittee's most active members. Ms. Bowers will address the long-term involvement Merck has had with waste minimization efforts, and will relate to you a proposal for our Council's involvement with the Hazardous Waste Siting Commission, which we believe you will encourage and support.

D O R O T H Y B O W E R S: Thank you, Jack. Thank you, Senator. What I would like to do today, with your permission, is give you one company's perspective -- Merck and Company's perspective -- on waste minimization, and talk a little bit about how we have approached waste minimization over the years, what it means to us, and how a new regulatory legislative system would affect our decision-making on waste minimization. I would like to make some suggestions, and then I would certainly be willing and happy to answer any questions you might have.

I think the first thing I would like to say is what waste minimization is not. It is not a black box that we go out and buy from somebody, bring it back to our factories, and install it. It is not a program where we go out to a consultant and get him to come into our factories to tell us what we should be doing to minimize waste. What waste minimization is, is us, we, ourselves finding a better way to make our products. There isn't anything new about that. We have been doing it for over 100 years, and doing it well.

Waste minimization comes from research and development, and research and development is one of the biggest businesses in this State. It is one of the most vital businesses in this State. When Merck talks about research and development, we like to talk about new lifesaving breakthrough drugs, and we do have some. A couple of years ago, we introduced into the market a new antibiotic that was broader

spectrum than any other. It was unmatched by any of the competition. In fact, by 1990, we think that about two million people will have used this drug.

This was invented by our research and development scientists. It took them 10 years to develop 18 chemical steps that it takes to make this new antibiotic. Every one of those steps has a possibility of creating waste. When we looked at that process five years ago before it was in production, there were more than 18 chemical steps, and our research scientists were projecting that we were going to have twice as much waste from that process as we actually did when we started it up.

Since we started it up, we have added additional recoveries; we have added additional waste minimization steps; and we are probably down about 30% less than we were when we started manufacturing that product. If we follow our historical trend, we are going to be telling people that we have reduced waste from that process when it is the oldest product in our line, not just when it is the newest product in our line.

Two key questions: How did we do it, and maybe even more importantly, why did we do it? The how is everything. It spans chemistry, engineering, all of the resources we have available to us. As I said, the original process had more than 18 steps, and it took our chemists and engineers to look at new chemistry -- to find an actual new way to get from one step to another, and new engineering technology that wasn't available before, in order to reduce the number of those steps, to make us have to use less chemicals to make the final product.

As an example, in one of the steps, we put an intermediate in, in a methenyl solution, and then we added hexane to it as part of the process. After the step was complete, the methenyl and the hexane were no longer used. They were waste; they were of no use to us. If we had had to go with that process, we would have had half a million gallons

of waste solvent to get rid of every year -- 500,000 gallons. By our engineers looking at that step before we started making it, they were able to come up with new chemistry and new engineering to eliminate that particular waste solvent altogether.

Did we eliminate all waste? No, we didn't. We certainly had a significant minimization, but we didn't eliminate all waste. There is still some waste stream. It is a lot smaller. It just so happens that that particular waste stream can be recovered for us to reuse in the process elsewhere.

We are not keeping those things secret. That particular development was published in a very well-known engineering journal. It is available for the world to look at, learn from, and see if there is a way that other companies can use the same technology -- the same technique -- that we developed for that particular waste minimization.

The point I want to make is that that was done before we started making the product. We saved half a million gallons of waste before we ever made the first gallon. I think that is important for you to keep in mind when I talk about how difficult it is to count. We never made that waste.

In another step, we were able to add a distillation and a internal recovery of an acetone water mixture. We cut our annual usage of that material by 80% -- an 80% reduction in what we had to buy, and an 80% reduction in what we would have had to throw away.

In another step, the waste was unrecoverable. We could not find a distillation method that would give us back the raw materials we needed. The chemists sat down, they looked at the process, and they said, "Well, let's use a different raw material," and they did. They were able to demonstrate that it worked in the process. They have not installed that process. They recover the waste stream. That

amounted to 2.6 million gallons a year of waste solvent that we do not have to send off-site for disposal.

We did not build our own system to recover that. We are sending it someplace else to an outside solvent reclaimer, and they are doing it for us. We don't usually do that. We usually like to do the recovery in our own plant. Why are we not doing it ourselves? Because our chemists are working on another process change that might eliminate that whole step altogether. We would like to eliminate it. We would like to do source reduction, not have the waste. But in the meantime, while we do have it, we are sending it out for recycling, sending it off-site.

The incentive is there for us to come up with a new technology to recover -- not to recover it, but to eliminate it. Obviously, we wouldn't have to buy the material; we wouldn't have to pay anyone off-site to recover it. But, it will take time. It will probably take us two years, possibly three years. We are doing the best we can in terms of impact on the environment in the meantime, but we are sending material off-site.

If you provide a new disincentive that makes it now less acceptable for me to send it off-site, you are going to change my decision-making process, and you may convince me that instead of waiting the two or three years it will take me to develop the process to eliminate that waste, I may have to go to recycling on my own site, invest the money, and then I will be pretty well committed to that as a long-term solution.

In another step in the process there is a very, very special solvent we need. It is made only for us. Nobody else in the world uses this solvent. When we started up the plant, we had no way to recover it. So we stored the whole waste stream while our engineers worked on a recovery system. They found one, they put it into practice, and we have now eliminated all of the waste that we had stored while we were

developing the process. We recovered all of that, and we are recovering the waste as it is generated from the ongoing process.

Another step generated a solid waste, but there was no way for us to recover it. It is somebody else's kind of business. It was going to be a waste that we would have to send off-site. The only alternative was landfilling. We worked with the raw material supplier. He now takes our waste, and converts it back into raw material for us. We have no waste. He doesn't have to buy raw material to make our product. It's a good deal all the way around.

I think these reductions are impressive. Why did we accomplish them? Precisely because it is a good deal all the way around, and it has been for a long time. Waste minimization reduces our costs; it improves our competitiveness. It is by no means new to us. One of our products in the 1950s was a particular problem. The details are covered in my written text, but I will just summarize. We were able to completely recover a waste stream, turn it into product, and eliminate a significant problem for the facility. That product is 30 years old. We are still making it. We are still making modifications in it. Not all of them are for waste minimization clearly. A lot of them are for economics. But many of them did minimize waste. Thirty years later, we now send no hazardous waste from the process off of our site. We do have treatment technology installed on-site. We do still have residuals from that treatment that meet the definition of hazardous waste.

For our newest products and our oldest, we must look at the kind of economics I talked about. Waste minimization makes good economic sense. In today's climate, it can mean the difference between being competitive and losing out to someone who is better at it than you are. You don't have to be an economist or an engineer to figure out that waste minimization

saves money. One of the solvents we now recover costs us 21 cents for every pound we buy. When we installed the process, it would have cost us 35 cents to burn every pound of waste that has that solvent in it. The waste was about half water, so by calculating it was costing us 21 cents a pound to buy it, 70 cents a pound to burn it up. You don't have to think very hard to figure out that even if you put in a recovery system that cost you more than it cost to buy it, you are still coming out ahead.

Yes, we have to invest money in recovery. Yes, it takes electricity, steam, labor to recover the material. Do we eliminate waste totally? No, we don't. There are still some residuals. They still need a place to go. There are environmental impacts from the recovery -- air emissions, some wastewater streams, some still bottoms. I think I would address Senator Gormley's question earlier: There will always be some waste for disposal. And yet, on balance, both economically and environmentally, we are still way ahead when we recover the waste.

I could talk a long time about waste minimization technologies, and I would like to. They range from very simple things -- better housekeeping, better raw materials handling, better maintenance, better storage -- all the way to the complex -- better chemistry, better engineering. I could give you a lot of examples of economics, but basically the material that cost us 21 cents a pound to buy, would have cost us 35 cents a pound to burn up a couple of years ago. Now it is 42 cents a pound. When we put in the process to recover that material, we expected to save money. We are saving a lot more than we expected, because of the escalation of off-site disposal costs.

I would like to summarize Merck's position on waste recovery and waste minimization by reading from our annual report: "The manufacture of drugs necessarily involves the

transformation of organic chemicals, portions of which become waste material. The company's policy is to reduce those wastes by applying the same level of creativity, technical competence, and hard-work that goes into the invention and development of our health care products." That is Merck's policy.

Now, let me ask a question for you: How do you, as the Legislature, how does EPA, how does DEP know we are following that policy? How do they know we are continuing to make progress in waste minimization? One way is for us to tell you, in a consistent, coherent manner, how we are reducing waste, and I think that is a good idea, because what we have learned may be of use to someone else in reducing their waste. We don't publish everything we do, as we did in this case, and our successes should not be lost to others. Obviously, everything we do does not apply to everyone else, and we obviously do not want to divulge all of our process trade secrets. But, historically, we have not considered environmental improvements as secrets, and I see no likelihood for us to do that in the future.

The transfer of technology in the reduction of hazardous waste is an area I would recommend to you for your consideration. We in the New Jersey Health Products Council want to participate with you and with the Hazardous Waste Siting Commission to accomplish that technology transfer.

Senator Hurley spoke about the Office of Technology Assessment document that referred to some lack of resources in many companies to develop their own waste minimization techniques. He referred to 4500 companies in New Jersey which do not have the resources available to them that we do. We stand ready, and we offer to you and to the State, to pass on to other companies what we have learned. I don't propose that we will go out and tell other people how to run their businesses, any more than I would be happy to have someone come and tell me how to run my business, but we have learned a lot

about waste minimization. We have developed a lot of techniques, a lot of things that could be useful to other people. We will make the offer to the Hazardous Waste Siting Commission that we would be happy to put on seminars, programs, training sessions, whatever, so that some of that learning can be made useful to other people who do not have the resources.

Secondly, I would reexamine -- I would urge you to reexamine -- what we have accomplished, and to continue monitoring our efforts through the reports we send to DEP before you initiate legislative or regulatory mandates. It is very difficult to count the wastes we have generated when we reduced them before we ever made them. Yet, environmentally, that is the ideal time to reduce the waste. After we start up a new product, we can tell you how much we have reduced that waste. Please be aware that it is difficult to count it, though, when we make 100 pounds of the product the first year, 1000 pounds the second year, and hopefully a million pounds the third year. We will be glad to count the wastes, but they have to be looked at in the perspective of the growing market and the growing production for the product.

How do we count a reduction in the waste from products if we only manufacture them once every five years? That is very common in our industry. It is called campaign production. In order to fill the marketplace, you may only run two months one year, a month another year, and maybe not again for several years. It is difficult to figure out how to count waste reductions for processes that are run infrequently.

How do we count reducing a large amount of a non-RCRA waste, when in that reduction we may make a small amount of a RCRA waste which is technically an increase, but environmentally a decrease? How do we count minimizations we have made over our history, especially on recent reductions? These are all difficulties in evaluating how waste minimization is being accomplished in a company.

Do we need financial incentives? The incentives of reduced liability and economic savings are already substantial. I recognize that there may be very different situations from the pharmaceutical health products industry, where waste minimization may need millions of dollars, and perhaps the product just can't bear the investment that is required. Some kind of tax incentive might be appropriate for that kind of a situation, maybe for purchase of technology, maybe for actually installing, or implementing the waste minimization.

I think of the messages I would like to give to you today, the most important one is that waste minimization should not be discouraged. We were very fortunate that none of our waste minimization projects required RCRA permits, or they would probably still be waiting. Many of them were held up. In fact, some still are, waiting for simple State air permits. If you want to encourage us to make lifesaving drugs, but you want to encourage waste minimization at the same time, the best thing you can do is please use your influence to help make the regulatory processes work more efficiently. You can help by ensuring that the existing programs have adequate resources to carry out their current responsibilities on a timely basis. The worst thing for waste minimization in the future would be another new level of regulatory system. You don't want to encourage someone to postpone a waste minimization project two years in the future because he already did his 10% this year, and he wants something in the bank for the future. You don't want to delay implementation, while a new regulatory division sits there waiting to look at an application to decide if the project is going to get reduction points and, if so, how many.

Senator Gormley, your bill says that the Legislature determines that it is in the public interest to encourage businesses generating hazardous waste to implement waste minimization strategies.

SENATOR GORMLEY: A pretty safe comment.

MS. BOWERS: Right now, without benefit of any regulatory mandates, waste minimization is alive and well, and with your positive encouragement, you can help it to blossom.

Thank you. I would love to answer questions.

SENATOR DALTON: Your testimony was extremely good, and extremely provocative, because it raised a host of questions that any program which we attempt to fashion has to address. Thank you very much for your offer -- and I am sure Rick will thank you himself--

MR. GIMELLO (speaking from audience): Believe it.

SENATOR DALTON: --to be of assistance, because there are a host of industries out in the hinterlands there that do not have the technological expertise that is available in a company like yours.

This is a broad question, and certainly you can answer it broadly: How does the Legislature attempt to deal with this issue on an even-handed basis, when trying to encourage those industries without significant technological expertise to minimize waste, and at the same time take into account your concerns about, particularly your industry, where it is in your best interest without any program to minimize waste?

MS. BOWERS: I think the first thing I would like to say is, I think it is in everybody's best interest, even the companies who don't know it, may not recognize it, have not looked at it, don't realize what it is costing them. I think to that end, you don't have to do anything to make it in their best interest. It already is. What I think it would be important for the Legislature to do, is to make sure that the opportunity is there for them to find out that there are other resources available to them in academia, in other industry trade associations, and that what has been learned can actually be passed on to them; that they can come and ask questions; that there is a place for them to go to find out what they

might be able to do. I think you need to look at what is happening in waste minimization.

I wish I could give you numbers and tell you how much waste minimization has been accomplished. If you ask me the question, how much have you done, the answer has to be not as much as we can, and more than we ever did before. But I can't give you a meaningful number, because the numbers, in their aggregate, are nonsense. The numbers in specific do mean something. I can tell you for a given process and a given product that I have reduced the waste steadily over the years in big spurts some years, but in nonetheless important degrees in other years. How I did it is a resource that is important to all the State of New Jersey, and to all of the country. I would like to be able to tell other people how we did it. Other companies in the industry would like to be able to tell people how we did it. Other companies in other industries, I think share the same feeling. I think through whatever means the Legislature sees itself able to do to encourage that -- to facilitate it -- I think it would be the best thing that could be done.

SENATOR DALTON: I suspect the research that is talked about in some of the legislation, and the ability to develop and also apply present technologies in areas which are not availing themselves-- I mean, I agree with you that it is in everybody's best interest, but there are a lot of folks out there who-- Joe's Auto Body Shop -- okay? -- uses a lot of waste at the front end, and has a lot of waste -- as Rick Gimello indicated -- at the other end of the pipe line, too. A standard set of procedures has been established over the years, which I don't think varies from body shop to body shop. And I am not picking on the body shops, by the way; I am using them by way of an example. There are thousands of body shops in the State. Although there are associations, how do you encourage those people to take advantage -- or how do you develop,

assuming there is a technology, to say, "Hey listen, Joe, there is another way of doing this"? I guess that is what I am grappling with.

MS. BOWERS: Joe does not want me to come and tell him about new chemistries, and he doesn't want me to tell him about a piece of equipment that is going to cost--

SENATOR DALTON: If it is between nine and five, he doesn't.

MS. BOWERS: If it is going to cost him \$5 million, he doesn't want to hear it either. But there are better ways of using the materials that he buys. There are better ways of cleaning the equipment he uses. There are better ways of painting cars and doing the kinds of things that the little guys do. I don't know them all, but I know some that might work for Joe's Auto Body Shop. I think collectively in industry, and collectively through the Chemical Industry Council, the National Paint and Coatings Association-- I think there is a body of knowledge there. I don't know how to get it into Joe's shop.

SENATOR DALTON: Okay.

MS. BOWERS: May I?

SENATOR DALTON: Sure.

MS. BOWERS: At one of our facilities, we were asked by a State agency to help the agency bring to the small quantity generator an understanding of what their obligations were, because Joe's Auto Body Shop does make hazardous waste. He does fall under RCRA now. He needs to know how to get into the system. We put on a seminar for all of the local small shops in the community. It is a relatively small town, but there were about 50 people from little auto body shops and dry cleaners, who came to listen to us tell them what the regulations meant. The regulations are like that. You can't send that to someone in the mail; you have to explain it to them. The technologies, to write them up and give them out,

are complex. But again, sitting down with people, and letting them ask the kinds of questions that they can understand the answers to is really the way to let them learn what we have learned.

SENATOR DALTON: So, what you're saying is, the technical offering of assistance, the inducements that are within the package, are appropriate. At the same time, Senator Gormley's mallet, it seems to me, is appropriate as well, because of the fact that now that you have gone out and you have taken the time and provided the technical assistance -- at least the offer -- provided the financial inducements, and you still haven't seen that reduction, then the mallet, I would assume, is appropriate.

MS. BOWERS: I would suggest that the first thing to do is what you said. You start looking at what is happening, until you get an idea of whether there really is waste minimization taking place or not.

SENATOR DALTON: Right.

MS. BOWERS: I think that is something that-- Frankly, the systems in place now don't let us do very well. I think they can be improved. I think we will support trying to track hazardous waste in meaningful terms. I can't give you an answer. I can't tell you how to do it. But I think it is important that we do try to do that. Then I think that perhaps a mallet is an appropriate tool. We in industry have responded to mallets before. I will submit to you, though, that a mallet is relatively a gross tool, and it tends to hit the good guys between the eyes sometimes worse than it hits the bad guys between the eyes. To the extent that sometimes a mallet might be a disincentive for what you are trying to accomplish, I think you have to recognize that that may be a reality.

SENATOR DALTON: Let me turn to the little old mallet maker. (laughter)

SENATOR GORMLEY: You're doing a lot of comedy lately, aren't you?

First of all, the bill -- just so you have the background, because your testimony -- and excuse me for missing a portion of it-- He has us on 15-minute swings to eat lunch. The situation is one where I would have preferred to have had a grant system. If there be an ideal, I would prefer that the President of the United States put one-tenth of the emphasis on the minimization of waste as he put on Star Wars, and that there be incentive grants to industries to set a deadline -- as we did for a space shot in the '60s -- and get it done.

Unfortunately, that is not happening. My intent is to take-- I believe your company was rated the best managed company in America last year, or this year, or something like that. My intent is to hopefully encourage that form of partnership. It might appear to be a mallet. I guess kicking it off with a half a cent tax, it is a mallet. But the intent was to encourage your type of remarks as they pertain to research and development. I don't think a well-managed company sincerely approaching waste minimization, or source reduction, or whatever buzz word we find for it this year, will face the tax if they work with the Hazardous Waste Siting Commission, as I envision it.

What the more important goal is -- and I think you are right -- is that the expertise that you have -- not just scientific expertise, but maybe some management skills -- if they could rub off on some other people -- but not the Legislature, of course. Maybe you could imbue those to some other individuals.

Also, on behalf of Bridget, I would like to thank you. My dog is very elated about your new heartworm pill. (laughter) As a matter of fact, it was the topic of discussion today. No, you have to be complimented because the cost for the pill is the same as the daily prescription would have

been. You are to be complimented for that. Hey, we have to bring out the good and the bad of these companies. We're trying to be fair. So, on behalf of Bridget, thank you very much.

The good part about the bill is that you are here today. The good part is that we have discovered a resource, and everybody has been impressed by the testimony. No one wants to use a mallet on a resource, when a good-faith offer is made. We would only encourage it. I don't think what I am proposing will ever hit an industry that acts in good faith to minimize. I think what we are talking about are those industries that are a burden on the name corporation, that you have to suffer through when you pick up the paper everyday, and say, "Why did they do that, because I am lumped in that big, broad brush," as we are as legislators, or politicians, when the big brush is drawn out for other individuals.

So, thank you very much. I think your offer is a good one. When I say it should be used, I mean that sincerely, and not for purposes of just the transcript.

MS. BOWERS: Thank you.

SENATOR DALTON: Thank you very much, both of you. The next speaker will be Richard Corbett, New Jersey Association of Realtors.

R I C H A R D T. C O R B E T T: Good afternoon. I will speak only on Senate Bill 2989. We are concerned about the effects of S-2989 on existing delays in the ECRA process. This bill will put an additional work load on DEP to review the environmental audits and to follow up on those audits. Right now, DEP has serious problems in handling the ECRA work load, and this bill will result in further delays.

The idea of independent engineers, we think is a good idea, but we think it should be applied to the ECRA process that now exists, especially with regard to minor cleanup matters. We are not against cleaning up industrial

establishments. We agree with the intent of the Environmental Cleanup Responsibility Act, but we do not agree with drawing more work into the process, where the cases that are there now cannot be handled effectively.

SENATOR DALTON: In other words, you're saying if you give DEP more jurisdiction, you better make sure you give them the appropriate tools to carry out that jurisdiction. What we did in ECRA was give them the jurisdiction and not the tools. Is that correct?

MR. CORBETT: Yes. I think there have been continuous efforts to beef up the staff at DEP on ECRA, but they never seem to catch up with the amount of work to be done. Additionally, other states, I believe, are going to be trying to recruit people from DEP to work on ECRA type bills in their states, so when people get hired, there is also an attrition rate. As a consequence, there are serious delays in getting cleanup through all the negative declarations. That is our concern.

SENATOR DALTON: I think some of us who sat on this Committee over the years have learned the lesson you are talking about the hard way, and I am hopeful -- and I am sure Bill is -- that we won't let it happen again. I appreciate your reiterating that lesson.

SENATOR GORMLEY: Do we have any estimates -- I am into estimates today -- of contracts of sales that were signed, where settlement never took place as a result of an environmental delay?

MR. CORBETT: I certainly don't have that information.

SENATOR GORMLEY: I would be curious. It is a common-- . I mean, the concept is a good concept. It is unfortunate when administratively -- not because of the people at DEP; there aren't enough bodies-- You know, when you have to certify that something is clean, they only bring up the one that wasn't clean that you missed, and that is a heck of a

burden to put on anybody. But I understand your point. I know we have all had concerns about ECRA and similar pieces of legislation, because of the administrative delays, which are not DEP's fault. It is a very complex process to certify that something is clean, especially soil, and then, you know, someone is going to second-guess you once there has been a complaint raised.

SENATOR DALTON: The thing is, though, when DEP comes in, they have to sit here and level with us. They want the jurisdiction. They are the ones who have to come in and say, "Hey, this is what we need to carry out this jurisdiction." They haven't, in the past, always leveled with us, I don't think. That is my reaction to it. We're up here and we are trying to do the right thing, and obviously something like ECRA -- a program like ECRA -- is the "right thing to do." We need someone to give us the facts, to say, "Hey, if you want us to carry this out, then we are going to need these bucks." I don't think that information has always been transmitted to this Committee.

MR. CORBETT: Perhaps part of the answer is to consider the idea of the independent engineers -- the system that is set up in this bill -- and apply it to that process. I believe that has been suggested to the Assembly Oversight Committee, but--

SENATOR DALTON: Art Albohn's Committee?

MR. CORBETT: Yes, but I don't think it has been followed up on there. They have a tremendous amount of work to do right now reforming the ECRA bill. Maybe it is just a matter of not getting to it. But that might, at least as far as the minor cleanups, free up some of DEP's resources to handle the major ones.

SENATOR DALTON: I agree; I agree. Thank you very much.

SENATOR GORMLEY: Thank you.

MR. CORBETT: Thank you.

SENATOR DALTON: The next persons to testify, I think are from Sweetwater Technology -- Barbara Monick and Alexander Blake. -- Then, is there anyone else who wants to testify? (no response) Okay.

B A R B A R A M O N I C K: Gentlemen, we represent, I think, the third field; that is, we are inventors of a chemical wastewater treatment process. We have heard from industry, which is greatly concerned with regulations, restrictions, and costs to industry. We are very well aware, though, that there are regulations on the books that have to be met. We are also aware of the fact that many of the small businesses cannot afford to implement the high cost of putting in environmental systems to meet the regulations. Therefore, of course, assistance should somehow be addressed to those people.

Many years ago, the Federal government had a program through EPA, whereby they guaranteed to the State 80% of a loan that, through the State EDAs, made available low-cost loans to companies wishing to put in environmental equipment and systems. In essence, industry develops technology, the reason being that when a man has to put in a system, he is going to find the best and cheapest, most efficient way to treat his waste. It stimulates research, at the same time of putting in a system and solving a problem.

I strongly support Senator Gormley's bill because it does not tax the industry, which is meeting the regulations and is in compliance. In essence, regulations have to be met, and the people are going to have to pay for it. Minimization -- source reduction-- It is to industry's advantage to come up with an answer to that, because it is economically advantageous or them to minimize waste. But the end of the pipe, the wastewater treatment -- and that is hazardous and/or toxic contaminants -- is something that absolutely has to be faced, regardless of whether it is faced in 10 gallons or 10 million

gallons. There will always be that end of the pipe to be faced and to be treated.

Therefore, I feel that the language, or definition of hazardous waste in all of the proposed bills should be amended to include aqueous or solid, and a very clear definition of the term "hazardous materials" should be addressed. When some of the gentlemen and ladies from industry indicated that there are times when their manufacturing processes will increase waste, that may be true in volume, but it does not necessarily mean that all of it would be toxic or hazardous, and that all of it, or some of it, could not be recycled back either into the manufacturing process or through their rinse lines, so as to eliminate the discharge into the POTWs. Again, I am of course talking about aqueous situations.

There are many instances and many new and innovative technologies that DEP is not aware of, simply because of the fact that they, unfortunately, do not wish to be made aware of these technologies. I am sorry to say that. I would like to feel that at times DEP would like to be an information receiving agency. There are other instances, of course, where they will not assess new technologies, and there are many innovative, economical, feasible technologies out there to treat some of the problems.

Now, I will defer to my partner, Alexander Blake.

A L E X A N D E R B L A K E: Well, I don't have that much to add to this. I agree with Ms. Monick that your bill, Senator Gormley, is extremely good, but it should include some other technologies, other than source reduction.

It is very simple. If I, for example, have water treatment, I will arrive at a solid waste -- sludge, let's call it -- which is a solid waste and which has to be disposed of. If I have that solid waste and it is still toxic, it is a very difficult matter to handle. But if I can produce the same amount of sludge -- of solids -- that is not hazardous. Do you

understand what I mean? If I take a pound of sludge that is toxic--

SENATOR GORMLEY: I thought I was saying it. If I am not, we will put it in.

MR. BLAKE: --a toxic substance, and I take the same amount and it is not toxic-- It may have the contaminants in it, but it is not toxic -- it doesn't leach -- and it should be considered a nonhazardous product.

SENATOR GORMLEY: That is why it is done in such a broad manner. It would be impossible for me to address -- or for any legislator to address -- thoroughly, matters of this nature.

MR. BLAKE: Right.

SENATOR GORMLEY: That is why I am suggesting that the Commission, in terms of setting criteria-- This is one of the things they look to.

MS. MONICK: I would like to say something about that. The regulations, as far as pre-treatment is concerned, are relatively clear-cut. There are, for many of the substances -- the heavy metals in particular for the electroplating industry, per se-- They do have very strict guidelines and regulations to meet. If they meet the regulations, that's fine. If they don't, then certainly Senator Gormley's bill would apply.

As far as indicating that, "Well, these regulations change daily," of course, that is not true. However, certainly if they do change, most of the technologies that treat the wastewaters do not treat strictly to that exact level. Either they don't treat at all, or they will treat within a 10% factor, so they are certainly below the recommended guideline, if they are in compliance at all.

If the regulation changes, certainly industry will be given time, as they are now, to get into compliance. I don't see a problem with changes in the regulations being a deterrent

not to approve that bill for that reason. But we are working with regulations that are already on the books. This perhaps is a very good way of acting as a reward, perhaps, to the companies that are in compliance. Well, they have to be in compliance. They must meet the regulations.

SENATOR GORMLEY: Well, there are regulations. This has been brought out before: We don't want to reward anybody for merely meeting a regulation. I guess we are setting a scale. You break even at a certain level, but if you go beyond--

MS. MONICK: You should be penalized for it.

SENATOR GORMLEY: Either way. You are either penalized or you are rewarded -- if you go to either end of the scale.

MS. MONICK: I don't understand industry's objection to the other proposed bills, in light of the fact that regulations are there. It is a fact of life. If they minimize or reduce their waste, that is to their economic advantage. They are going to do that anyway, as the lady from Merck indicated. I don't understand the objection, therefore, to receiving a break if they purchase additional equipment.

I am not an equipment manufacturer, so it is not my ax to grind. However, if, at any time, they are going to use equipment, and get a tax break for purchasing that equipment, I don't understand their objection.

SENATOR DALTON: How about if you don't need the equipment?

MS. MONICK: But they will eventually, because equipment wears out.

SENATOR DALTON: I think Mr. Gimello's point is, there are some low-tech items that should be tried before all of a sudden you start granting incentives for high-tech items. I think that is what his point was.

MS. MONICK: Except that they are discussing it from a subjective point of view, but if you look at all industry -- which I am sure a bill must address -- there are industries where that would not apply. That's true, but there are perhaps other industries where they must -- they will utilize equipment. I don't understand in those instances why they would object to a tax break for purchasing a piece of equipment, that they are going to have to purchase anyway.

SENATOR GORMLEY: I think you will find one of the favorite set of bills -- second only to constitutional amendments that are suggested every October before an election -- are tax-credit bills. They are very, very popular. But if you are going to have as flat a tax as possible -- either corporate or at the income tax level in New Jersey-- Let's get away from environmental policy -- tax policy. I don't think a credit program-- A credit program, to me, is, you can take it if you want to, but you don't have to take it. I don't think credits-- I don't know the last time we had one that really passed. A lot are introduced. They seem good to the particular industry that may or may not be affected.

SENATOR DALTON: I don't think his point was to generally reject credits. That is not what I heard, anyhow. What he is saying is that credits have to be applied, but they have to be applied somewhat carefully; that you don't want to give out a credit where some low-tech item -- which is certainly more desirable -- should be utilized first.

Additionally, you don't want to start giving out credits to people who have been recalcitrant in cleaning up their own houses, which they are perfectly capable of doing.

MS. MONICK: Well, I would like to say something else about that. If you give a credit for equipment, there definitely should be some form of monetary review of that company to see, in fact, that they are utilizing that equipment properly. I know myself of many abuses of companies that have

purchased equipment because they were told that DEP was going to close them down. They stick it in a corner, and it is not plugged in until the guy comes around. It is not used.

SENATOR GORMLEY: That is an argument against the bill.

MS. MONICK: No, no.

SENATOR DALTON: I think that is what he was saying. That is one of the things he was saying.

MS. MONICK: What I'm saying is, perhaps that bill might include something that would act as a check and balance against the misspendature of the money. That is basically what I am saying.

SENATOR GORMLEY: Instead of just using it as a shelter, substantively use it for the environment.

MS. MONICK: Yes. I also feel that research and development funds and grants to companies-- I still feel that people develop technology, not necessarily always the colleges and the thinkers. The people out there who have a specific need for something are the ones who are going to go out and find us, because they need to find us. They should have some assistance in helping to put in equipment or systems that will best serve their need.

MR. BLAKE: I think, also, it is unfortunate that by law our government agencies -- whether it be the DEP here or the EPA in Washington -- are not allowed to recommend anything. They are allowed to cite industries, but they are not allowed to recommend. Maybe our State can change that by saying to a manufacturing company, "Look, here is a list of environmental systems, companies. Take your pick." They would not be recommending one.

SENATOR GORMLEY: I think that is done in certain areas, isn't it?

SENATOR DALTON: Sure it is.

MR. BLAKE: Well, not that we know of.

SENATOR DALTON: It is certainly done in certain areas. DEP has a certified list for people who market water filtration systems. That is done.

SENATOR GORMLEY: Radon is being done now, isn't it?

SENATOR DALTON: That is correct.

SENATOR GORMLEY: Radon is being done now. Also, you have to balance that with-- Whenever government makes a private recommendation, you have to balance that, because there are many greater evils that enter into the system when government is making recommendations as to who to hire.

MR. BLAKE: Well, the only thing I would like to add, then, to this, is, if you will, please consider including in your waste minimization bills the recycling -- if someone installs recycling equipment. For example, if the waste is cleaned, if the rinse water is clean enough, he doesn't have to discharge the water. He installs a closed loop where the water is reused. That, I think, is waste minimization. The same thing if he uses a treatment system producing a stable sludge, for example, which does not cause a hazard. I think that is waste minimization.

SENATOR GORMLEY: Thank you.

MS. MONICK: Thank you.

SENATOR DALTON: We appreciate it, thank you.

SENATOR GORMLEY: A good point.

SENATOR DALTON: I think this will conclude our hearing today. If there are any additional comments that people want to provide to us-- How long does the record stay open usually?

MR. CONNELLY (Committee Aide): Two weeks.

SENATOR DALTON: Okay, you have two weeks to provide any written comments.

That concludes our hearing today.

(HEARING CONCLUDED)

