

**PUBLIC HEARING**

before

**SENATE ENERGY AND ENVIRONMENT COMMITTEE**

on

**SENATE BILL 1762 AND ASSEMBLY BILL 1778**

(Imposing taxes on the disposal of solid waste at landfills,  
and authorizing local government units to enter into long-term  
contracts with private firms for the financing, construction,  
operation, and maintenance of resource recovery facilities)

Held:  
July 16, 1984  
Room 346  
State House Annex  
Trenton, New Jersey

**MEMBERS OF COMMITTEE PRESENT:**

Senator Daniel J. Dalton, Chairman  
Senator Paul Contillo  
Senator Peter P. Garibaldi

**ALSO PRESENT:**

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

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SENATE, No. 1762

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STATE OF NEW JERSEY

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INTRODUCED MAY 14, 1984

By Senators GORMLEY and CODEY

Referred to Committee on Energy and Environment

AN ACT concerning solid waste disposal and resource recovery,  
amending P. L. 1975, c. 326, P. L. 1970, c. 40 and P. L. 1971, c. 198  
and supplementing P. L. 1970, c. 39 and P. L. 1976, c. 68.

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

3    1. (New section) The Legislature finds and declares that the  
4    State's capacity to safely dispose of solid waste at sanitary landfills  
5    is rapidly diminishing; that the recovery of any potential resource  
6    in solid waste, especially its conversion to useable energy, is in the  
7    public interest; that the acquisition, construction or operation of  
8    resource recovery facilities is characterized by high initial capital  
9    expenditures and initially high costs of disposal which may be  
10   stabilized or decreased based upon a return on energy generated,  
11   all of which require long-term financial arrangements and a steady  
12   and secure flow of waste; that to encourage the use of resource  
13   recovery it is necessary to attain the most advantageous financing  
14   and ownership structures for implementation of resource recovery  
15   projects by units of local government while maintaining strict  
16   financial and programmatic scrutiny by agencies of State govern-  
17   ment; and that it is necessary to provide for funding of the solid  
waste management programs of the State and of the solid waste  
management districts, all as hereinafter provided.

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

2    a. "Contracting unit" means any county; any municipality; or  
3    any board, commission, committee, authority or agency, which is  
4    not a State board, commission, committee, authority or agency,

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

5 and which has administrative jurisdiction over any district other  
6 than a school district, project, or facility, included or operating in  
7 whole or in part, within the territorial boundaries of any county or  
8 municipality which exercises functions which are appropriate for  
9 the exercise by one or more units of local government, and which  
10 has statutory power to make purchases and enter into contracts or  
11 agreements for the performance of any work or the furnishing or  
12 hiring of any materials or supplies usually required, the contract  
13 price of which is to be paid with or out of public funds;

14 b. "County" means any county of this State of whatever class;

15 c. "Department" means the Department of Environmental  
16 Protection;

17 d. "Director" means the Director of the Division of Taxation  
18 in the Department of Treasury;

19 e. "District" means a solid waste management district as desig-  
20 nated by section 10 of P. L. 1975, c. 326 (C. 13:1E-19);

21 f. "District investment tax fund" means a District Resource  
22 Recovery Investment Tax Fund established pursuant to subsection  
23 b. of section 15 of this act;

24 g. "Division" means the Division of Taxation in the Department  
25 of Treasury;

26 h. "Franchise" means the exclusive right to control the disposal  
27 of solid waste within a district as awarded by the Board of Public  
28 Utilities;

29 i. "Independent public accountant" means a certified public  
30 accountant, a licensed public accountant or a registered municipal  
31 accountant;

32 j. "Investment tax" means the resource recovery investment tax  
33 imposed pursuant to subsection b. of section 3 of this act;

34 k. "Investment tax fund" means the Resource Recovery Invest-  
35 ment Tax Fund containing subaccounts for each county pursuant to  
36 the provisions of section 14 of this act;

37 l. "Out-of-district solid waste" means any solid waste accepted  
38 for disposal in a district which was generated outside the receiving  
39 district;

40 m. "Person or party" means any individual, public or private  
41 corporation, company, partnership, firm, association, political sub-  
42 division of this State, or any State, bi-state, or interstate agency or  
43 authority;

44 n. "Resource recovery facility" means a solid waste facility  
44a constructed and operated for the collection, separation, recycling,  
44b and recovery of metals, glass, paper, and other materials for reuse  
44c or for energy production;



44d o. "Sanitary landfill facility" means a solid waste facility  
 45 at which solid waste is deposited on or in the land as fill for the  
 46 purpose of permanent disposal or storage for a period exceeding  
 47 six months, except that it shall not include any waste facility  
 48 approved for disposal of hazardous waste;

49 p. "Services tax" means the solid waste services tax imposed  
 50 pursuant to subsection a. of section 3 of this act;

51 q. "Services tax fund" means the Solid Waste Services Tax  
 52 Fund established pursuant to section 12 of this act in which the  
 53 receipts from the services tax and any interest thereon will be  
 54 deposited;

55 r. "Subfranchise" means the exclusive right, as awarded by a  
 56 district, of a vendor to control the disposal of solid waste within all  
 57 or any portion of a district; and

58 s. "Vendor" means any person or party financially qualified for,  
 59 and technically and administratively capable of, undertaking the  
 60 design, financing, construction, operation, or maintenance of a  
 61 resource recovery facility or of providing resource recovery ser-  
 62 vices.

1 3. (New section) a. There is levied upon the owner or operator  
 2 of every sanitary landfill facility a solid waste services tax. The  
 3 services tax shall be imposed on the owner or operator at the  
 4 initial rate of \$0.25 per cubic yard of solids and \$0.003 per gallon  
 5 of liquids on all solid waste accepted for disposal at a sanitary  
 6 landfill facility. On the first day of the 13th month following the  
 7 imposition of the services tax and annually thereafter, the rate of  
 8 the services tax shall be increased by \$0.01 per cubic yard of solids.

9 b. (1) There is levied upon the owner or operator of every  
 10 sanitary landfill facility a resource recovery investment tax. The  
 11 investment tax shall be levied on the owner or operator at an  
 12 initial rate of \$0.28 per cubic yard of solids and \$0.004 per gallon  
 13 of liquids on all solid waste, other than waste products resulting  
 14 from the operation of a resource recovery facility, accepted for  
 15 disposal at a sanitary landfill facility.

16 (2) Unless the rate is otherwise adjusted pursuant to section 11  
 17 of this act, the rate of the investment tax shall be increased pur-  
 18 suant to the following schedule:

19 (a) On the first day of the 18th month following the imposi-  
 20 tion of the investment tax, the rate of the investment tax shall  
 21 increase to \$0.56 per cubic yard of solids;

22 (b) On the first day of the 30th month following the imposi-  
 23 tion of the investment tax, the rate of the investment tax shall  
 24 increase to \$0.84 per cubic yard of solids; and

25 (c) On the first day of the 42nd month following the imposi-  
26 tion of the investment tax, the rate of the investment tax shall  
27 increase to \$1.12 per cubic yard of solids.

28 The investment tax shall no longer be levied on the owner or  
29 operator of a sanitary landfill facility on and after the first day of  
30 the first month of the 11th year following the imposition of the  
31 investment tax.

32 c. (1) There is levied upon the owner or operator of every sani-  
33 tary landfill facility a surcharge on the investment tax. The sur-  
34 charge shall be imposed on the owner or operator at a rate of  
35 \$0.21 per cubic yard of solids and \$0.003 per gallon of liquids on  
36 all out-of-district solid waste, other than waste products resulting  
37 from the operation of a resource recovery facility, accepted for  
38 disposal at a sanitary landfill facility.

39 (2) If the department shall determine that a district has failed  
40 to fulfill its solid waste management planning responsibilities  
41 pursuant to section 17 of this act, the rate of the surcharge on the  
42 investment tax levied pursuant to paragraph (1) of this subsection  
43 shall, upon notification to the Board of Public Utilities and to the  
44 director, immediately be increased to a rate determined by the  
45 department, not to exceed \$0.42 per cubic yard of solids or \$0.006  
46 per gallon of liquids.

47 d. If any owner or operator of a sanitary landfill measures the  
48 solid waste accepted for disposal by a measure other than cubic  
49 yards or gallons, the taxes and surcharges imposed by the provi-  
50 sions of this section shall be levied at a rate equivalent thereof as  
51 determined by the director.

52 e. No taxes or surcharges shall be levied on the owner or operator  
53 of a sanitary landfill facility for the acceptance of solid waste  
54 generated exclusively by any agency of the federal government if  
55 a solid waste collector submits to the owner or operator a copy of  
56 the contract with the federal agency indicating the effective date of  
57 the contract was before the effective date of this act. Taxes and  
58 surcharges shall be levied on the owner or operator for acceptance  
59 of solid waste generated by a federal agency if the contract between  
60 the federal agency and the solid waste collector was entered into,  
61 or renewed, on or after the effective date of this act.

1 4. (New section) a. Every owner or operator of a sanitary land-  
2 fill facility which accepts solid waste for disposal and which is  
3 subject to the taxes and surcharges imposed pursuant to section 3  
4 of this act, shall register with the director on forms prescribed by  
5 him within 20 days after the first acceptance of that waste.

6 b. The director shall prepare and transmit to each owner or

7 operator of a sanitary landfill facility forms for the rendering of a  
 8 tax return. The form shall be structured in a manner and form  
 9 determined by the director and shall provide for the following  
 10 information, and any other information he may deem necessary  
 11 to be rendered in the return:

12 (1) The total number of cubic yards of solids and gallons of  
 13 liquids accepted for disposal during the previous month;

14 (2) The number of cubic yards of solids and gallons of  
 15 liquids accepted and place of origin of out-of-district waste  
 16 accepted for disposal during the previous month; and

17 (3) The amount of each tax or surcharge paid according to  
 18 the amount of solid waste accepted.

19 The director may prescribe a consolidated form for reporting the  
 20 taxes and surcharges imposed under this act and the taxes imposed  
 21 pursuant to P. L. 1981, c. 278 (C. 13:1E-91 et seq.) and P. L. 1981,  
 22 c. 306 (C. 13:1E-100 et seq.).

1 5. (New section) Every owner or operator of a sanitary landfill  
 2 facility shall, on or before the 20th day of each month, render a  
 3 return under oath to the director and pay the full amount of taxes  
 4 and surcharges due as stated in the return.

1 6. (New section) a. If a return required by this act is not filed, or  
 2 if a return when filed is incorrect or insufficient in the opinion of  
 3 the director, the amount of tax due shall be determined by the  
 4 director from such information as may be available. Notice of such  
 5 determination shall be given to the taxpayer liable for the payment  
 6 of the tax. Such determination shall finally and irrevocably fix the  
 7 tax unless the person against whom it is assessed, within 30 days  
 8 after receiving notice of such determination, shall apply to the  
 9 director for a hearing, or unless the director on his own motion  
 10 shall redetermine the same. After such hearing, the director shall  
 11 give notice of his determination to the person to whom the tax is  
 12 assessed.

13 b. Any taxpayer who shall fail to file his return when due or to  
 14 pay any tax when the same becomes due, as herein provided, shall  
 15 be subject to such penalties and interest as provided in the "state  
 16 tax uniform procedure law," Subtitle 9 of Title 54 of the Revised  
 17 Statutes. If the director determines that the failure to comply with  
 18 any provision of this section was excusable under the circum-  
 19 stances, it may remit such part or all of the penalty as shall be  
 20 appropriate under such circumstances.

21 c. (1) Any person failing to file a return, failing to pay the tax,  
 22 or filing or causing to be filed, or making or causing to be made, or  
 23 giving or causing to be given any return, certificate, affidavit,



24 representation, information, testimony or statement required or  
 25 authorized by this act, or rules or regulations adopted hereunder  
 26 which is willfully false, or failing to keep any records required by  
 27 this act or rules and regulations adopted hereunder, shall, in addi-  
 28 tion to any other penalties herein or elsewhere prescribed, be  
 29 guilty of a crime of the fourth degree.

30 (2) The certificate of the director to the effect that a tax has  
 31 not been paid, that a return has not been filed, that information has  
 32 not been supplied or that inaccurate information has been supplied  
 33 pursuant to the provisions of this act or rules or regulations  
 34 adopted hereunder shall be presumptive evidence thereof.

1 7. (New section) In addition to any other powers authorized by  
 2 this act, the director shall have the following powers:

3 a. To delegate to any officer or employee of the division any  
 4 powers or responsibilities required by this act as he may deem  
 5 necessary;

6 b. To promulgate and distribute any forms necessary for the  
 7 implementation of this act; and

8 c. To adopt any rules and regulations pursuant to the  
 9 "Administrative Procedure Act," P. L. 1968, c. 410 (C.  
 10 52:14B-1 et seq.) as he may deem necessary to effectuate the  
 11 purposes of this act.

1 8. (New section) The taxes imposed by this act shall be governed  
 2 in all respects by the provisions of the "state tax uniform pro-  
 3 cedure law," Subtitle 9 of Title 54 of the Revised Statutes, but only  
 4 to the extent that a specific provision of this act or any rule or  
 5 regulation required to be promulgated by this act may be in con-  
 6 flict therewith.

7 9. a. (New section) Notwithstanding the provisions of any law  
 8 to the contrary, the owner or operator of a sanitary landfill facility  
 9 may collect the taxes and surcharges levied and imposed pursuant  
 10 to this act by imposing an automatic surcharge on any tariff estab-  
 11 lished pursuant to law for the solid waste disposal operations of  
 the sanitary landfill facility.

7 b. For the purposes of this act, all municipal, county, and State  
 8 contracts for solid waste collection and disposal shall be considered  
 9 tariffs for solid waste collection, and shall be subject to any adjust-  
 10 ment of tariffs resulting from the provisions of this act.

1 10. (New section) a. The Board of Public Utilities shall, within  
 2 60 days of the effective date of this act, issue an order adjusting  
 3 the tariffs established pursuant to law for solid waste collection  
 4 operations by an amount equal to the total amount of the increase  
 5 in the adjusted tariffs for solid waste disposal operations to take  
 6 effect on the date on which the tax is imposed.

7 b. The Board of Public Utilities shall, by the date of any increase  
8 in the services tax or the investment tax required in subsection a.  
9 of section 3 of this act, issue an order adjusting the tariffs estab-  
10 lished pursuant to law for solid waste collection operations by an  
11 amount equal to the total amount of the increase in the tariffs for  
12 solid waste disposal operations that shall be adjusted on that date.

13 c. The Board of Public Utilities shall, within 60 days of notifica-  
14 tion by the department that an additional surcharge shall be  
15 imposed on an owner or operator of a sanitary landfill facility or  
16 that the investment tax rate shall be adjusted in a manner other  
17 than by the rate adjustments provided in subsection b. of section 3  
18 of this act, issue an order adjusting the tariffs established pursuant  
19 to law for solid waste collection operations by an amount equal  
20 to the total amount of the increase in the tariffs for solid waste  
21 disposal operations.

22 d. In issuing any order required by this section, the Board of  
23 Public Utilities shall be exempt from the provisions of R. S.  
24 48:2-21.

1 11. (New section) a. Each district, in consultation with the  
2 department, may conduct a study to determine the tax rate esti-  
3 mated to be necessary to be paid into the district investment tax  
4 fund so as to lower the cost of resource recovery facility services  
5 to a level which is competitive with the cost of disposal in a sani-  
6 tary landfill utilized by the district.

7 b. After completion of the study, the district may request the  
8 department to adjust the investment tax rate set forth in section 3  
9 of this act to a rate, not to exceed \$2.80 per cubic yard, or the  
10 equivalent thereof, which is consistent with the conclusions drawn  
11 in the study and with the plan developed pursuant to subsection d.  
12 of section 15. The district may request the department to adjust  
13 the rate, subject to that maximum rate, on an annual basis in  
14 accordance with the conclusions drawn as a result of a review of  
15 the study and any additional information gained during the pre-  
16 vious year.

17 c. The provisions of any law to the contrary notwithstanding,  
18 two or more districts may conduct a joint study and establish a  
19 single investment tax rate for the districts.

20 d. The department shall, upon approval of a request by a dis-  
21 trict, notify the Board of Public Utilities and the director of the  
22 investment tax rate adjustment in that district.

1 12. (New section) There is created a nonlapsing Solid Waste  
2 Services Tax Fund to be the depository for the services tax moneys,  
3 and any interest thereon, paid to the director pursuant to this act  
4 and disbursed as provided herein.

1 13. (New section) a. Before any moneys in the services tax fund  
2 are appropriated as provided hereunder, the cost of administration  
3 and collection of the tax shall be paid out of that fund.

4 b. The moneys collected in the services tax fund shall be appro-  
5 priated to the Department of Environmental Protection and shall  
6 be used only in the following manner:

7 (1) By the department for solid waste planning, permitting,  
8 regulation, enforcement and research, pursuant to the provisions  
9 of the "Solid Waste Management Act," P. L. 1970, c. 39 (C. 13:1E-1  
10 et seq.);

11 (2) By the department for reviewing the economic aspects of  
12 solid waste management;

13 (3) By the department for administering the services tax fund;  
14 and

15 (4) To provide State aid to solid waste management districts  
16 for preparing, revising, and implementing solid waste management  
17 plans. At least 50% of the annual balance of the services tax fund  
18 shall be used for State aid and shall be distributed in amounts  
19 proportionate to the population of each district, except that no  
20 district shall receive less than 2% of the amount apportioned to  
21 aid all districts. In the event that the department determines pur-  
22 suant to section 17 of this act that any district shall fail to fulfill  
23 its solid waste management planning responsibilities, the depart-  
24 ment may withhold for the entire year or until the district fulfills  
25 its responsibilities, all or a portion of the amount of moneys that  
26 district would have received in any year pursuant to this para-  
27 graph. Any moneys withheld for the entire year shall be distributed  
28 among the remaining districts in the same proportion as the other  
29 moneys were distributed.

1 14. (New section) There is created a Resource Recovery Invest-  
2 ment Tax Fund to contain subaccounts for each district to be held  
3 by the State Treasurer, to be the depository for:

4 a. The investment tax revenues collected by the director  
5 resulting from the amount of solid waste generated from within  
6 each county;

7 b. The surcharge revenues collected by the director resulting  
8 from the acceptance of out-of-district waste;

9 c. The investment tax revenues collected by the director not  
10 otherwise deposited in another investment tax fund subaccount  
11 pursuant to subsections a. and b. of this section shall be  
12 deposited in the receiving district's subaccount; and

13 d. Any interest thereon.



14 The moneys deposited in each district subaccount fund shall be  
15 disbursed as provided herein.

1 15. (New section) a. Before the moneys in each investment tax  
2 fund subaccount are appropriated as provided hereunder, the cost  
3 of administration and collection of the tax and surcharge shall be  
4 paid by the moneys in the subaccounts.

5 b. Each district shall create a District Resource Recovery In-  
6 vestment Tax Fund, to be the depository of the moneys appropriated  
7 to each district pursuant to this section to be administered by the  
8 governing body of each county, and the Hackensack Commission, in  
9 the case of the Hackensack Meadowlands District.

10 c. The moneys collected in each investment tax fund subaccount  
11 shall be appropriated to each district for deposit in its district in-  
12 vestment tax fund and shall be used only in accordance with a plan  
13 prepared and approved pursuant to subsection d. of this section  
14 and only for the following purposes:

15 (1) To reduce the rates charged by a resource recovery facility  
16 serving the district in order to provide gradual transition between  
17 resource recovery facility rates and sanitary landfill facility rates.  
18 Any reductions may be achieved through use of investment tax  
19 fund money: to pay construction costs and related facility start-up  
20 costs, or to pay directly part of the fees charged for disposal at a  
21 resource recovery facility.

22 (2) To cover any expenses directly related to the planning, design-  
23 ing, financing, construction, operation or maintenance of a resource  
24 recovery facility or the acquisition of the services of a resource  
25 recovery facility, including expenses incurred if a study is con-  
26 ducted pursuant to section 11 of this act;

27 (3) To design, finance, construct, operate, maintain environ-  
28 mentally sound sanitary landfill facilities to be utilized for:

29 (a) Disposing of those solid wastes which cannot be pro-  
30 cessed by a resource recovery facility or which result from the  
31 operation of a resource recovery facility;

32 (b) Disposal of solid waste, on an interim basis, until a  
33 resource recovery facility becomes operational; and

34 (c) Disposal of solid waste, on a long term basis, in those  
35 districts which demonstrate to the satisfaction of the depart-  
36 ment that utilization of a resource recovery facility is not  
37 feasible for disposal of the solid waste generated in that dis-  
38 trict; and

39 (4) To administer the investment tax fund, provided that not  
40 more than two percent of the annual balance shall be used for  
41 administration.

42 d. Within two years of the effective date of this act, and prior to  
 43 the disbursal of any funds, each district shall prepare a plan, includ-  
 44 ing a schedule, which shall outline the proposed uses of the moneys  
 45 in the district investment tax fund as well as describe the manner  
 46 in which those moneys will be disbursed. Each plan shall be adopted  
 47 as an amendment to the district solid waste management plan re-  
 48 quired pursuant to the provisions of the "Solid Waste Management  
 49 Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.). This plan may be  
 50 amended, as necessary, in accordance with the procedures provided  
 51 therefor pursuant to the "Solid Waste Management Act," P. L.  
 52 1970, c. 39 (C. 13:1E-1 et seq.).

53 e. Each district shall, by October 31 of each year in which moneys  
 54 remain in its district investment tax fund, file an audit of the  
 55 district investment tax fund and any expenditures therefrom with  
 56 the Local Finance Board in the Division of Local Government  
 57 Services in the Department of Community Affairs. The audit shall  
 58 be conducted by an independent public accountant.

59 f. Upon approval by the department, two or more districts may  
 60 establish a joint investment tax fund to receive the investment tax  
 61 fund revenues and any surcharge collected pursuant to section  
 62 3 of this act.

1 16. (New section) If the department shall determine that a dis-  
 2 trict has failed to fulfill its solid waste management planning re-  
 3 sponsibilities pursuant to section 17 of this act, the department  
 4 may assume the administration of the district investment tax fund  
 5 of that district and may use the moneys in the fund for the pur-  
 6 poses permitted in subsection c. of section 15 of this act for the  
 7 benefit of that district.

1 17. (New section) The department may determine that a district  
 2 has failed to fulfill its solid waste management planning responsi-  
 3 bilities as required by sections 11 and 12 of P. L. 1975, c. 326  
 4 (C. 13:1E-20 and 13:1E-21) and by subsection d. of section 15 of  
 5 this act. A determination of failure shall include a finding that the  
 6 district has not made a good faith effort toward fulfilling its  
 7 planning responsibilities.

1 18. (New section) Notwithstanding the provisions of any law,  
 2 rule or regulation to the contrary, as an alternative to any other  
 3 procedure provided for by law, the design, financing, construction,  
 4 operation or maintenance, or any combination thereof, of a resource  
 5 recovery facility or the provision of resource recovery facility  
 6 services may be procured by a contracting unit in accordance with  
 7 the provisions of sections 19 through 27 of this act.

1 19. (New section) Any contract between a vendor and a con-

tracting unit for the design, financing, construction, operation or maintenance, or any combination thereof, of a resource recovery facility or for the provision of the services of such a facility may be awarded for a period not to exceed 40 years.

20. (New section) a. The contracting unit shall issue a request for qualifications of vendors which shall include the date, time of day and place by which qualifications shall be received and the minimum acceptable qualifications, and which shall be made available to all potential vendors through adequate public notice which shall include publication in at least one appropriate trade or professional journal and a newspaper of general circulation in the jurisdiction of the contracting unit. In addition to all other factors bearing on qualification, the contracting unit may consider information which might result in debarment or suspension of a vendor from State contracting and may disqualify a vendor if the vendor has been debarred or suspended by any State agency.

b. The contracting unit shall publish, in the same publications in which notice of the request for qualifications appeared, a list of qualified vendors and a statement setting forth the basis for their selection.

21. (New section) a. The contracting unit shall issue a request for proposals to the qualified vendors which shall include a description of the services and facilities required, the specific information and data required, and a statement as to the relative importance of price and other evaluation factors.

b. The contracting unit shall fix a date, time of day and place by which proposals shall be received and shall specify the format and procedure for submission of proposals. The contracting unit may extend the time for submission of proposals provided that any extension shall apply to all qualified vendors and the contracting unit shall provide simultaneous written notice of any extension to all qualified vendors.

22. (New section) a. Proposals shall be reviewed by the contracting unit so as to avoid disclosure of contents to competing vendors during the process of proposal review. A list of proposals shall be prepared and shall be open for public inspection in the offices of the contracting unit at reasonable hours for at least 30 days after the contract award.

b. As shall be provided in the request for proposals, discussions may be conducted with qualified vendors who submit proposals for the purpose of clarification to assure full understanding of, and responsiveness to, the solicitation requirements. Any revisions in the request for proposals which may be developed in the course



12 of those discussions shall immediately be communicated to all quali-  
 13 fied vendors. Revisions to proposals may be permitted after sub-  
 14 missions and prior to award for the purpose of obtaining best and  
 15 final offers. In conducting discussions, there shall be no disclosure  
 16 of any information derived from proposals submitted by competing  
 17 vendors.

1 23. (New section) a. The contracting unit shall designate the  
 2 qualified vendor, or two vendors if simultaneous negotiation is to  
 3 be conducted, whose proposal or proposals are determined in writ-  
 4 ing to be the most advantageous to the public, taking into considera-  
 5 tion price and the evaluation factors set forth in the request for  
 6 proposals. No other factors or criteria shall be used in the evalua-  
 7 tion. The contract file shall include the basis on which the desig-  
 8 nation is made.

9 b. The contracting unit may negotiate a proposed contract, which  
 10 shall include the accepted proposal, with the designated vendor.

1 24. (New section) Any contract to be awarded to a vendor pur-  
 2 suant to the provisions of sections 19 through 27 of this act or pur-  
 3 suant to the "Local Public Contracts Law," P. L. 1971, c. 198  
 4 (C. 40A:11-1 et seq.) or any other contracting procedure authorized  
 5 by law for resource recovery facilities, shall include where applica-  
 6 ble, but not be limited to, provisions concerning:

7 a. Allocation of the risks of financing and constructing a resource  
 8 recovery facility, such risks to include:

- 9 (1) Delays in project completion;
- 10 (2) Construction cost overruns and change orders;
- 11 (3) Changes necessitated by revisions in laws, rules or regu-  
 12 lations;
- 13 (4) Failure to achieve the required operating performance;
- 14 (5) Loss of tax benefits; and
- 15 (6) The need for additional equity contributions.

16 b. Allocation of the risks of operating and maintaining a re-  
 17 source recovery facility, such risks to include:

- 18 (1) Excess downtime or technical failure;
- 19 (2) Excess labor or materials costs due to underestimation;
- 20 (3) Changes in operating procedure necessitated by revi-  
 21 sions in laws, rules or regulations;
- 22 (4) Changes in the amount or composition of the solid waste  
 23 delivered for disposal;
- 24 (5) Excess operation or maintenance costs due to poor  
 25 management; and
- 26 (6) Increased costs of disposal of the resource recovery  
 27 facility residue.

28 c. Allocation of the risks associated with circumstances beyond  
29 the control of any party to the contract:

30 d. Allocation of the revenues from the sale of energy:

31 e. Default and termination of the contract:

32 f. The periodic preparation by the vendor of an operating per-  
33 formance report and an audited financial statement of the facility  
34 which shall be submitted to the contracting unit, the department  
35 and the Division of Local Government Services in the Department  
36 of Community Affairs;

37 g. The intervals at which the contract shall be renegotiated; and

38 h. Employment of current employees of the contracting unit  
39 whose positions will be affected by the terms of the contract.

1 25. (New section) Any new or substantially renegotiated con-  
2 tract to be awarded to a vendor pursuant to this act shall be the  
3 subject of a public hearing to be held by the contracting unit in  
4 the jurisdiction of the contracting unit, prior to submission of the  
5 contract for the approvals required in section 26 of this act, in  
6 accordance with the following procedure:

7 a. The contracting unit shall provide adequate public notice of  
8 the proposed contract award to prospective consumers and other  
9 interested parties, which shall include publication in at least one  
10 newspaper of general circulation in the jurisdiction of the con-  
11 tracting unit;

12 b. The contracting unit shall schedule a meeting to be held within  
13 45 days of publication of the public notice with consumer repre-  
14 sentatives and other interested parties in order to present and  
15 explain the terms and conditions of the contract and to receive  
16 written questions which shall become part of the hearing record;

17 c. The contracting unit shall hold a public hearing within 90  
18 days of providing notice of the proposed contract award at which  
19 the questions submitted at the meeting held pursuant to subsec-  
20 tion b. of this section shall be addressed. At the hearing, interested  
21 parties may submit statements or additional questions concerning  
22 the terms and conditions of the proposed contract;

23 d. The contracting unit shall, within 30 days of the close of the  
24 hearing record, publish a hearing report which shall include all  
25 issues and questions raised at the hearing and the contracting  
26 unit's response thereto; and

27 e. The hearing report and the determination of the contracting  
28 unit concerning the terms and conditions of the contract shall be  
29 provided to all interested parties and hearing attendees at least 15  
30 days prior to submission of the contract for the approvals required  
31 in section 26 of this act.

1     26. (New section) a. Any new or substantially renegotiated con-  
2     tract to be awarded to a vendor and a copy of the public hearing  
3     report shall be submitted to the department which shall approve or  
4     disapprove the proposed contract based on its being consistent with  
5     the district solid waste management plan adopted pursuant to the  
6     provisions of the "Solid Waste Management Act," P. L. 1970, c. 39  
7     (C. 13:1E-1 et seq.) within 60 days of receipt. If the department  
8     shall disapprove the proposed contract, the contracting unit may  
9     prepare an amended contract and, if the amendments are sub-  
10    stantial, hold a public hearing thereon pursuant to the provisions  
11    of section 25 of this act. Thereafter the amended contract may be  
12    resubmitted for approval. In the alternative, the district solid  
13    waste management plan may be amended so as to be consistent  
14    with the proposed contract.

15    b. Any new or substantially renegotiated contract to be awarded  
16    to a vendor and a copy of the public hearing report shall be sub-  
17    mitted to Division of Local Government Services in the Department  
18    of Community Affairs which shall approve or disapprove the pro-  
19    posed contract within 60 days of receipt. The Division of Local  
20    Government Services shall approve the contract if the division  
21    finds, in writing, that the contract meets the requirements of section  
22    24 of this act concerning the contents of the contract and that the  
23    contract comports with the fiscal and financial capabilities of the  
24    contracting unit. If the Division of Local Government Services dis-  
25    approves the proposed contract, the division shall inform the  
26    contracting unit, in writing, of the changes necessary for approval.  
27    The contracting unit may then prepare an amended contract and,  
28    if the amendments are substantial, hold a public hearing thereon  
29    pursuant to the provisions of section 25 of this act. Thereafter, the  
30    amended contract may be resubmitted for approval.

31    c. Any new or substantially renegotiated contract to be awarded  
32    to a vendor pursuant to this act, pursuant to the "Local Public  
33    Contracts Law," P. L. 1971, c. 198 (C. 40A:11-1 et seq.) or pur-  
34    suant to any other contracting procedure authorized by law for  
35    resource recovery facilities, shall be filed with the Board of Public  
36    Utilities along with a copy of the public hearing report. The Board  
37    of Public Utilities shall, within 90 days of receipt, review any con-  
38    tract filed with it and approve that contract if the board finds the  
39    contract to be in the public interest. If the Board of Public Utilities  
40    disapproves the contract because the contract is not in the public  
41    interest, the board shall notify the contracting unit in writing of  
42    the changes needed in the contract in order for it to be in the public  
43    interest. The contracting unit may prepare an amended contract



44 and, if the amendments are substantial, hold a public hearing  
45 thereon pursuant to the provisions of section 25 of this act. There-  
46 after the amended contract may be resubmitted for approval.

47 In reviewing and approving the contract, the Board of Public  
48 Utilities shall not determine a rate base for, or otherwise regulate  
49 the tariffs or return of, the proposed resource recovery facility. The  
50 board shall not, thereafter, conduct any further review of the  
51 contract.

52 d. Notwithstanding the provisions of subsection c. of this section,  
53 all parties to any contract may request the board to determine a rate  
54 base for the proposed resource recovery facility, in which case the  
55 board may make that determination and the terms of any contract  
56 so approved shall remain subject to the continuing jurisdiction of  
57 the board.

58 27. (New section) The contracting unit may award a contract  
59 for resource recovery facilities or services to a vendor only after  
60 a public hearing thereon and upon approval by the department, the  
61 Division of Local Government Services, and the Board of Public  
62 Utilities.

1 28. (New section) Whenever the Division of Rate Counsel in the  
2 Department of the Public Advocate represents the public interest in  
3 a proceeding held to consider a contract awarded pursuant to sec-  
4 tions 19 through 27 of this act, the Director of the Division of Rate  
5 Counsel may assess the vendor in the manner provided for in section  
6 20 of P. L. 1974, c. 27 (C. 52:27E-19).

1 29 (New section) A contracting unit may lease or sell the site for  
2 a resource recovery facility to a vendor which has been awarded a  
3 contract pursuant to this act or pursuant to the "Local Public  
4 Contracts Law," P. L. 1971, c. 198 (C. 40A:11-1 et seq.) or pursuant  
5 to any other contracting procedure authorized by law for resource  
6 recovery facilities.

1 30. (New section) Any contracting unit which has substantially  
2 and materially complied with the provisions of sections 20 through  
3 23 of this act, prior to the effective date of this act, as determined  
4 by the department, may award contracts pursuant to the provisions  
5 of this act.

1 31. (New section) a. Each district which is awarded a franchise  
2 pursuant to the provisions of section 6 of P. L. 1970, c. 40 (C.  
3 48:13A-5) may award subfranchises to one or more persons en-  
4 gaged in operating a resource recovery facility in all or any part  
5 of that district, provided that any subfranchise so awarded does  
6 not alter the terms of any franchise awarded by the Board of Public

7 Utilities and that the subfranchise shall conform to the solid waste  
8 management plan for that district as approved by the department.

9 b. Subfranchises awarded pursuant to this section shall be of  
10 sufficient area to support the estimated technical and economic needs  
11 of the resource recovery facility which is to serve the district or  
12 portion thereof.

1 32. (New section) a. The department may adopt any rules and  
2 regulations pursuant to the provisions of the "Administrative  
3 Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.) as it may  
4 deem necessary to effectuate the purposes of this act.

5 b. The Board of Public Utilities may adopt any rules and regula-  
6 tions pursuant to the provisions of the "Administrative Procedure  
7 Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.) as it may deem  
8 necessary to effectuate the purposes of this act.

9 c. The Division of Local Government Services in the Department  
10 of Community Affairs may adopt any rules and regulations pursu-  
11 ant to the provisions of the "Administrative Procedure Act," P. L.  
12 1968, c. 410 (C. 52:14B-1 et seq.) as it may deem necessary to  
13 effectuate the purposes of this act.

1 33. (New section) Any additional expenditures made by a munic-  
2 ipality or county necessary to comply with an order, issued by the  
3 department pursuant to the provisions of the "Solid Waste Manage-  
4 ment Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.) and the Board of  
5 Public Utilities pursuant to the "Solid Waste Utility Control Act  
6 of 1970," P. L. 1970, c. 40 (C. 48:13A-1 et seq.), to transport solid  
7 waste to a resource recovery facility, or any expenditures necessary  
8 to reflect adjustment in rates, fees or other charges made in con-  
9 nection with the taxes and surcharges imposed pursuant to section  
10 3 of P. L. c. (C. ) (now pending before the Legislature as  
11 Senate Bill No. of 1984), or the provisions of a contract  
12 entered into pursuant to the provisions of P. L. , c. (C.  
13 ), (now pending before the Legislature as Senate Bill No.  
14 of 1984), shall, for the purposes of P. L. 1976, c. 68 (C.  
15 40A:4-45.1 et seq.), be considered an expenditure mandated by  
16 State law.

1 34. Section 11 of P. L. 1975, c. 326 (C. 13:1E-20) is amended to  
2 read as follows:

3 11. a. (1) Within 360 days after the effective date of this amenda-  
4 tory and supplementary act, the respective boards of chosen  
5 freeholders, in the case of counties, and the Hackensack Com-  
6 mission, in the case of the Hackensack Meadowlands District,  
7 shall develop and formulate, pursuant to the procedures herein  
8 contained, a solid waste management plan for each respective solid

9 waste management district; provided, however, that the commis-  
10 sioner may extend such period for a maximum of 45 additional  
11 days upon the certification of the board of chosen freeholders or  
12 the Hackensack Commission, as the case may be, of the causes of  
13 the delay in developing and formulating a plan, and upon the  
14 commissioner's determination that an extension will permit the  
15 development and formulation of a solid waste management plan  
16 as required herein. Within 90 days of the effective date of this  
17 act, each district shall make the necessary personnel, financial and  
18 legal arrangements to assure the development and formulation  
19 of the plan within 360 days of the effective date of this act.  
20 Every such solid waste management plan shall be developed and  
21 formulated to be in force and effect for a period of *not less than*  
22 10 years, upon the expiration of which a new plan shall be developed  
23 and formulated pursuant to the procedures herein contained; pro-  
24 vided, however, that every such plan shall contain provisions for  
25 automatic review thereof not less than once every two years  
26 following the approval thereof by the department, which review  
27 shall be undertaken by the board of chosen freeholders or the  
28 Hackensack Commission, as the case may be; and, provided further,  
29 however, that every such plan may be reviewed at any time by the  
30 department. Upon such review, if the board of chosen freeholders,  
31 the Hackensack Commission, or the department, as the case may  
32 be, determines that any solid waste management plan, or any part  
33 thereof, is inadequate for the purposes for which it was intended,  
34 such board of chosen freeholders or the Hackensack Commission, as  
35 the case may be, shall develop and formulate a new solid waste  
36 management plan, or any part thereof, and such new plan, or part  
37 thereof, shall be adopted thereby pursuant to the procedures con-  
38 tained in section 14 of this amendatory and supplementary act.

38A Nothing herein contained shall be construed as to prevent any  
38B board of chosen freeholders or the Hackensack Commission from  
38C readopting a solid waste management plan upon the expiration of  
38D same in a solid waste management district; provided, however,  
38E that any such readoption shall be pursuant to the provisions of  
38F section 14 of this amendatory and supplementary act.

39 (2) Any two or more districts may formulate and adopt a single  
40 solid waste management plan which shall meet all the requirements  
41 of this act for the combined area of the cooperating solid waste  
42 management districts.

43 b. (1) To assist each board of chosen freeholders in the develop-  
44 ment and formulation of the solid waste management plans re-  
45 quired herein, an advisory solid waste council shall be constituted

46 in every county and shall include municipal mayors or their  
 47 designees, persons engaged in the collection or disposal of solid  
 48 waste and environmentalists. The respective size, composition and  
 49 membership of each such council shall be designated by the respec-  
 50 tive boards of chosen freeholders. In the Hackensack Meadowlands  
 51 District, the Hackensack meadowlands municipal committee, estab-  
 52 lished pursuant to article 4 of P. L. 1968, c. 404 (C. 13:17-7 and  
 53 13:17-8), is hereby designated an advisory solid waste council  
 54 for the purposes of this amendatory and supplementary act; pro-  
 55 vided, however, that nothing herein contained shall be construed  
 56 as in any way altering the powers, duties and responsibilities of the  
 57 Hackensack Meadowlands municipal committee except as herein  
 58 specifically provided. The respective boards of chosen freeholders  
 59 and the Hackensack Commission shall consult with the relevant  
 60 advisory solid waste council at such stages in the development and  
 61 formulation of the solid waste management plan as each such board  
 62 of chosen freeholders or the Hackensack Commission, as the case  
 63 may be, shall determine; provided, however, that a solid waste  
 64 management plan shall be adopted as hereinafter provided only  
 65 after consultation with the relevant advisory solid waste council.

66 (2) In the development and formulation of a solid waste man-  
 67 agement plan for any solid waste management district, the board  
 68 of chosen freeholders or the Hackensack Commission, as the case  
 69 may be, shall:

70 (a) Consult with the county or municipal government agencies  
 71 concerned with, or responsible for, water pollution control, water  
 72 policy, water supply, or zoning or land use within the solid waste  
 73 management district;

74 (b) Review such plans for solid waste collection and disposal  
 75 proposed by, or in force in, any municipality or municipalities  
 76 within the solid waste management district, to determine the suit-  
 77 ability of any such plan, or any part thereof, for inclusion within  
 78 the solid waste management plan of the solid waste management  
 79 district; and

80 (c) Consult with persons engaged in solid waste collection and  
 81 disposal in the solid waste management district.

1 35. Section 6 of P. L. 1970, c. 40 (C. 48:13A-5) is amended to  
 2 read as follows:

3 6. a. The Board of Public [Utility Commissioners] Utilities shall,  
 4 after hearing, by order in writing, when it finds that the public  
 5 interest requires, designate any municipality as a franchise area  
 6 to be served by one or more persons engaged in solid waste collec-  
 7 tion and may award any solid waste management district [as] a

8 franchise [area to] which shall be served by one or more persons  
 9 engaged in solid waste disposal at rates and charges published in  
 10 tariffs or contracts accepted for filing by the board; provided,  
 11 however, that the proposed franchise area for solid waste collection  
 12 or the proposed franchise for solid waste disposal conforms to the  
 13 solid waste management plan of the solid waste management  
 14 district in which such franchise area is to be located or such fran-  
 15 chise is to be awarded, as such plan shall have been approved by  
 16 the Department of Environmental Protection.

17 b. Upon application by any solid waste management district,  
 18 the Board of Public Utilities shall, by order in writing, award a  
 19 solid waste management district, or two or more districts, a fran-  
 20 chise which shall be served by a person engaged in operating a  
 21 resource recovery facility, provided that the proposed franchise  
 22 shall conform to the solid waste management plan, as approved by  
 23 the department, of the solid waste management district or districts  
 24 to which the franchise will be awarded.

25 Each district awarded a franchise pursuant to this subsection  
 26 may award subfranchises pursuant to the provisions of section 31  
 27 of P. L. c. (C. ) (now pending before the Legis-  
 28 lature as Senate Bill No. of 1964), provided the subfran-  
 29 chises do not alter the terms of a franchise awarded pursuant to  
 30 this subsection.

31 c. Franchises awarded pursuant to this section shall be of suffi-  
 32 cient area to support the estimated technical and economic needs of  
 33 the resource recovery facility which is to serve the district or  
 34 portion thereof.

35 d. For the purposes of this section, franchise shall mean the  
 36 exclusive right to control the disposal of solid waste within a  
 37 district as awarded pursuant to this section.

38 e. The board shall encourage the consolidation of all accounts,  
 39 customers, routes and facilities by persons engaged in solid waste  
 40 collection [or] within franchise areas or in solid waste disposal  
 41 [within such] pursuant to a franchise [areas].

42 Nothing in section 11 of this act (C. 48:13A-10) shall be inter-  
 43 preted to prevent the implementation of this section by the Board  
 44 of Public [Utility Commissioners] Utilities.

1 36. Section 15 of P. L. 1971, c. 198 (C. 40A:11-15) is amended to  
 2 read as follows:

3 15. Duration of certain contracts. All purchases, contracts or  
 4 agreements for the performing of work or the furnishing of ma-  
 5 terials, supplies or services shall be made for a period not to exceed  
 6 12 consecutive months, except that contracts or agreements may  
 7 be entered into for longer periods of time as follows:

- 8 (1) Supplying of
  - 9 (a) Fuel for heating purposes, for any term not exceeding
    - 10 in the aggregate, two years;
    - 11 (b) Fuel or oil for use of airplanes, automobiles, motor
      - 12 vehicles or equipment for any term not exceeding in the aggregate, two years;
      - 13 (c) Thermal energy produced by a cogeneration facility, for
        - 14 use of heating or air conditioning or both, of any term not
          - 15 exceeding 40 years, when the contract is approved by the Board
            - 16 of Public Utilities. For the purposes of this paragraph, "cogen-
              - 17 eration" means the simultaneous production in one facility of
                - 18 electric power and other forms of useful energy such as heating
                  - 19 or process steam;
    - 21 (2) (Deleted by amendment; P. L. 1977, c. 53.)
    - 22 (3) The collection and disposal of garbage and refuse, for any
      - 23 term not exceeding in the aggregate, five years;
      - 24 (4) The recycling of solid waste, for any term not exceeding 25
        - 25 years, when such contract is in conformance with a solid waste
          - 26 management plan approved pursuant to P. L. 1970, c. 39 (C. 12:1E-1
            - 27 et seq.), and with the approval of the Division of Local Government
              - 28 Services and the Department of Environmental Protection;
      - 29 (5) Data processing service, for any term of not more than three
        - 30 years;
        - 31 (6) Insurance, for any term of not more than three years;
        - 32 (7) Leasing or servicing of automobiles, motor vehicles,
          - 33 machinery and equipment of every nature and kind, for a period
            - 34 not to exceed three years; provided, however, such contracts shall
              - 35 be entered into only subject to and in accordance with the rules and
                - 36 regulations promulgated by the Director of the Division of Local
                  - 37-38 Government Services of the Department of Community Affairs:
          - 39 (8) The supplying of any product or the rendering of any service
            - 40 by a telephone company which is subject to the jurisdiction of the
              - 41 Board of Public Utilities for a term not exceeding five years;
              - 42 (9) Any single project for the construction, reconstruction or
                - 43 rehabilitation of any public building, structure or facility, or any
                  - 44 public works project, including the retention of the services of any
                    - 45 architect or engineer in connection therewith, for the length of time
                      - 46 authorized and necessary for the completion of the actual con-
                        - 47 struction;
              - 48 (10) The providing of food services for any term not exceeding
                - 49 three years;
                - 50 (11) On-site inspections undertaken by private agencies pur-
                  - 51 suant to the "State Uniform Construction Code Act" (P. L. 1975,

c. 217; C. 52:27D-119 et seq.) for any term of not more than three years;

(12) The performance of work or services or the furnishing of materials or supplies for the purpose of conserving energy in buildings owned by, or operations conducted by, the contracting unit, the entire price of which to be established as a percentage of the resultant savings in energy costs, for a term not to exceed 10 years: provided, however, that such contracts shall be entered into only subject to and in accordance with rules and regulations promulgated by the Department of Energy establishing a methodology for computing energy cost savings;

(13) The performance of work or services or the furnishing of materials or supplies for the purpose of elevator maintenance for any term not exceeding three years;

(14) Leasing or servicing of electronic communications equipment for a period not to exceed five years; provided, however, such contract shall be entered into only subject to and in accordance with rules and regulations promulgated by the Director of the Division of Local Government Services of the Department of Community Affairs;

(15) Leasing of motor vehicles, machinery and other equipment primarily used to fight fires, for a term not to exceed seven years, when the contract includes an option to purchase, subject to and in accordance with rules and regulations promulgated by the Director of the Division of Local Government Services of the Department of Community Affairs;

*(16) The provision of solid waste disposal services by a resource recovery facility, or the design, construction, operation or maintenance of a resource recovery facility for a period not to exceed 40 years when the contract is approved by the Division of Local Government Services in the Department of Community Affairs, the Board of Public Utilities, and the Department of Environmental Protection; and when the facility is in conformance with a solid waste management plan approved pursuant to P. L. 1970, c. 39 (C. 13:1E-1 et seq.). For the purposes of this subsection, "resource recovery facility" means a solid waste facility for the collection, separation, recycling and recovery of metals, glass, paper and other materials for reuse or for energy production.*

All multi-year leases and contracts entered into pursuant to this section 15, except contracts for the leasing or servicing of equipment supplied by a telephone company which is subject to the jurisdiction of the Board of Public Utilities, contracts for thermal energy authorized pursuant to subsection (1) above, construction



95 contracts authorized pursuant to subsection (9) above, or contracts  
 96 and agreements for the provision of work or the supplying of equip-  
 97 ment to promote energy conservation authorized pursuant to sub-  
 98 section (12) above, or contracts for resource recovery services or a  
 99 resource recovery facility authorized pursuant to subsection (16)  
 100 above shall contain a clause making them subject to the availability  
 101 and appropriation annually of sufficient funds as may be required  
 102 to meet the extended obligation, or contain an annual cancellation  
 103 clause.

104 The Division of Local Government Services shall adopt and  
 105 promulgate rules and regulations concerning the methods of ac-  
 106 counting for all contracts that do not coincide with the fiscal year.

1 37. This act shall take effect immediately except for section 3  
 2 which shall take effect the first day of the third month following  
 3 enactment.

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#### STATEMENT

The State's capacity to dispose of its non-hazardous solid waste through landfilling is rapidly diminishing. As required under the "Solid Waste Management Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.), each solid waste management district has prepared a plan for solid waste management. Most of the plans developed provide for the establishment of resource recovery facilities to replace the sanitary landfills currently in use. Resource recovery facilities provide an environmentally acceptable means of solid waste disposal and also will convert waste to energy and thereby be more economically efficient than landfilling.

The construction and initial operation of resource recovery facilities are highly capital intensive and, therefore, the owners or operators of the facilities may need to charge disposal fees which, at least initially, will be substantially higher than landfill disposal fees. In order to encourage and facilitate the provision of resource recovery services, it is necessary to reduce the initially high cost of these disposal services so that the fees are more competitive with landfill disposal fees.

This bill provides for a resource recovery investment tax on solid waste disposal at sanitary landfills to be placed in a resource recovery investment fund in each solid waste district for later use in subsidizing the transition to resource recovery. The tax will be levied on all solid waste generated within each district at an initial rate of \$0.28 per cubic yard of waste. Thereafter, the tax will be

automatically increased by \$0.25 at 18 months, 30 months, and 42 months after the tax is first imposed unless otherwise adjusted by the district with the approval of the Department of Environmental Protection. In addition, the bill provides for a surcharge on the tax to be levied on all out-of-district waste received in a district at a rate of \$0.21 per cubic yard. The funds generated by the surcharge will be retained in the resource recovery fund of the receiving district as compensation for accepting solid waste from another district and to provide an incentive to districts that send waste to another district to discontinue that practice.

This bill also provides for the imposition of an additional tax to be levied on all solid waste accepted at landfills at a rate of \$0.25 per cubic yard. At least 50% of the funds generated by this additional tax will be distributed among the 22 solid waste management districts for the purpose of preparing, revising, and implementing solid waste management plans. The remaining funds will be used by the Department of Environmental Protection for research, planning, permitting, regulating and enforcing the provisions of the Solid Waste Management Act and for administering the services tax fund.

To attract private sector financing of resource recovery facilities, it is necessary to remove any institutional impediments which now exist. This bill would encourage private sector financing of resource recovery facilities by establishing a method of procurement by local government through the use of long term negotiated contracts, designated franchises and simplified rate setting as an alternative to traditional public utility regulation. This process would be subject to strict scrutiny by the Department of Environmental Protection, the Board of Public Utilities and the Department of Community Affairs.

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[OFFICIAL COPY REPRINT]  
ASSEMBLY, No. 1778

STATE OF NEW JERSEY

INTRODUCED MARCH 15, 1984

By Assemblymen McENROE, VAINIERI, HENDRICKSON,  
ZECKER, Assemblywoman COOPER, Assemblyman ROD,  
Assemblywoman OGDEN, Assemblymen FORTUNATO, OTLOW-  
SKI, GALLO, LARROCCA, Assemblywoman KALIK, Assembly-  
men LONG and PANKOK

AN ACT concerning solid waste disposal and resource recovery,  
amending P. L. 1975, c. 326, P. L. 1970, c. 40 and P. L. 1971, c. 198  
and supplementing P. L. 1970, c. 39 and P. L. 1976, c. 68.

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

1 1. (New section) The Legislature finds and declares that the  
2 State's capacity to safely dispose of solid waste at sanitary landfills  
3 is rapidly diminishing; that the recovery of any potential resource  
4 in solid waste, especially its conversion to useable energy, is in the  
5 public interest; that the acquisition, construction or operation of  
6 resource recovery facilities is characterized by high initial capital  
7 expenditures and initially high costs of disposal which may be  
8 stabilized or decreased based upon a return on energy generated,  
9 all of which require long-term financial arrangements and a steady  
10 and secure flow of waste; that to encourage the use of resource  
11 recovery it is necessary to attain the most advantageous financing  
12 and ownership structures for implementation of resource recovery  
13 projects by units of local government while maintaining strict  
14 financial and programmatic scrutiny by agencies of State govern-  
15 ment; and that it is necessary to provide for funding of the solid  
16 waste management programs of the State and of the solid waste  
17 management districts, all as hereinafter provided.

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

Matter printed in italics *thus* is new matter.

Matter enclosed in asterisks or stars has been adopted as follows:

\*—Assembly committee amendments adopted June 18, 1984.

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

2 a. "Contracting unit" means any county, any municipality, *any*  
3 *bi-State authority*,<sup>\*</sup> or any board, commission, committee, an-  
4 thority or agency, which is not a State board, commission, com-  
5 mittee, ~~authority or agency~~, and which has administrative jurisdic-  
6 tion over any district other than a school district, project, or  
7 facility, included or operating in whole or in part, within the terri-  
8 torial boundaries of any county or municipality which exercises  
9 functions which are appropriate for the exercise by one or more  
10 units of local government, and which has statutory power to make  
11 purchases and enter into contracts or agreements for the per-  
12 formance of any work or the furnishing or hiring of any materials  
13 or supplies usually required, the contract price of which is to be  
14 paid with or out of public funds;

14A b. "County" means any county of this State of whatever class:

15 c. "Department" means the Department of Environmental  
16 Protection;

17 d. "Director" means the Director of the Division of Taxation  
18 in the Department of Treasury;

19 e. "District" means a solid waste management district as desig-  
20 nated by section 10 of P. L. 1975, c. 326 (C. 13:1E-19):

21 f. "District investment tax fund" means a District Resource  
22 Recovery Investment Tax Fund established pursuant to subsection  
23 b. of section 15 of this act;

24 g. "Division" means the Division of Taxation in the Department  
25 of Treasury;

26 h. "Franchise" means the exclusive right to control the disposal  
27 of solid waste within a district as awarded by the Board of Public  
28 Utilities<sup>[ ]</sup>;

29 i. "Independent public accountant" means a certified public  
30 accountant, a licensed public accountant or a registered municipal  
31 accountant;

32 j. "Investment tax" means the resource recovery investment tax  
33 imposed pursuant to subsection b. of section 3 of this act;

34 k. "Investment tax fund" means the Resource Recovery Invest-  
35 ment Tax Fund containing subaccounts for each county pursuant to  
36 the provisions of section 14 of this act;

37 l. "Out-of-district solid waste" means any solid waste accepted  
38 for disposal in a district which was generated outside the receiving  
39 district;

40 m. "Person or party" means any individual, public or private  
41 corporation, ~~company~~, ~~partnership~~, firm, ~~association~~, political sub-

42 division of this State, or any State, bi-state, or interstate agency or  
43 authority;

43a. \*n. "Recycling facility" means a facility at which materials  
43a which would otherwise become solid waste are collected, separated  
43c or processed and returned to the economic mainstream in the form  
43a of raw materials or products;\*

44. \*[n.] \*o. "Resource recovery facility" means a solid waste  
44a facility constructed and operated for the collection, separation,  
44a recycling, and recovery of metals, glass, paper, and other materials  
44a for reuse or for energy production;

44b. \*[o.] \*p. "Sanitary landfill facility" means a solid waste  
45 facility at which solid waste is deposited on or in the land as fill for  
46 the purpose of permanent disposal or storage for a period exceed-  
47 ing six months, except that it shall not include any waste facility  
48 approved for disposal of hazardous waste;

49. \*[p.] \*q. "Services tax" means the solid waste services tax im-  
50 posed pursuant to subsection a. of section 3 of this act;

51. \*[q.] \*r. "Services tax fund" means the Solid Waste Services  
52 Tax Fund established pursuant to section 12 of this act in which the  
53 receipts from the services tax and any interest thereon will be  
54 deposited;

55. \*[r.] \*s. "Subfranchise" means the exclusive right, as awarded  
56 by a district, of a vendor to control the disposal of solid waste within  
57 all or any portion of a district; and:

58. \*[s.] \*t. "Vendor" means any person or party financially  
59 qualified for, and technically and administratively capable of,  
60 undertaking the design, financing, construction, operation, or  
61 maintenance of a resource recovery facility or of providing re-  
62 source recovery services.

1 3. (New section) a. There is levied upon the owner or operator  
2 of every sanitary landfill facility a solid waste services tax. The  
3 services tax shall be imposed on the owner or operator at the  
4 initial rate of \$0.25 per cubic yard of solids and \$0.003 per gallon  
5 of liquids on all solid waste accepted for disposal at a sanitary  
6 landfill facility. On the first day of the 13th month following the  
7 imposition of the services tax and annually thereafter, the rate of  
8 the services tax shall be increased by \$0.01 per cubic yard of solids.

9 b. (1) There is levied upon the owner or operator of every  
10 sanitary landfill facility a resource recovery investment tax. The  
11 investment tax shall be levied on the owner or operator at an  
12 initial rate of \$0.28 per cubic yard of solids and \$0.004 per gallon  
13 of liquids on all solid waste, other than waste products resulting

14 from the operation of a resource recovery facility, accepted for  
15 disposal at a sanitary landfill facility.

16 (2) Unless the rate is otherwise adjusted pursuant to section 11  
17 of this act, the rate of the investment tax shall be increased pur-  
18 suant to the following schedule:

19 (a) On the first day of the 18th month following the imposi-  
20 tion of the investment tax, the rate of the investment tax shall  
21 increase to \$0.56 per cubic yard of solids;

22 (b) On the first day of the 30th month following the imposi-  
23 tion of the investment tax, the rate of the investment tax shall  
24 increase to \$0.84 per cubic yard of solids; and

25 (c) On the first day of the 42nd month following the imposi-  
26 tion of the investment tax, the rate of the investment tax shall  
27 increase to \$1.12 per cubic yard of solids.

28 The investment tax shall no longer be levied on the owner or  
29 operator of a sanitary landfill facility on and after the first day of  
30 the first month of the 11th year following the imposition of the  
31 investment tax.

32 c. (1) There is levied upon the owner or operator of every sani-  
33 tary landfill facility *"which accepts out-of-district solid waste"* a  
34 surcharge on the investment tax. The surcharge shall be imposed  
35 on the owner or operator at a rate of \$0.21 per cubic yard of solids  
36 and \$0.003 per gallon of liquids on all out-of-district solid waste,  
37 other than waste products resulting from the operation of a re-  
38 source recovery facility, accepted for disposal at a sanitary landfill  
38a facility.

39 (2) If the department shall determine that a district has failed  
40 to fulfill its solid waste management planning responsibilities  
41 pursuant to section 17 of this act, the rate of the surcharge on the  
42 investment tax levied pursuant to paragraph (1) of this subsection  
43 shall, upon notification to the Board of Public Utilities and to the  
44 director, immediately be increased to a rate determined by the  
45 department, not to exceed \$0.42 per cubic yard of solids or \$0.006  
46 per gallon of liquids.

47 d. If any owner or operator of a sanitary landfill measures the  
48 solid waste accepted for disposal by a measure other than cubic  
49 yards or gallons, the taxes and surcharges imposed by the provi-  
50 sions of this section shall be levied at a rate equivalent thereof as  
51 determined by the director.

52 e. No taxes or surcharges shall be levied on the owner or operator  
53 of a sanitary landfill facility for the acceptance of solid waste  
54 generated exclusively by any agency of the federal government if



55 a solid waste collector submits to the owner or operator *"an itemized*  
 56 *invoice, signed and verified by an authorized officer of the federal*  
 57 *agency, indicating the number of cubic yards of solid waste to be*  
 58 *disposed of and"* a copy of the contract with the federal agency  
 59 indicating the effective date of the contract was before the effective  
 60 date of this act. Taxes and surcharges shall be levied on the owner  
 61 or operator for acceptance of solid waste generated by a federal  
 62 agency if the contract between the federal agency and the solid  
 63 waste collector was entered into, or renewed, on or after the effective date of this act.

1 4. (New section) a. Every owner or operator of a sanitary landfill facility which accepts solid waste for disposal and which is  
 2 subject to the taxes and surcharges imposed pursuant to section 3  
 3 of this act, shall register with the director on forms prescribed by  
 4 him within 20 days after the first acceptance of that waste.

5 b. The director shall prepare and transmit to each owner or  
 6 operator of a sanitary landfill facility forms for the rendering of a  
 7 tax return. The form shall be structured in a manner and form  
 8 determined by the director and shall provide for the following  
 9 information, and any other information he may deem necessary  
 10 to be rendered in the return:

11 (1) The total number of cubic yards of solids and gallons of  
 12 liquids accepted for disposal during the previous month;

13 (2) The number of cubic yards of solids and gallons of  
 14 liquids accepted and place of origin of out-of-district waste  
 15 accepted for disposal during the previous month; and

16 (3) The amount of each tax or surcharge paid according to  
 17 the amount of solid waste accepted.

18 The director may prescribe a consolidated form for reporting the  
 19 taxes and surcharges imposed under this act and the taxes imposed  
 20 pursuant to P. L. 1981, c. 278 (C. 13:1E-91 et seq.) and P. L. 1981,  
 21 c. 306 (C. 13:1E-100 et seq.).

22 5. (New section) Every owner or operator of a sanitary landfill facility shall, on or before the 20th day of each month, render a  
 1 return under oath to the director and pay the full amount of taxes  
 2 and surcharges due as stated in the return.

3 6. (New section) a. If a return required by this act is not filed, or  
 4 if a return when filed is incorrect or insufficient in the opinion of  
 5 the director, the amount of tax due shall be determined by the  
 6 director from such information as may be available. Notice of such  
 7 determination shall be given to the taxpayer liable for the payment  
 8 of the tax. Such determination shall finally and irrevocably fix the

7 tax unless the person against whom it is assessed, within 30 days  
8 after receiving notice of such determination, shall apply to the  
9 director for a hearing, or unless the director on his own motion  
10 shall redetermine the same. After such hearing, the director shall  
11 give notice of his determination to the person to whom the tax is  
12 assessed.

13 b. Any taxpayer who shall fail to file his return when due or to  
14 pay any tax when the same becomes due, as herein provided, shall  
15 be subject to such penalties and interest as provided in the "state  
16 tax uniform procedure law," Subtitle 9 of Title 54 of the Revised  
17 Statutes. If the director determines that the failure to comply with  
18 any provision of this section was excusable under the circum-  
19 stances, it may remit such part or all of the penalty as shall be  
20 appropriate under such circumstances.

21 c. (1) Any person failing to file a return, failing to pay the tax,  
22 or filing or causing to be filed, or making or causing to be made, or  
23 giving or causing to be given any return, certificate, affidavit,  
24 representation, information, testimony or statement required or  
25 authorized by this act, or rules or regulations adopted hereunder  
26 which is willfully false, or failing to keep any records required by  
27 this act or rules and regulations adopted hereunder, shall, in addi-  
28 tion to any other penalties herein or elsewhere prescribed, be  
29 guilty of a crime of the fourth degree.

30 (2) The certificate of the director to the effect that a tax has  
31 not been paid, that a return has not been filed, that information has  
32 not been supplied or that inaccurate information has been supplied  
33 pursuant to the provisions of this act or rules or regulations  
34 adopted hereunder shall be presumptive evidence thereof.

1 7. (New section) In addition to any other powers authorized by  
2 this act, the director shall have the following powers:

3 a. To delegate to any officer or employee of the division any  
4 powers or responsibilities required by this act as he may deem  
5 necessary;

6 b. To promulgate and distribute any forms necessary for the  
7 implementation of this act; and

8 c. To adopt any rules and regulations pursuant to the  
9 "Administrative Procedure Act," P. L. 1968, c. 410 (C.  
10 52:14B-1 et seq.) as he may deem necessary to effectuate the  
11 purposes of this act.

1 8. (New section) The taxes imposed by this act shall be governed  
2 in all respects by the provisions of the "state tax uniform pro-  
3 cedure law," Subtitle 9 of Title 54 of the Revised Statutes, but only

4 to the extent that a specific provision of this act or any rule or  
5 regulation required to be promulgated by this act may be in con-  
6 flict therewith.

11 9. a. (New section) Notwithstanding the provisions of any law  
12 to the contrary, the owner or operator of a sanitary landfill facility  
13 may collect the taxes and surcharges levied and imposed pursuant  
14 to this act by imposing an automatic surcharge on any tariff estab-  
15 lished pursuant to law for the solid waste disposal operations of  
16 the sanitary landfill facility.

7 b. For the purposes of this act, all municipal, county, and State  
8 contracts for solid waste collection and disposal shall be considered  
9 tariffs for solid waste collection, and shall be subject to any adjust-  
10 ment of tariffs resulting from the provisions of this act.

1 10. (New section) a. The Board of Public Utilities shall, within  
2 60 days of the effective date of this act, issue an order adjusting  
3 the tariffs established pursuant to law for solid waste collection  
4 operations by an amount equal to the total amount of the increase  
5 in the adjusted tariffs for solid waste disposal operations to take  
6 effect on the date on which the tax is imposed.

7 b. The Board of Public Utilities shall, by the date of any increase  
8 in the services tax or the investment tax required in subsection a.  
9 "or subsection b." of section 3 of this act, issue an order adjusting  
10 the tariffs established pursuant to law for solid waste collection  
11 operations by an amount equal to the total amount of the increase  
12 in the tariffs for solid waste disposal operations that shall be  
12a adjusted on that date.

13 c. The Board of Public Utilities shall, within 60 days of notifica-  
14 tion by the department that an additional surcharge shall be  
15 imposed on an owner or operator of a sanitary landfill facility or  
16 that the investment tax rate shall be adjusted in a manner other  
17 than by the rate adjustments provided in subsection b. of section 3  
18 of this act, issue an order adjusting the tariffs established pursuant  
19 to law for solid waste collection operations by an amount equal  
20 to the total amount of the increase in the tariffs for solid waste  
21 disposal operations.

22 d. In issuing any order required by this section, the Board of  
23 Public Utilities shall be exempt from the provisions of R. S.  
24 48:2-21.

1 11. (New section) a. Each district, in consultation with the  
2 department, may conduct a study to determine the "investment"  
3 tax rate estimated to be necessary to be paid into the district  
4 investment tax fund so as to lower the cost of resource recovery



16 districts for preparing, revising, and implementing solid waste  
 17 management plans\*, including the implementation of the goals of  
 18 the State Recycling Plan. The moneys may also be used by the  
 19 districts to support community oversight projects and to establish  
 20 a citizens' advisory committee. A district receiving State aid shall  
 21 not use more than 2% of the aid for the costs of administering the  
 22 aid\*. At least 50% of the annual balance of the services tax fund  
 23 shall be used for State aid and shall be distributed in amounts  
 24 proportionate to the population of each district, except that no  
 25 district shall receive less than 2% of the amount apportioned to  
 26 aid all districts. In the event that the department determines pur-  
 27 suant to section 17 of this act that any district shall fail to fulfill  
 28 its solid waste management planning responsibilities, the depart-  
 29 ment may withhold for the entire year or until the district fulfills  
 30 its responsibilities, all or a portion of the amount of moneys that  
 31 district would have received in any year pursuant to this para-  
 32 graph. Any moneys withheld for the entire year shall be distributed  
 33 among the remaining districts in the same proportion as the other  
 34 moneys were distributed.

35 \*c. The district may appoint a citizens' advisory committee to  
 36 consist of interested local officials and citizens. An appointed  
 37 citizens' advisory committee or an existing advisory solid waste  
 38 committee may develop and implement oversight projects and  
 39 conduct community awareness programs regarding resource re-  
 40 covery facilities in a district.

41 d. The department shall issue a report to the Governor and the  
 42 Legislature detailing how moneys received pursuant to this act  
 43 were spent by June 1 of each year in which moneys are received.\*

1 14. (New section) There is created a Resource Recovery Invest-  
 2 ment Tax Fund to contain \*[subaccounts]\* \*sub-accounts\* for  
 3 each district to be held by the State Treasurer, to be the depository  
 3A for:

4 a. The investment tax revenues collected by the director  
 5 resulting from the amount of solid waste generated from within  
 6 each county;

7 b. The surcharge revenues collected by the director resulting  
 8 from the acceptance of out-of-district waste;

9 c. The investment tax revenues collected by the director not  
 10 otherwise deposited in another investment tax fund \*[sub-  
 11 account]\* \*sub-account\* pursuant to subsections a. and b. of  
 12 this section shall be deposited in the receiving district's \*[sub-  
 12A account]\* \*sub-account\*; and

13 d. Any interest thereon.

14 The moneys deposited in each district "[subaccount]" "sub-  
15 account" fund shall be disbursed as provided herein.

1 15. (New section) a. Before the moneys in each investment tax  
2 fund "[subaccount]" "sub-account" are appropriated as provided  
3 hereunder, the cost of administration and collection of the tax and  
4 surcharge shall be paid by the moneys in the "[subaccounts]"  
4A "sub-accounts, except that the cost of administration and collection  
4B shall not exceed 3% of the total amount in all the sub-accounts".

5 b. Each district shall create a District Resource Recovery In-  
6 vestment Tax Fund, to be the depository of the moneys appropriated  
7 to each district pursuant to this section to be administered by the  
8 governing body of each county, and the Hackensack Commission, in  
9 the case of the Hackensack Meadowlands District.

10 c. The moneys collected in each investment tax fund "[sub-  
11 account]" "sub-account" shall be appropriated to each district for  
12 deposit in its district investment tax fund and shall be used only in  
13 accordance with a plan prepared and approved pursuant to sub-  
14 section d. of this section and only for the following purposes:

15 (1) To reduce the rates charged by a resource recovery facility  
16 serving the district in order to provide gradual transition between  
17 resource recovery facility rates and sanitary landfill facility rates.  
18 Any reductions may be achieved through use of investment tax  
19 fund money"[;]" to pay construction costs and related facility  
20 start-up costs, or to pay directly part of the fees charged for dis-  
21 posal at a resource recovery facility.

22 (2) To cover any expenses directly related to the planning, design-  
23 ing, financing, construction, operation or maintenance of a resource  
24 recovery facility", including a composting or recycling facility," or  
25 the acquisition of the services of a resource recovery facility,  
26 including expenses incurred if a study is conducted pursuant to  
26A section 11 of this act;

27 (3) To design, finance, construct, operate"[;]" "or" maintain  
28 environmentally sound sanitary landfill facilities to be utilized for:

29 (a) Disposing of those solid wastes which cannot be pro-  
30 cessed by a resource recovery facility or which result from the  
31 operation of a resource recovery facility;

32 (b) Disposal of solid waste, on an interim basis, until a  
33 resource recovery facility becomes operational; and

34 (c) Disposal of solid waste, on a long term basis, in those  
35 districts which demonstrate to the satisfaction of the depart-  
36 ment that utilization of a resource recovery facility is not  
37 feasible for disposal of the solid waste generated in that dis-  
38 trict; and

39 (4) To administer the investment tax fund, provided that not  
40 more than two percent of the annual balance shall be used for  
41 administration.

42 d. Within two years of the effective date of this act, and prior to  
43 the disbursal of any funds *"by the district"*, each district shall pre-  
44 pare a plan, including a schedule, which shall outline the proposed  
45 uses of the moneys in the district investment tax fund as well as  
46 describe the manner in which those moneys will be disbursed. Each  
47 plan shall be adopted as an amendment to the district solid waste  
48 management plan required pursuant to the provisions of the "Solid  
49 Waste Management Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.). This  
50 plan may be amended, as necessary, in accordance with the pro-  
51 cedures provided therefor pursuant to the "Solid Waste Manage-  
52 ment Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.).

53 e. Each district shall, by October 31 of each year in which moneys  
54 remain in its district investment tax fund, file an audit of the  
55 district investment tax fund and any expenditures therefrom with  
56 the Local Finance Board in the Division of Local Government  
57 Services in the Department of Community Affairs. The audit shall  
58 be conducted by an independent public accountant.

59 f. Upon approval by the department, two or more districts may  
60 establish a joint investment tax fund to receive the investment tax  
61 fund revenues and any surcharge collected pursuant to section  
62 3 of this act.

1 16. (New section) If the department shall determine that a dis-  
2 trict has failed to fulfill its solid waste management planning re-  
3 sponsibilities pursuant to section 17 of this act, the department  
4 may assume the administration of the district investment tax fund  
5 of that district and may use the moneys in the fund for the pur-  
6 poses permitted in subsection c. of section 15 of this act for the  
7 benefit of that district.

1 17. (New section) The department may determine that a district  
2 has failed to fulfill its solid waste management planning responsi-  
3 bilities\*, which may include failure to implement the State Recycl-  
4 ing Plan goals\*, as required by sections 11 and 12 of P. L. 1975,  
5 c. 326 (C. 13:1E-20 and 13:1E-21) and by subsection d. of section  
6 15 of this act. A determination *"[of failure shall include]"* *"by the*  
7 *department that the district has failed to fulfill its planning*  
8 *responsibilities may be based upon"* a finding that the district has  
9 not made a good faith effort toward *"[fulfilling its planning*  
10 *responsibilities]"* *"identifying sufficient available suitable sites for*  
11 *solid waste facilities within the district, or negotiating interdistrict*  
12 *agreements, to provide for the disposal needs of the district"*.



1 18. (New section) Notwithstanding the provisions of any law,  
 2 rule or regulation to the contrary, as an alternative to any other  
 3 procedure provided for by law, the design, financing, construction,  
 4 operation or maintenance, or any combination thereof, of a resource  
 5 recovery facility or the provision of resource recovery facility  
 6 services may be procured by a contracting unit in accordance with  
 7 the provisions of sections 19 through 27 of this act.

1 19. (New section) Any contract between a vendor and a con-  
 2 tracting unit for the design, financing, construction, operation or  
 3 maintenance, or any combination thereof, of a resource recovery  
 4 facility or for the provision of the services of such a facility may  
 5 be awarded for a period not to exceed 40 years.

1 20. (New section) a. The contracting unit shall issue a request  
 2 for qualifications of vendors which shall include the date, time of  
 3 day and place by which qualifications shall be received and the  
 4 minimum acceptable qualifications, and which shall be made avail-  
 5 able to all potential vendors through adequate public notice which  
 6 shall include publication in at least one appropriate trade or pro-  
 7 fessional journal and a newspaper of general circulation in the  
 8 jurisdiction of the contracting unit. In addition to all other factors  
 9 bearing on qualification, the contracting unit may consider infor-  
 10 mation which might result in debarment or suspension of a vendor  
 11 from State contracting and may disqualify a vendor if the vendor  
 12 has been debarred or suspended by any State agency.

13 b. The contracting unit shall publish, in the same publications  
 14 in which notice of the request for qualifications appeared, a list  
 15 of qualified vendors and a statement setting forth the basis for  
 16 their selection.

1 21. (New section) a. The contracting unit shall issue a request  
 2 for proposals to the qualified vendors which shall include a de-  
 3 scription of the services and facilities required, the specific infor-  
 4 mation and data required, and a statement as to the relative im-  
 5 portance of price and other evaluation factors.

6 b. The contracting unit shall fix a date, time of day and place  
 7 by which proposals shall be received and shall specify the format  
 8 and procedure for submission of proposals. The contracting unit  
 9 may "[extent]" *\*extend\** the time for submission of proposals  
 10 provided that any extension shall apply to all qualified vendors  
 11 and the contracting unit shall provide simultaneous written notice  
 12 of any extension to all qualified vendors.

1 22. (New section) a. Proposals shall be reviewed by the con-  
 2 tracting unit so as to avoid disclosure of contents to competing

3 vendors during the process of proposal review. A list of proposals  
4 shall be prepared and shall be open for public inspection in the  
5 offices of the contracting unit at reasonable hours for at least 30  
6 days after the contract award.

7 b. As shall be provided in the request for proposals, discussions  
8 may be conducted with qualified vendors who submit proposals  
9 for the purpose of clarification to assure full understanding of, and  
10 responsiveness to, the solicitation requirements. Any revisions in  
11 the request for proposals which may be developed in the course  
12 of those discussions shall immediately be communicated to all quali-  
13 fied vendors. Revisions to proposals may be permitted after sub-  
14 missions and prior to award for the purpose of obtaining best and  
15 final offers. In conducting discussions, there shall be no disclosure  
16 of any information derived from proposals submitted by competing  
17 vendors.

1 23. (New section) a. The contracting unit shall designate the  
2 qualified vendor, or two vendors if simultaneous negotiation is to  
3 be conducted, whose proposal or proposals are determined in writ-  
4 ing to be the most advantageous to the public, taking into considera-  
5 tion price and the evaluation factors set forth in the request for  
6 proposals. No other factors or criteria shall be used in the evalua-  
7 tion. The contract file shall include the basis on which the desig-  
8 nation is made.

9 b. The contracting unit may negotiate a proposed contract, which  
10 shall include the accepted proposal, with the designated vendor.

1 24. (New section) Any contract to be awarded to a vendor pur-  
2 suant to the provisions of sections 19 through 27 of this act or pur-  
3 suant to the "Local Public Contracts Law," P. L. 1971, c. 198  
4 (C. 40A:11-1 et seq.) or any other contracting procedure authorized  
5 by law for resource recovery facilities, shall include where applica-  
6 ble, but not be limited to, provisions concerning:

7 a. Allocation of the risks of financing and constructing a resource  
8 recovery facility, such risks to include:

- 9 (1) Delays in project completion;
- 10 (2) Construction cost overruns and change orders;
- 11 (3) Changes necessitated by revisions in laws, rules or regu-  
12 lations;
- 13 (4) Failure to achieve the required operating performance;
- 14 (5) Loss of tax benefits; and
- 15 (6) The need for additional equity contributions.

16 b. Allocation of the risks of operating and maintaining a re-  
17 source recovery facility, such risks to include:

- 18 (1) Excess downtime or technical failure;
- 19 (2) Excess labor or materials costs due to underestimation;
- 20 (3) Changes in operating procedure necessitated by revisions in laws, rules or regulations;
- 21 (4) Changes in the amount or composition of the solid waste delivered for disposal;
- 22 (5) Excess operation or maintenance costs due to poor management; and
- 23 (6) Increased costs of disposal of the resource recovery facility residue.

24 c. Allocation of the risks associated with circumstances beyond the control of any party to the contract;

25 d. Allocation of the revenues from the sale of energy;

26 e. Default and termination of the contract;

27 f. The periodic preparation by the vendor of an operating performance report and an audited "[financial]" "balance" statement of the facility which shall be submitted to the contracting unit, the department and the Division of Local Government Services in the Department of Community Affairs;

28 g. The intervals at which the contract shall be renegotiated; and

29 h. Employment of current employees of the contracting unit whose positions will be affected by the terms of the contract.

1 25. (New section) Any new or substantially renegotiated contract to be awarded to a vendor pursuant to "sections 20 through 24 of" this act shall be the subject of a public hearing to be held by the contracting unit in the jurisdiction of the contracting unit, prior to submission of the contract for the approvals required in section 26 of this act, in accordance with the following procedure:

2 a. The contracting unit shall provide adequate public notice of the proposed contract award to prospective consumers and other interested parties, which shall include publication in at least one newspaper of general circulation in the jurisdiction of the contracting unit;

3 b. The contracting unit shall schedule a meeting to be held within 45 days of publication of the public notice with consumer representatives and other interested parties in order to present and explain the terms and conditions of the contract and to receive written questions which shall become part of the hearing record;

4 c. The contracting unit shall hold a public hearing within 90 days of providing notice of the proposed contract award at which the questions submitted at the meeting held pursuant to subsection b. of this section shall be addressed. At the hearing, interested

21 parties may submit statements or additional questions concerning  
22 the terms and conditions of the proposed contract;

23 d. The contracting unit shall, within 30 days of the close of the  
24 hearing record, publish a hearing report which shall include all  
25 issues and questions raised at the hearing and the contracting  
26 unit's response thereto; and

27 e. The hearing report and the determination of the contracting  
28 unit concerning the terms and conditions of the contract shall be  
29 provided to all interested parties and hearing attendees at least 15  
30 days prior to submission of the contract for the approvals required  
31 in section 26 of this act.

1 26. (New section) a. Any new or substantially renegotiated con-  
2 tract to be awarded to a vendor and a copy of the public hearing  
3 report shall be submitted to the department which shall approve or  
4 disapprove the proposed contract based on its being consistent with  
5 the district solid waste management plan adopted pursuant to the  
6 provisions of the "Solid Waste Management Act," P. L. 1970, c. 39  
7 (C. 13:1E-1 et seq.) within 60 days of receipt. If the department  
8 shall disapprove the proposed contract, the contracting unit may  
9 prepare an amended contract and, if the amendments are sub-  
10 stantial, hold a public hearing thereon pursuant to the provisions  
11 of section 25 of this act. Thereafter the amended contract "[may]"  
12 "shall" be resubmitted for approval. In the alternative, the district  
13 solid waste management plan may be amended so as to be consistent  
14 with the proposed contract.

15 b. Any new or substantially renegotiated contract to be awarded  
16 to a vendor and a copy of the public hearing report shall be sub-  
17 mitted to Division of Local Government Services in the Department  
18 of Community Affairs which shall approve or disapprove the pro-  
19 posed contract within 60 days of receipt. The Division of Local  
20 Government Services shall approve the contract if the division  
21 finds, in writing, that the contract meets the requirements of section  
22 24 of this act concerning the contents of the contract and that the  
23 contract comports with the fiscal and financial capabilities of the  
24 contracting unit. If the Division of Local Government Services dis-  
25 approves the proposed contract, the division shall inform the  
26 contracting unit, in writing, of the changes necessary for approval.  
27 The contracting unit may then prepare an amended contract and,  
28 if the amendments are substantial, hold a public hearing thereon  
29 pursuant to the provisions of section 25 of this act. Thereafter, the  
30 amended contract "[may]" "shall" be resubmitted for approval.

31 c. Any new or substantially renegotiated contract to be awarded

32 to a vendor pursuant to *"sections 20 through 25 of"* this act, pur-  
 33 suant to the "Local Public Contracts Law," P. L. 1971, c. 198 (C.  
 34 40A:11-1 et seq.) or pursuant to any other contracting procedure  
 35 authorized by law for resource recovery facilities, shall be filed  
 36 with the Board of Public Utilities along with a copy of the public  
 37 hearing report. The Board of Public Utilities shall, within 90 days  
 38 of receipt, review any contract filed with it and approve that con-  
 39 tract if the board finds the contract to be in the public interest. If the  
 40 Board of Public Utilities disapproves the contract because the  
 41 contract is not in the public interest, the board shall notify the con-  
 42 tracting unit in writing of the changes needed in the contract in  
 43 order for it to be in the public interest. The contracting unit may  
 44 prepare an amended contract and, if the amendments are sub-  
 45 stantial, hold a public hearing thereon pursuant to the provisions of  
 46 section 25 of this act. Thereafter the amended contract *"[may]"*  
 47 *"shall"* be resubmitted for approval.

47A In reviewing and approving the contract, the Board of Public  
 48 Utilities shall not determine a rate base for, or otherwise regulate  
 49 the tariffs or return of, the proposed resource recovery facility. The  
 50 board shall not, thereafter, conduct any further review of the  
 51 contract.

52 d. Notwithstanding the provisions of subsection c. of this section,  
 53 all parties to any contract may request the board to determine a rate  
 54 base for the proposed resource recovery facility, in which case the  
 55 board may make that determination and the terms of any contract  
 56 so approved shall remain subject to the continuing jurisdiction of  
 57 the board.

58 27. (New section) The contracting unit may award a contract  
 59 for resource recovery facilities or services to a vendor only after  
 60 a public hearing thereon *"pursuant to section 25 of this act"* and  
 61 upon approval by the department, the Division of Local Govern-  
 62 ment Services, and the Board of Public Utilities.

1 28. (New section) Whenever the Division of Rate Counsel in the  
 2 Department of the Public Advocate represents the public interest in  
 3 a proceeding held to consider a contract awarded pursuant to sec-  
 4 tions 19 through 27 of this act, the Director of the Division of Rate  
 5 Counsel may assess the vendor *"as provided hereafter. Whenever*  
 6 *a vendor shall first submit a contract to the Board of Public*  
 7 *Utilities, the vendor shall be assessed an amount equal to one-tenth*  
 8 *of 1% of the estimated gross revenues of the facility in the first*  
 9 *year of its operation. Thereafter, the vendor shall be assessed"* in

10 the manner provided for in section 20 of P. L. 1974, c. 27 (C.  
11 52:27E-19).

1 29.\* (New section) **\*[A]\*** *\*Notwithstanding the provisions of*  
2 *any other law, rule or regulation to the contrary, a\** contracting  
3 unit may lease or sell the site for a resource recovery facility to a  
4 vendor which has been awarded a contract pursuant to this act or  
5 pursuant to the "Local Public Contracts Law," P. L. 1971, c. 198  
6 (C. 40A:11-1 et seq.) or pursuant to any other contracting pro-  
7 cedure authorized by law for resource recovery facilities.

1 30. (New section) Any contracting unit which has substantially  
2 and materially complied with the provisions of sections 20 through  
3 23 of this act, prior to the effective date of this act, as determined  
4 by the department, may award contracts pursuant to the provisions  
5 of this act.

1 31. (New section) a. Each district which is awarded a franchise  
2 pursuant to the provisions of section 6 of P. L. 1970, c. 40 (C.  
3 48:13A-5) may award subfranchises to one or more persons en-  
4 gaged in operating a resource recovery facility in all or any part  
5 of that district, provided that any subfranchise so awarded does  
6 not alter the terms of any franchise awarded by the Board of Public  
7 Utilities and that the subfranchise shall conform to the solid waste  
8 management plan for that district as approved by the department.

9 b. Subfranchises awarded pursuant to this section shall be of  
10 sufficient area to support the estimated technical and economic needs  
11 of the resource recovery facility which is to serve the district or  
12 portion thereof.

1 32. (New section) a. **\*(1)\*** The department may adopt any rules  
2 and regulations pursuant to the provisions of the "Administrative  
3 Procedure Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.) as it may  
4 deem necessary to effectuate the purposes of this act.

4A **\*(2)\*** *The department shall adopt rules and regulations for the*  
4B *engineering design of resource recovery facilities, to include a*  
4C *requirement that state-of-the-art air emission technology be in-*  
4D *stalled to control the emission of hydrocarbons, particulates,*  
4E *dioxins, nitrogen oxides, carbon monoxide, heavy metals, hydro-*  
4F *chloric acid, sulfur oxides and other acid gases and pollutants from*  
4G *each resource recovery facility which is expected to emit these*  
4H *pollutants.\**

5 b. The Board of Public Utilities may adopt any rules and regula-  
6 tions pursuant to the provisions of the "Administrative Procedure  
7 Act," P. L. 1968, c. 410 (C. 52:14B-1 et seq.) as it may deem  
8 necessary to effectuate the purposes of this act.

9 c. The Division of Local Government Services in the Department  
10 of Community Affairs may adopt any rules and regulations pursu-  
11 ant to the provisions of the "Administrative Procedure Act," P. L.  
12 1968, c. 410 (C. 52:14B-1 et seq.) as it may deem necessary to  
13 effectuate the purposes of this act.

1 33. (New section) Any additional expenditures made by a munic-  
2 ipality or county necessary to comply with an order "[.]" issued by  
3 the department pursuant to the provisions of the "Solid Waste  
4 Management Act," P. L. 1970, c. 39 (C. 13:1E-1 et seq.) and the  
5 Board of Public Utilities pursuant to the "Solid Waste Utility  
6 Control Act of 1970," P. L. 1970, c. 40 (C. 48:13A-1 et seq.), to  
7 transport solid waste to a resource recovery facility, or any  
8 expenditures necessary to reflect adjustment in rates, fees or other  
9 charges made in connection with the taxes and surcharges imposed  
10 pursuant to section 3 of P. L.,\* c. (C. ) (now pending  
11 before the Legislature as Assembly Bill No. 1778 of 1984), or the  
12 provisions of a contract entered into pursuant to the provisions of  
13 P. L. , c. (C. ) (now pending before the  
14 Legislature as Assembly Bill No. 1778 of 1984), shall, for the  
15 purposes of P. L. 1976, c. 68 (C. 40A:4-45.1 et seq.), be considered  
16 an expenditure mandated by State law.

1 34. Section 11 of P. L. 1975, c. 326 (C. 13:1E-20) is amended to  
2 read as follows:

3 11. a. (1) Within 360 days after the effective date of this amenda-  
4 tory and supplementary act, the respective boards of chosen  
5 freeholders, in the case of counties, and the Hackensack Com-  
6 mission, in the case of the Hackensack Meadowlands District,  
7 shall develop and formulate, pursuant to the procedures herein  
8 contained, a solid waste management plan for each respective solid  
9 waste management district; provided, however, that the commis-  
10 sioner may extend such period for a maximum of 45 additional  
11 days upon the certification of the board of chosen freeholders or  
12 the Hackensack Commission, as the case may be, of the causes of  
13 the delay in developing and formulating a plan, and upon the  
14 commissioner's determination that an extension will permit the  
15 development and formulation of a solid waste management plan  
16 as required herein. Within 90 days of the effective date of this  
17 act, each district shall make the necessary personnel, financial and  
18 legal arrangements to assure the development and formulation  
19 of the plan within 360 days of the effective date of this act.  
20 Every such solid waste management plan shall be developed and  
21 formulated to be in force and effect for a period of *not less than*  
22 10 years, upon the expiration of which a new plan shall be developed



23 and formulated pursuant to the procedures herein contained; pro-  
24 vided, however, that every such plan shall contain provisions for  
25 automatic review thereof not less than once every two years  
26 following the approval thereof by the department, which review  
27 shall be undertaken by the board of chosen freeholders or the  
28 Hackensack Commission, as the case may be; and, provided further,  
29 however, that every such plan may be reviewed at any time by the  
30 department. Upon such review, if the board of chosen freeholders,  
31 the Hackensack Commission, or the department, as the case may  
32 be, determines that any solid waste management plan, or any part  
33 thereof, is inadequate for the purposes for which it was intended,  
34 such board of chosen freeholders or the Hackensack Commission, as  
35 the case may be, shall develop and formulate a new solid waste  
36 management plan, or any part thereof, and such new plan, or part  
37 thereof, shall be adopted thereby pursuant to the procedures con-  
38 tained in section 14 of this amendatory and supplementary act.

38A Nothing herein contained shall be construed as to prevent any  
38B board of chosen freeholders or the Hackensack Commission from  
38C readopting a solid waste management plan upon the expiration of  
38D same in a solid waste management district; provided, however,  
38E that any such readoption shall be pursuant to the provisions of  
38F section 14 of this amendatory and supplementary act.

39 (2) Any two or more districts may formulate and adopt a single  
40 solid waste management plan which shall meet all the requirements  
41 of this act for the combined area of the cooperating solid waste  
42 management districts.

43 b. (1) To assist each board of chosen freeholders in the develop-  
44 ment and formulation of the solid waste management plans re-  
45 quired herein, an advisory solid waste council shall be constituted  
46 in every county and shall include municipal mayors or their  
47 designees, persons engaged in the collection or disposal of solid  
48 waste and environmentalists. The respective size, composition and  
49 membership of each such council shall be designated by the respec-  
50 tive boards of chosen freeholders. In the Hackensack Meadowlands  
51 District, the Hackensack meadowlands municipal committee, estab-  
52 lished pursuant to article 4 of P. L. 1968, c. 404 (C. 13:17-7 and  
53 13:17-8), is hereby designated an advisory solid waste council  
54 for the purposes of this amendatory and supplementary act; pro-  
55 vided, however, that nothing herein contained shall be construed  
56 as in any way altering the powers, duties and responsibilities of the  
57 Hackensack Meadowlands municipal committee except as herein  
58 specifically provided. The respective boards of chosen freeholders

59 and the Hackensack Commission shall consult with the relevant  
60 advisory solid waste council at such stages in the development and  
61 formulation of the solid waste management plan as each such board  
62 of chosen freeholders or the Hackensack Commission, as the case  
63 may be, shall determine; provided, however, that a solid waste  
64 management plan shall be adopted as hereinafter provided only  
65 after consultation with the relevant advisory solid waste council.

66 (2) In the development and formulation of a solid waste man-  
67 agement plan for any solid waste management district, the board  
68 of chosen freeholders or the Hackensack Commission, as the case  
69 may be, shall:

70 (a) Consult with the county or municipal government agencies  
71 concerned with, or responsible for, water pollution control, water  
72 policy, water supply, or zoning or land use within the solid waste  
73 management district;

74 (b) Review such plans for solid waste collection and disposal  
75 proposed by, or in force in, any municipality or municipalities  
76 within the solid waste management district, to determine the suit-  
77 ability of any such plan, or any part thereof, for inclusion within  
78 the solid waste management plan of the solid waste management  
79 district; and

80 (c) Consult with persons engaged in solid waste collection and  
81 disposal in the solid waste management district.

1 35. Section 6 of P. L. 1970, c. 40 (C. 48:13A-5) is amended to  
2 read as follows:

3 6. a. The Board of Public **[Utility Commissioners]** *Utilities* shall,  
4 after hearing, by order in writing, when it finds that the public  
5 interest requires, designate any municipality as a franchise area  
6 to be served by one or more persons engaged in solid waste collec-  
7 tion and *may award* any solid waste management district **[as]** a  
8 franchise **[area to]** *which shall* be served by one or more persons  
9 engaged in solid waste disposal at rates and charges published in  
10 tariffs or contracts accepted for filing by the board; provided,  
11 however, that the proposed franchise area for solid waste collection  
12 or *the proposed franchise* for solid waste disposal conforms to the  
13 solid waste management plan of the solid waste management  
14 district in which such franchise area is to be located or *such fran-*  
15 *chise is to be awarded*, as such plan shall have been approved by  
16 the Department of Environmental Protection.

17 b. *Upon application by any solid waste management district,*  
18 *the Board of Public Utilities shall, by order in writing, award a*  
19 *solid waste management district, or two or more districts, a fran-*  
20 *chise which shall be served by a person engaged in operating a*

21 resource recovery facility, provided that the proposed franchise  
 22 shall conform to the solid waste management plan, as approved by  
 23 the département, of the solid waste management district or districts  
 24 to which the franchise will be awarded.

25 Each district awarded a franchise pursuant to this subsection  
 26 may award subfranchises pursuant to the provisions of section 31  
 27 of P. L. c. (C. ) (now pending before the Legis-  
 28 lature as Assembly Bill No. 1778 of 1984), provided the subfran-  
 29 chises do not alter the terms of a franchise awarded pursuant to  
 30 this subsection.

31 c. Franchises awarded pursuant to this section shall be of suffi-  
 32 cient area to support the estimated technical and economic needs of  
 33 the resource recovery facility which is to serve the district or  
 34 portion thereof.

35 d. For the purposes of this section, franchise shall mean the  
 36 exclusive right to control the disposal of solid waste within a  
 37 district as awarded pursuant to this section.

38 e. The board shall encourage the consolidation of all accounts,  
 39 customers, routes and facilities by persons engaged in solid waste  
 40 collection [or] within franchise areas or in solid waste disposal  
 41 [within such] pursuant to a franchise [areas].

42 Nothing in section 11 of this act (C. 48:13A-10) shall be inter-  
 43 preted to prevent the implementation of this section by the Board  
 44 of Public [Utility Commissioners] Utilities.

1 36. Section 15 of P. L. 1971. c. 198 (C. 40A:11-15) is amended to  
 2 read as follows:

3 15. Duration of certain contracts. All purchases, contracts or  
 4 agreements for the performing of work or the furnishing of ma-  
 5 terials, supplies or services shall be made for a period not to exceed  
 6 12 consecutive months, except that contracts or agreements may  
 7 be entered into for longer periods of time as follows:

8 (1) Supplying of

9 (a) Fuel for heating purposes, for any term not exceeding  
 10 in the aggregate, two years;

11 (b) Fuel or oil for use of airplanes, automobiles, motor  
 12 vehicles or equipment for any term not exceeding in the aggre-  
 13 gate, two years;

14 (c) Thermal energy produced by a cogeneration facility, for  
 15 use of heating or air conditioning or both. \*for\* any term not  
 16 exceeding [20] 40 years. when the contract is approved by the  
 17 Board of Public Utilities. For the purposes of this paragraph,  
 18 "cogeneration" means the simultaneous production in one

19 facility of electric power and other forms of useful energy such  
20 as heating or process steam;

21 (2) (Deleted by amendment; P. L. 1977, c. 53.)

22 (3) The collection and disposal of garbage and refuse, for any  
23 term not exceeding in the aggregate, five years;

24 (4) The recycling of solid waste, for any term not exceeding 25  
25 years, when such contract is in conformance with a solid waste  
26 management plan approved pursuant to P. L. 1970, c. 39 (C. 13:1E-1  
27 et seq.), and with the approval of the Division of Local Government  
28 Services and the Department of Environmental Protection;

29 (5) Data processing service, for any term of not more than three  
30 years;

31 (6) Insurance, for any term of not more than three years;

32 (7) Leasing or servicing of automobiles, motor vehicles, [elec-  
33 tronic communications equipment.] machinery and equipment of  
34 every nature and kind, for a period not to exceed three years: pro-  
35 vided, however, such contracts shall be entered into only subject  
36 to and in accordance with the rules and regulations promulgated  
37 by the Director of the Division of Local Government Services of  
38 the Department of Community Affairs;

39 (8) The supplying of any product or the rendering of any service  
40 by a telephone company which is subject to the jurisdiction of the  
41 Board of Public Utilities for a term not exceeding five years;

42 (9) Any single project for the construction, reconstruction or  
43 rehabilitation of any public building, structure or facility, or any  
44 public works [projects] project, including the retention of the  
45 services of any architect or engineer in connection therewith, for  
46 the length of time authorized and necessary for the completion of  
47 the actual construction;

48 (10) The providing of food services for any term not exceeding  
49 three years;

50 (11) On-site inspections undertaken by private agencies pur-  
51 suant to the "State Uniform Construction Code Act" (P. L. 1975,  
52 c. 217; C. 52:27D-119 et seq.) for any term of not more than three  
53 years;

54 (12) The performance of work or services or the furnishing of  
55 materials or supplies for the purpose of conserving energy in build-  
56 ings owned by, or operations conducted by, the contracting unit,  
57 the entire price of which to be established as a percentage of the  
58 resultant savings in energy costs, for a term not to exceed 10 years:  
59 provided, however, that such contracts shall be entered into only  
60 subject to and in accordance with rules and regulations promulgated

61 by the Department of Energy establishing a methodology for com-  
62 puting energy cost savings[.];

63 (13) The performance of work or services or the furnishing of  
64 materials or supplies for the purpose of elevator maintenance for  
65 any term not exceeding three years;

66 (14) Leasing or servicing of electronic communications equip-  
67 ment for a period not to exceed five years; provided, however, such  
68 contract shall be entered into only subject to and in accordance  
69 with the rules and regulations promulgated by the Director of the  
70 Division of Local Government Services of the Department of Com-  
71 munity Affairs;

72 (15) Leasing of motor vehicles, machinery and other equipment  
73 primarily used to fight fires, for a term not to exceed seven years,  
74 when the contract includes an option to purchase, subject to and in  
75 accordance with rules and regulations promulgated by the Director  
76 of the Division of Local Government Services of the Department of  
77 Community Affairs;

78 (16) *The provision of solid waste disposal services by a resource*  
79 *recovery facility, or the design, "financing" construction, operation*  
80 *or maintenance of a resource recovery facility for a period not to*  
81 *exceed 40 years when the contract is approved by the Division of*  
82 *Local Government Services in the Department of Community*  
83 *Affairs, the Board of Public Utilities, and the Department of*  
84 *Environmental Protection; and when the facility is in conformance*  
85 *with a solid waste management plan approved pursuant to P. L.*  
86 *1970, c. 39 (C. 13:1E-1 et seq.). For the purposes of this subsection,*  
87 *"resource recovery facility" means a solid waste facility for the*  
88 *collection, separation, recycling and recovery of metals, glass,*  
89 *paper and other materials for reuse or for energy production.*

90 All multi-year leases and contracts entered into pursuant to this  
91 section 15, except contracts for the leasing or servicing of equip-  
92 ment supplied by a telephone company which is subject to the  
93 jurisdiction of the Board of Public Utilities [or]. contracts for  
94 thermal energy authorized pursuant to subsection (1) above, con-  
95 struction contracts authorized pursuant to subsection (9) above,  
96 "[or]" contracts and agreements for the [provisions] provision of  
97 work or the supplying of equipment to promote energy conservation  
98 authorized pursuant to subsection (12) above, or contracts for re-  
99 source recovery services or a resource recovery facility authorized  
100 pursuant to subsection (16) above\*,\* shall contain a clause making  
101 them subject to the availability and appropriation annually of

102 sufficient funds as may be required to meet the extended obligation,  
103 or contain an annual cancellation clause.

104 The Division of Local Government Services shall adopt and  
105 promulgate rules and regulations concerning the methods of ac-  
106 counting for all contracts that do not coincide with the fiscal year.

1 \*37. Section 19 of P. L. 1975, c. 326 (C. 13:1E-28) is amended to  
2 read as follows:

3 19. Subject to such terms as agreed upon by [a board of chosen  
4 freeholders] *the governing body of a county* or the Hackensack  
5 Commission, as the case may be, any municipality within which  
6 any solid waste facility is located pursuant to an adopted and  
7 approved solid waste management plan, shall be entitled to any or  
8 all of the following benefits in consideration for the use of land  
9 within its municipal boundaries as the location of such solid waste  
10 facility:

11 a. The receipt of annual sums of money [in lieu of taxes on such  
12 property] in such amount as may be agreed upon between the  
13 [board of chosen freeholders] *governing body of a county* or the  
14 Hackensack Commission, as the case may be, and the municipality,  
15 and each [such board of chosen freeholders] *governing body of the*  
16 *county* and the Hackensack Commission is empowered to make such  
17 payments and each such municipality is empowered to accept such  
18 payments and to apply them in the manner in which taxes may be  
19 applied in such municipality; provided, however, that no such  
20 annual payment [with respect to any parcel of such property] shall  
21 [exceed] *be less than* the amount of taxes paid [thereon] *on the*  
22 *land used for the facility* for the taxable year immediately prior to  
23 the time of its use as the location of such solid waste facility:

24 b. Preferential rates charged for the services provided by the  
25 solid waste management district for any solid waste disposed of at  
26 a solid waste facility within said municipality, which rate dis-  
27 counts shall be subject to the approval of the Board of Public  
28 Utility Commissioners and shall not be in excess of 25%:

29 c. The right to reacquire any real or personal property used by  
30 the solid waste management district in connection with the opera-  
31 tion of any solid waste facility upon the termination of the uses for  
32 which such property was originally acquired, unless prior to such  
33 expiration or termination the [board of chosen freeholders]  
34 *governing body of the county* or the Hackensack Commission, as the  
35 case may be, entered into a new agreement for the continued use  
36 of such property.

37 Any real property reacquired by a municipality [in accordance  
38 with paragraph c. of this section,] shall be repaired and, as nearly  
39 as practicable, restored to its original condition, including, in the  
40 case of a sanitary landfill, adequate landscaping of the final earth  
41 covering to conform with the immediately surrounding terrain, by  
42 and at the expense of the [board of chosen freeholders] governing  
43 body of the county or the Hackensack Commission, as the case may  
44 be, or adequate compensation made therefor by [said board of  
45 chosen freeholders] the governing body of the county or the Hack-  
46 ensack Commission, as the case may be.

47 In the event that any municipality and any [board of chosen free-  
48 holders] governing body of a county or the Hackensack Commis-  
49 sion, as the case may be, fail to reach an agreement on the benefits  
50 authorized herein in consideration for the use of land within  
51 municipal boundaries as the location of a solid waste facility, the  
52 commissioner, after consultation with the relevant board of chosen  
53 freeholders or the Hackensack Commission, as the case may be, with  
54 the mayor of the relevant municipality, and with the relevant  
55 advisory municipal council, shall fix such terms and establish such  
56 benefits as he shall deem appropriate.\*

1 \* [37.] \* 38. \* This act shall take effect immediately except for  
2 section 3 which shall take effect the first day of the third month  
3 following enactment.

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ASSEMBLY COUNTY GOVERNMENT AND  
REGIONAL AUTHORITIES COMMITTEE

STATEMENT TO  
**ASSEMBLY, No. 1778**

with Assembly committee amendments

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**STATE OF NEW JERSEY**

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DATED: JUNE 18, 1984

Assembly Bill No. 1778, with Assembly committee amendments, establishes a new method of contracting for the construction, operation, and maintenance of resource recovery facilities, and simplifies the rate-setting procedures. In addition, the bill permits franchises and subfranchises to be awarded in order to ensure a solid waste flow to the facilities. The bill also establishes two taxes and a surcharge to provide stable funding sources for the State and the solid waste management districts to use in implementing, regulating, and enforcing solid waste management plans and in reducing resource recovery fees.

The new contracting procedure permits a contracting unit to request proposals from vendors for the construction, operation, and maintenance of a resource recovery facility. The contracting unit may then designate a vendor or vendors based upon price and evaluation factors for the purposes of negotiating a proposed contract. Certain provisions must be included in the proposed contract concerning the allocation of risks between the vendor and the contracting unit in the event problems arise during the construction or operation of the resource recovery facility.

After a proposed contract has been negotiated, the contracting unit must hold a meeting with consumer representatives and a public hearing to explain the contract and answer any questions thereon.

After the public hearing, the contracting unit must submit the proposed contract for approval to the Department of Environmental Protection, the Division of Local Government Services, and the Board of Public Utilities.

Upon approval by all three parties, the contract may be awarded to a vendor for a period not to exceed 40 years.

The bill further provides for a resource recovery investment tax on solid waste disposed at sanitary landfills to be placed in a resource recovery investment fund in each solid waste district for later use in subsidizing the transition to resource recovery. The tax is levied on the owner or operator of a sanitary landfill for all solid waste accepted

from a district, at an initial rate of \$0.28 per cubic yard of waste. Thereafter, the tax will be automatically increased by \$0.29 at 18 months, 30 months, and 42 months after the tax is first imposed, unless otherwise adjusted by the district and the Department of Environmental Protection.

In addition, the bill provides for a surcharge on the tax to be levied on the owner or operator, on all out-of-district waste received in a district, at a rate of \$0.21 per cubic yard of waste. The funds generated by the surcharge will be retained in the resource recovery fund of the receiving district as compensation for accepting solid waste from another district, and to provide an incentive to districts that send waste to another district to discontinue that practice.

The bill also provides for the imposition of an additional tax to be levied on all solid waste accepted at landfills, at a rate of \$0.25 per cubic yard of waste. At least 50% of the funds generated by this additional tax will be distributed among the 22 solid waste management districts for the purpose of preparing, revising, and implementing solid waste management plans. The remaining funds may be used by the Department of Environmental Protection for reviewing, regulating, enforcing, and assisting in the development of solid waste management plans, and for administering the tax funds.

The committee held three public hearings on the bill and invited interested individuals to a committee meeting to discuss air emissions from resource recovery facilities.

**The committee amendments:**

1. Limit the amount expended for administering the tax funds to 2% of the total amount in the funds;
2. Permit counties to use the services tax fund moneys to implement the goals of the State Recycling Plan and to support community oversight projects and community awareness programs. In addition, a county may appoint a citizens advisory committee;
3. Permit the Department of Environmental Protection to use the services tax fund moneys for recycling research and planning;
4. Further define the conditions by which the department may determine that a county has failed to fulfill its solid waste planning responsibilities; to include failure to implement the State Recycling Plan goals, or inability to negotiate interdistrict agreements or to identify suitable facility sites; and
5. Require the Department of Environmental Protection to adopt rules and regulations concerning the engineering design of resource recovery facilities, to include a requirement that state-of-the-art air emission technology be installed to control pollutants.

In addition, the amendments clarify the benefits a host municipality may receive. Other amendments are technical in nature.

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## TABLE OF CONTENTS

|  | <u>Page</u> |
|--|-------------|
| Assemblyman Harry A. McEnroe<br>District 27  | 1           |
| Robert E. Hughey<br>Commissioner<br>Department of Environmental Protection                             | 3           |
| Robert Swain<br>Board of Public Utilities  | 26          |
| Kevin Davis<br>Board of Public Utilities   | 31          |
| Susan C. Remis<br>Department of the Public Advocate<br>Division of Public Interest Advocacy            | 34          |
| Philip Beachem<br>Legislative Coordinator<br>New Jersey Association of Counties                        | 43          |
| Victoria Snyder<br>Environmental Specialist<br>County of Gloucester                                    | 45          |
| Madelyn Hoffman<br>Statewide Coordinator<br>SMOKE (Statewide Movement<br>Opposing Killer Environments) | 53          |
| June Kruszewski<br>Resident of the Ironbound<br>Section of Newark, New Jersey                          | 59          |
| James Lanard<br>New Jersey Environmental Lobby   | 61          |
| Theodore Ptylar, Director<br>Division of Solid Waste Management<br>Essex County                        | 64          |
| Jeffrey D. Ross<br>New Jersey Chapter of the National<br>Solid Wastes Management Association           | 84          |

## TABLE OF CONTENTS (continued)

|  | <u>Page</u> |
|--|-------------|
| Richard T. Felago<br>Project Manager of Business Development<br>in Charge of New Jersey Projects for<br>Signal RESCO, Inc.   | 88          |
| Charles H. Jacobson<br>Certified Public Accountant<br>Representing Edgeboro Disposal   | 92          |
| Charles McMullin<br>President<br>Kinsley Landfill  | 94          |
| <b>APPENDIX</b>  |             |
| Decision and Order in the<br>Matter of Resource Recovery<br>Generic Proceeding submitted by the<br>Board of Public Utilities   | 1x          |
| Proposals and attachments submitted by<br>Madelyn Hoffman<br>Statewide Coordinator of SMOKE  | 13x         |
| Highlights of Environmental and<br>Community Impacts - Essex County<br>Energy Recovery Facility, November, 1983  | 21x         |
| Statement submitted by<br>Jeffrey D. Ross<br>New Jersey Chapter of the National<br>Solid Wastes Management Association   | 56x         |
| Letter and Statement on Behalf of East<br>Brunswick Township Concerning Proposed<br>Amendments to Middlesex County District<br>Solid Waste Management Plan (with Exhibits)<br>submitted by Lewis Goldshore | 70x         |
| Letter addressed to Senator Daniel J. Dalton<br>submitted by the New Jersey State League of<br>Municipalities  | 117x        |
| Statement submitted by<br>Mary H. Owen<br>West Long Branch, New Jersey   | 118x        |

TABLE OF CONTENTS (continued)

|   | <u>Page</u> |
|---|-------------|
| Kinsley Waste Flow by Source<br>submitted by Gloucester County                                      | 119x        |
| Printout Illustrating the Results<br>of Gloucester County's Waste Flow<br>Monitoring Program        | 120x        |
| News Article of April 24, 1984<br>submitted by Gloucester County                                    | 132x        |
| Letter to Senate Energy and<br>Environment Committee from<br>Joseph H. Rodriguez<br>Public Advocate | 134x        |

\* \* \* \* \*

mjz: 1-79  
jb: 79-113



**SENATOR DANIEL J. DALTON (Chairman):** We would like to get started now. This morning's hearing is on A-1778, sponsored by Assemblyman McEnroe, and S-1762, sponsored by Senator Gormley, concerning the development of resource recovery in New Jersey.

I do not have an opening statement, nor any remarks. Does any member of the Committee have a statement or remarks to make? (negative response) As a result, what I would like to do is go directly to testimony from the Assembly sponsor, Assemblyman McEnroe. At this time, I would like to take the opportunity to commend Assemblyman McEnroe for all the hard work and many months he has put in on this legislation. Assemblyman?

**ASSEMBLYMAN HARRY A. McENROE:** Thank you. You're very kind, Senator, and I appreciate that. Members of the Committee, Senator Garibaldi and Senator Contillo, I am very happy to join you this morning to relate some of our experiences around this great State of New Jersey.

In reviewing the proposed legislation, we had four public hearings in four different parts of the State. We began, I believe, in this very same room. We then traveled north to the City of Newark in Essex County, where we had a group of perhaps 200 people, and testimony which lasted approximately six hours. We then traveled to Salem County, where landfilling is probably the most appropriate procedure in some of the more rural areas, and we heard substantial testimony there from both public and private citizens, all involved and all concerned with the management of our waste in New Jersey.

We then held a hearing emphasizing the Committee's concern with air emission control. We held that here in the State House -- in the Annex in fact -- and we heard testimony from numerous people from across the country, as far away as Texas and California, all addressing our concern with qualified air emission control of any facilities built in the State of New Jersey.

I think the comments and supportive testimony we heard, the major part of the concerns we heard-- All of the criticism of the legislation I would characterize as constructive criticism. I think every responsible person who came before the Committee emphasized the requirements and the need to address a better way of managing our waste

in New Jersey. As all of you know, this is the most densely populated state in the nation. Without reciting history to any great extent, six or seven years ago we had over 300 landfills; we are now down to somewhere in the neighborhood of 76 or 78. Ninety percent of the waste in New Jersey is delivered to 10 major landfills. So, that in some way emphasizes the importance of the deliberations of this Committee today, and of the Legislature, in general, in addressing the needs of what we do in the 1980's to accept and resolve this crisis in a more environmentally and financially-sound way.

I like to think that the bill establishes a framework for the orderly development of solid waste management in the coming years. The criticism, of course, is understandable in certain areas, but it is all based, I think, on parochial considerations and not really on reviewing the whole concept of where we are going and the fact that we lack a suitable and acceptable alternative.

I will be happy to answer any of your questions, Senator. I believe all of you have had an opportunity to review all of the technical aspects of the bill. As you know, it establishes a new stable funding source. It addresses other questions, such as franchising, which in its real sense is control of the waste stream. It recognizes the importance of the new concept of privatization, in that it eliminates some of the institutional difficulties with the encouragement by public bodies of private money in the funding, management, and construction of energy recovery facilities around the State. It also addresses the need to establish a longer period of contractual arrangements, in that it amends existing public contracts law so that it provides that a district -- a county, in other words -- can proceed for a period of 40 years and can establish a contract after appropriate public review by a vendor who would establish this new direction and new way of handling waste through energy recovery facilities.

Again, for 14 years the Legislature has continually supported the concept -- the reality really -- that we were in a crisis circumstance, or would soon be. We have reached that now, and this bill, of course, establishes-- They were planning procedures, you



might say, over those years, but now we are getting into the developmental stage of energy recovery facilities and acceptable landfilling. I think this is a beginning of that new procedure. It is not the first bill introduced, and it certainly will not be the last, but I think it raises our level of concern, our level of interest, to the level of supporting the development, as opposed to the planning aspects of new ways of doing things in New Jersey.

SENATOR DALTON: Very good. Are there any questions for Assemblyman McEnroe from the members of the Committee? (negative response) We do not have any questions for you, Assemblyman McEnroe. Thank you very much.

ASSEMBLYMAN McENROE: Thank you. I appreciate the opportunity, Senator. If there no questions today, of course I will be happy to provide background information, position papers, and in an informal way, address any concern or question that any member of the Committee may have.

SENATOR DALTON: Very good.

ASSEMBLYMAN McENROE: Thank you very much.

SENATOR DALTON: Just for everyone's understanding, what we would like to do now is go into testimony from the Executive Branch. It is my understanding that besides Commissioner Hughey, we have representatives of both the Board of Public Utilities and the Department of the Public Advocate here. We will listen to them, and will then listen to the counties which are represented here. After that, we will go into not only individual concerns from the industry, but into environmental concerns from the groups which are represented here.

I would like to call on Commissioner Hughey from the Department of Environmental Protection now. Good morning, Commissioner.

**COMMISSIONER ROBERT E. HUGHEY:** Good morning, Senator Dalton and members of the Committee. I have offered considerable testimony on this bill and have been working with the sponsor, Assemblyman McEnroe for approximately 18 months, so I am going to make my testimony today short.

The bill in front of you is the result of a two-year process. It was begun at a point where I started to meet with the counties about the problems they were having developing options in solid waste management. When we first met with the counties, we sort of broke up the responsibilities. We realized, and I think everyone on this Committee realizes, that the counties have a major responsibility in garbage. They are the ones that have the responsibility for siting, and for doing the environmental assessments on both upgraded landfills and resource recovery. I thought the State had to take the responsibility -- particularly my Department -- for streamlining the process to put the counties in a position where they could exercise their options and, also, address what I think is the second major issue in garbage for the future, and that is the cost of doing it right, whether it is upgraded landfills, resource recovery, or recycling.

I think we all recognize that garbage in this State has reached a crisis. Unfortunately for all of us, it is not a new crisis; it is one that was recognized over a decade ago, and it hasn't really progressed much in this decade. It has become increasingly real, and we are way beyond whether it is imminent or not. We are past imminent; we are in the midst of a garbage crisis in this State. There are 13 landfills today which handle over 90% of the State's nonhazardous waste. Of those 13, five are either at or over capacity today as we sit here, and are continued on an ad hoc basis because we have no alternatives.

The solid waste law, which I think the Legislature passed very wisely a number of years ago, is in danger almost daily -- I have to administer parts of it -- with being used in reverse. In other words, the counties which have done their job, which have gone through the planning process, which have had to bite the bullet on siting, and which have moved to either upgraded landfills or towards resource recovery, are now being faced with their having followed the law work against them, as other counties which have not quite gotten as far along are forcing their problems on those which have. I am not in a particularly good position with regard to that, nor is the BPU, as we are asked, as crises develop, to distribute garbage throughout the

State. That is probably one of the most unpopular things that I have to do.

So, garbage is not a crisis that we talk about conceptually or academically. It is a crisis that is very real. It is a problem that is intense, and I think it is the State's responsibility to begin to provide some of the alternatives.

The bill before you today does do some things, and it doesn't do some things. I think it is important for all of us to realize exactly what it does and exactly what it doesn't do. It does address the question of rate shock. We now have counties, like Cape May and Burlington, which are going to upgraded landfills which go from a charge of \$5.00 to \$6.00 a ton to \$26.00 a ton in a one or two-week period. The reason we have that rate shock is because we have never set aside money to offset the difference between doing it wrong and doing it right. One of the things that this bill provides is a graduated increase in the tipping fee so that we can start to set aside funds to take away the future rate shock. It is never going to accomplish it totally, and the total increase that is proposed in this bill is 5% to 10% over a four-year period. The BPU is going to testify in just a minute, and I think they will tell you that they have not seen a rate increase that small in the last five years. But not one of those rate increases that they have seen has had a public benefit. The difference here is that we are going to try to start to assemble money so that we can lay it off against the future.

Now, there are going to be some municipalities that will not like that initially, but I would suggest to this Committee that in garbage it is merely a question of when you want to pay, not whether you are going to pay. I think we have all seen that in the last five years in this State. We saw it most recently in the Meadowlands where with one landfill, we funded -- with the help of BPU -- one-third of the environmental improvements required, and it was appealed by 13 communities. That was one-third of the environmental improvements, which means that automatically two-thirds of the environmental improvements are going to find their way onto the next landfill that opens in the Meadowlands. So, we are building ourselves into a

tremendous cost for the future, and we ought to be doing it in some organized fashion.

This bill does streamline the contracting process. I think that is the part of it that Assemblyman McEnroe is most familiar with. I think it is a lesson we have learned from working with the counties. No county has gone through this process easily. As they have to deal with the contracting process in this State, they are dealing with a new technology, a new idea that is being imposed on an old set of standards. What this does is make it possible for other counties in the State to do what Essex County has had to do on its own.

It does provide the counties with some options, and I think that is very important to us. It does acknowledge the relative position for those counties in this State, and I think the County Association is going to testify today. For the first time to my knowledge, they have unanimously supported a piece of legislation. There are counties which are not very far along in the planning process and, therefore, have something to lose in this legislation. There are also counties which have completed the planning process. I think it is a strong statement on their behalf that they have taken this collective position.

Who stands to lose? Well, one of the things that the bill provides is a small surcharge for those counties which have to send their waste to another county. It is not enough to make any county in this State want to take anyone else's waste, but it at least recognizes the inequity of the current situation.

The bill provides the enforcement capability we have been lacking at both the State and county levels. I think we have been working for the last two years to get the counties to work with our Department more and more in terms of enforcement. We have actually written them into consent agreements. For the first time, we are going to have the resources to do that. The Chairman sponsored a very similar piece of legislation that would have done just that a couple of years ago. We appeared together before the JAC a number of times to talk about the need for this kind of legislation.

What doesn't this bill do? Well, it doesn't make resource recovery imminent. It applies to both upgraded landfills and resource recovery, but it doesn't make it financially possible. It doesn't set aside any environmental standard. As a matter of fact, because of the amendments that Assemblyman McEnroe worked in in the Assembly, it actually stiffens the general environmental standards of this State. It doesn't take the rate far enough. There is no way we can make enough progress in four years to really offset the rate changes we are going to see in the next 10 years. But, it does soften the blow, and I think it is very important to do that.

I think we all acknowledge now, and the Legislature certainly does, that garbage has sort of been the ignored stepchild of this State. I think we have done very well in handling some of our environmental problems, but this is one that has sort of passed us by. New Jersey has a reputation for planning for environmental problems, and I think this is a step in the planning process. The State is the only place where we can acknowledge the existing problems of the existing system. It is the only place where the contracting process can be streamlined, and I think it is the only place where certainty can be built into the rate-setting process. It is the only place where you can acknowledge that some of the counties have done an outstanding job and some of them have done somewhat less than an outstanding job.

I think these are the ingredients the sponsor and I see in this bill. I want you to know how we got here. We got here because we have been working with the counties for over 18 months on this bill. Everything they have run into snags with in the current process we have tried to anticipate and build into this piece of legislation. As Assemblyman McEnroe said, we know it is not the last time we will be before the Legislature with regard to garbage. We are currently working on a comprehensive mandatory recycling bill and I know there is interest on the part of the Legislature in that kind of legislation. I hope we will have it in front of this Committee in the fall. We are now working with recycling groups in the State and with about six groups which have expressed specific interest in recycling, in order to decide how fast we can phase in mandatory recycling, how we can deal

with the market as we do it, and how we can make it the easiest on the counties that have to build it into their solid waste plans.

Let me say again that this bill is not a cure-all, but it does address those problems we were aware of in working with the counties. To be able to take a piece of legislation and make it as comprehensive as this is to me a really unusual occurrence. It is a credit to the sponsor of the legislation. It is also a credit to the Public Advocate, the Board of Public Utilities, and the people in my Department who have worked on it collectively for the last year and a half.

We do not always answer environmental problems by negotiating our problems in advance between State agencies with far different interests. However, I think for the environmental problems we face in this State it is the only way to do it. Now, between ourselves, the Public Advocate, and the Board of Public Utilities, certainly there is not concurrence on every line that is in this bill. But, we have tried to anticipate our problems with each other and our potential problems with the Legislature. Everyone's comments through the public hearings that were held by Assemblyman McEnroe were built into amendments. Each one of the agencies in the Executive Branch had input. We think that the bill, as amended, is a perfect start on a new road for New Jersey and solid waste. That new road comes none too soon. This is not the complete answer but it is a step in the right direction, and we ask for your support. Thank you, Mr. Chairman.

SENATOR DALTON: Thank you, Commissioner. Are there any questions from the members of the Committee? Pete?

SENATOR GARIBALDI: Yes. First, Commissioner Hughey, I would like to commend you for your comprehensive presentation on what is perhaps one of the most pressing problems in the State. You have a heck of a job ahead of you. I can see from the work that you, the counties, Assemblyman McEnroe, and all those who participated have done, that you have come up with a comprehensive plan. My only question is-- I happen to represent perhaps one of the most heavily dumped upon areas in the State of New Jersey -- Middlesex County -- which has a variety of solid waste dump sites that have given us one

large headache. The fact is we have, even in my own town in Monroe Township, a dump that, first of all, we had to fight with the Department of Environmental Protection back in 1976 to close. We eventually got the closure rights, but the fact is it has been costing us one bundle of money. We have capital improvements in there, leachate collection systems, and a treatment plant to the tune of anywhere between \$2 million and \$3 million, plus an annual operating cost which fluctuates annually from \$85,000 to upwards of \$155,000 -- operating costs -- and we don't know how long that is going to go on.

This is a major problem and I don't see it addressed here. I don't know how you can address it. How can you keep garbage from coming in from other areas -- interstate, county, inner county, or whatever else -- because that landfill that I just referred to had a life span originally of 150 years had it just been for the locale. But, it was filled far beyond capacity within a 30-year period. Now, the residents of that community are faced with this astronomical tax burden which can only be raised with a property tax. It is going to drive the homeowners right out of their homes.

It is one thing to say it is the counties' responsibility to site dump sites and to site facilities, but I don't see the counties, the State, or anyone else, even these super, duper funds that are supposed to be available, being applied toward the restoration of these landfills which are costing-- We have people who live all along the landfill who are afraid to plant tomatoes in their ground. You know, these are questions which have to be addressed at this time. While this bill sets up a plan for the future, I don't see anything in here. Perhaps that is not the intent here, but something has to be done to address the problems we are faced with now.

COMMISSIONER HUGHEY: Right. First of all, I agree with you. As you might expect, I would love it if every one of those concerns would go away. I think that is the worst part of this job, as I said before. Middlesex County is a good example. Middlesex County has an adopted solid waste plan. One of the ingredients of that plan, and unfortunately the only one that was a little weak, was the contracting with other communities, which they had the right to do. I

think there was hesitancy on the part of both the communities coming in and Middlesex County itself at a certain point in doing those contracts. I think there are two reasons for the problem there, one of which is that, the contracting, and the fact that you have counties which have, over time, become reliant on Middlesex County. As you know, we are going through a crisis up there as we sit here today, where three counties have as their solid waste plans really, a reliance on Middlesex County. I think that is a problem that will ultimately be resolved in the courts. I think it is beyond both of us because it has to be. I think we are going to see some legal decisions in garbage that will be not unlike the decisions we have seen in housing. I think we are going to have to, because I think there are counties which are being penalized, and they are being penalized for planning, as opposed to not planning.

The other problem in Middlesex County, which I am sure you are aware of, is that we have always thought, and it has always been politically popular to keep the rates down on garbage. There are a lot of things associated with that problem, but the basic one is that it is cheaper here to dump than it is in New York City, and it is cheaper in South Jersey to dump in Gloucester than it is to dump in Philadelphia. So, keeping the rates low has been to our real disadvantage. The Supreme Court says, on one hand, that you have to have equality in terms of the distribution of garbage and that we cannot stop out-of-state people from coming in except as consistent with our solid waste plan, so it is doable. But, on the other hand, by keeping our rates artificially low, and I do think they have been artificially low because we just recently started to address the costs of closure-- The one you're working on is \$2 million to \$3 million. We're working on one currently that is going to be in the neighborhood of \$20 million to \$40 million for closure. I think as those costs for environmental improvements begin to go onto landfills in this State, you are going to see far less incentive for anyone to want to bring their garbage to New Jersey. I think that is a plus; I don't think that is a disincentive.

SENATOR DALTON: Pete, if I may, just on the point you raised, that is also a point I am interested in. Commissioner, the



only thing I would raise in conjunction with Senator Garibaldi's question is the fact that in 1981 we passed the Landfill Closure and Contingency Act. That Act has, in many cases, allowed landfill owner/operators to set aside moneys in an escrow account for closure, so you are collecting in the present for a closure that will happen in the future. However, in many cases there are landfills throughout the State that have closed prior to accumulating any significant money in that closure or escrow account.

Additionally, there are landfills that have been closed either in 1981 when the Act was passed or prior to the adoption of the Act. Wouldn't it make sense to provide a portion of the Solid Waste Services Fund in this bill for the closure of landfills that will be closing in the very near future, and, also, landfills that have been closed where there are no moneys available to monitor them? There are a number of landfills in Gloucester County that have been closed, and yet there are not sufficient funds to provide the monitoring capacity needed. Wouldn't this be an appropriate vehicle to address that problem?

COMMISSIONER HUGHEY: I think the answer to that is "Yes," and the question now is whether there is enough built into it financially to do it. I think you are aware of the problems we've had sometimes, and this is a similar case, Dan. We're talking about a very similar kind of situation, where in 1981 we started to provide something, and now we have a closure and maybe we have a third of the cost. So, we are never going to have quite enough money in those closure funds. We are probably going to have to look for another source. Whether it is this piece of legislation or a similar piece I can't answer, but I will take a look at it and give you an estimate.

SENATOR DALTON: Okay. Senator Garibaldi, do you have any further questions?

SENATOR GARIBALDI: No, thank you.

SENATOR DALTON: Senator Contillo?

SENATOR CONTILLO: Commissioner, is it true that you own the solid waste in this State?

COMMISSIONER HUGHEY: Do I own it? I have been trying to give it to BPU, but they won't take it. (laughter) It is true that I find myself in a position where I cannot avoid it.

SENATOR CONTILLO: Okay. Inasmuch as we are talking about waste-- You know, I am not a scientist, and one of the questions I have asked people whom I consider to be scientists is, do you have evidence? I don't have any evidence that it is better to go to resource recovery and produce electricity than it is simply to incinerate. Do you have evidence to substantiate that we are better off going to resource recovery as opposed to plain incineration?

COMMISSIONER HUGHEY: Well, I think you have to look at garbage as somewhat of a closed loop, so I think you should always develop by-products in that loop. For that reason, resource recovery is attractive to me. I think that because of the benefits of electricity and the fact that it builds more money into the facility, you can afford to ask for more stringent environmental standards. I think that is in the interest of all of us. Incineration is an old technique. We used to have incineration in many places in this State, but I think you really have to look at reusing as much of everything in the garbage field as you can. For that reason, I think resource recovery makes a lot more sense.

SENATOR CONTILLO: I know; I generally agree with everything you just told me. But, do we have any scientific data that upholds the position that it is less costly to build a plant and get back the electricity than it is simply to build a less expensive plant in the first place and simply incinerate it? Do we have any scientific evidence to substantiate that?

COMMISSIONER HUGHEY: Well, first of all, because of the standards we are going to apply, you are not going to be able to build a less costly incinerator. You are going to have to do state of the art. If you do that, you might as well-- Financially, you have to work everything into the plan. I would think that Essex County, which is represented here today, could tell you that they have strong financial evidence that you have to be able to recapture. There are a number of studies we have done in the Department that work fact into

the rate based on having electricity to sell, or not having it. We can make that available to you, but I think the answer is "Yes." There is strong evidence that it helps; it certainly helps the ratepayer.

SENATOR DALTON: On that point, I think that Paul is sensitive to the fact that historically in this country half of the resource recovery facilities have gone belly up. Okay? I think that is what you are driving at.

SENATOR CONTILLO: It was.

SENATOR DALTON: I shouldn't say they have gone belly up just for financial reasons, although a lot of them have. There have been environmental reasons, and things of that nature. What we seem to be doing in the bill -- and I'm not saying it's wrong, Commissioner, I would just like you to respond -- is we're committing ourselves to a technology that, in fact, doesn't have a historically-good track record. How would you respond to that?

COMMISSIONER HUGHEY: First of all, I don't think we are committing ourselves to any type of--

SENATOR DALTON: (interrupting) In this country, I should say. Someone's gasp reminded me of that.

COMMISSIONER HUGHEY: I think what we are doing is providing an option. I do not think we are committing ourselves to a technology. I mean, it is conceivable that you wouldn't have resource recovery built under this bill and you would still be in an advantage position because you would have set aside moneys for upgraded landfills. I don't think you are going to see a massive run to resource recovery in this State. I think right now there are two on the drawing board that look like they may be moving forward -- two in the whole State. So, we have never talked in terms of just changing the whole way we do business in the State. However, we have used some statistics recently to try to tell you why we think it is necessary to have the option whether it is used or not. With some resource recovery -- some meaning like four in the next 10 years, four facilities, or five facilities -- this State will still have a demand for about 158 acres a year of landfills. With none, you double that; you're over 300 acres. Now, everyone on this Committee, and everyone I

work with, is aware that in the last three years we have not been real successful in finding two new acres. So, we have to have more than one alternative. I very honestly think that what we are going to end up with in this State is a series of solutions. Resource recovery, for example, even in those places where it is debated, does not exist without a landfill. You have to have that in order to develop the financing. You have to have backup, ash, and nonprocessables. I do not think either will exist without a recycling plan in the future, and I don't think that any of those things if we had them today would solve the problem we are in right now. We are going to go through three or four very uncomfortable years.

SENATOR DALTON: I'm sorry I interrupted you, Paul; I just wanted to clarify that.

SENATOR CONTILLO: I can only draw an analogy in my own mind about when they built so many atomic energy reactors across the country. We were assured by the scientists, the bonding attorneys, the engineers, and the architects that this was fine and was going to work. Now we are being given the same assurance for the resource recovery plants. Someone pointed out a plant that does a certain thing in Saugus, Massachusetts, but apparently when you look into it a little further, it only produces-- Steam does not produce electricity. I saw a nice program by a hospital, but it was a very tiny plant. Do you know what I'm saying? You may be given the unpleasant job in the future of shutting down these plants if we are not truly prepared, if we do not know where we are going with them, and all the ramifications that are going to follow.

COMMISSIONER HUGHEY: Let me just comment on that, because as a worst case--

SENATOR CONTILLO: Okay, but what we want to do as a Committee, and as non-scientists, as laymen-- I asked the Chairman if we could go to some of the plants, and that is when we found out that we couldn't find a plant that does what the plant is supposed to do in Essex County or what the plant is supposed to do in Bergen County -- one that is that size that does all those things.

COMMISSIONER HUGHEY: We will certainly try to provide that opportunity for you. One of the comments I hear all the time is, "If you have it, then you are really in trouble." Well, one thing about resource recovery is that you can always shut it down. You don't shut down landfills, and we have a lot of examples of that. I mean, I can't correct the problems under the ground. Twenty-five of our former landfill sites are now in the Superfund. So, there is no easy way out of the garbage crisis. I think it is going to take all of these alternatives to do it. I do not think we are giving up any of our rights to condition the applications for these projects as they come on. That is not what this bill is intended to do. This bill is attempting to take some of the hurdles away from the contracting process and to begin to provide the resources to move forward. It will not move us there tomorrow. The arguments are not over in terms of resource recovery, but right now the arguments can't even be heard.

SENATOR CONTILLO: Could you describe for me how you decide on what size plant is going into, let's say, Essex?

COMMISSIONER HUGHEY: I don't decide that at all.

SENATOR CONTILLO: Who decides that, Commissioner?

COMMISSIONER HUGHEY: The counties have that role. The counties decide whether they want to go to upgraded landfills, resource recovery, both, or both in combination with recycling. They then size the plants and the facilities to meet their flows. Essex is the County that is the furthest along, and one of the people from Essex is here today. I'm sure he can discuss this with you. They do the sizing given the flows they have in that County.

SENATOR CONTILLO: There seems to be a number of loose elements flying around that could impact very severely on the size of a plant, and they do not seem to be directed in this particular bill.

COMMISSIONER HUGHEY: I think they are in this bill, particularly with regard to the areas of the bill which deal with franchising, where a county is given control over its own waste and can direct that waste. I think that is a very important feature of the legislation.

SENATOR CONTILLO: Commissioner, could you enlighten me slightly on-- Mr. Chairman, is it all right for me to continue with my questions?

SENATOR DALTON: Surely.

SENATOR CONTILLO: Could you enlighten me on why we decided on county boundaries, political boundaries, as opposed to what might be some more logical boundaries, you know, more economical areas, as opposed to just counties?

COMMISSIONER HUGHEY: I wasn't here when that decision was made; that preceded me. I think the counties have always been looked at legislatively in this State as the only way to get some regional solutions. I think that what you are going to see in the future are counties -- either because they want to or because they are forced to -- working with other counties. There is no prohibition at all in any of the legislation you have ever passed that says that counties cannot work together. Unfortunately, with regard to garbage, what has slowed people down from working together is that some counties have the opinion that working together means sending their garbage somewhere else. With that spirit of cooperation, we have not seen a lot of joint ventures, but I think you will.

I think it is inevitable that as we get into phasing in all of the components of a good garbage plan that some counties will take one part of the burden and other counties will take other parts of the burden. We have probably seen more progress in that direction in the last couple of years than ever before because the tension has really developed. We see that now on an ad hoc basis, uncomfortably in Middlesex County, where they have to deal with other counties, in Burlington County, which has had to phase out of contracts with other counties, and down where Senator Dalton is, where counties are fairly dependent on Gloucester. Right now there is an artificial cooperation, but that cooperation ought to become a lot more official.

SENATOR CONTILLO: It seems to me that it would be impossible to determine the size of the plant you need, until you determine the amount of garbage that is going to go into that plant.

COMMISSIONER HUGHEY: The counties and I have already made determinations. I mean, we have a law we are working with, where counties have a responsibility, where their flows are known, and where they are making plans to deal with their flows -- either making plans or not making plans. The only way I could take it another step would be to say to counties which are doing the job -- and I don't think you want me to do this -- "Now, in addition to your flows, I want you to plan for all the counties around you which are not doing it." I mean, that would be the only piece of planning that is missing, and I do not intend to do that. I think the counties have a responsibility. Over the last 18 months I have forced them to address that responsibility, and I think that many counties are beginning to do it collectively -- not always -- but the only way I could follow your suggestion to its logical conclusion would be to say, "We won't do anything until every county gets even." I don't think we are ever going to be there.

SENATOR CONTILLO: I am not making a suggestion; I am asking you a question. However, I see an area you have not planned for and it disturbs me. You have not taken into consideration-- I shouldn't say you, Commissioner, I mean the sponsors of the bill. First off, I recognize what a problem we are dealing with. It is interesting to hear someone say we had a crisis 14 years ago, when we are sitting here today with the same crisis that no one would listen to you about. I am not sure, you know, that we can push our minds far enough into the future. I don't know how you can talk about resource recovery, incineration, or landfill, and not talk about recycling, because if you do not mandate recycling, if you do not reduce that flow to the furthest degree you can reduce it so you know the size of the plant you are going to build-- Once you build a resource recovery plant, I don't think you can recycle.

Again, from what I have been able to read, resource recovery plants operate seven days a week to produce electricity. They have to have a guaranteed constant source of waste. If you build a plant, you build it for a certain waste flow. Now, once that plant is built, I don't see how you can then consider recycling, because you are going to drop your waste flow anywhere from 15% to 20%. Now, will we have a plant that is 20% too large?

COMMISSIONER HUGHEY: The answer to that is, if we put all the plants that are being discussed right now with any activity at all, which is a total of three, and if we had the best recycling law in the country and it took out 80% of the waste flow, which is a lot more than they are anticipated to do, we still wouldn't be in a position where those plants could be guaranteed everything that they could use. I mean, the extent of this crisis is way beyond what the question suggests. We need every part of the garbage situation to fall into place immediately, and we know that won't happen. We are working on a mandatory recycling bill, but that is not easy either. This bill took 18 months to draft; that bill has taken six months so far and will probably get to you in the fall, which will make it about nine months, because the considerations there are pretty enormous too. How fast can you put things into the marketplace? I don't mean to make a profit, because I think we are going to change our minds about recycling in this State. We are going to do it to avoid costs.

SENATOR CONTILLO: And to reduce the waste load.

COMMISSIONER HUGHEY: Right. I think that is going to change, but you still have to be able to put things into the marketplace and you have to be able to phase it in for urban areas where you are not dealing with residential curbside pickup. That has not been easy to negotiate either, and won't be done through the negotiation process when we bring it to you. I'm sure we will go through a lot more. So, it certainly deserves its own attention. It is going to be another major piece of legislation. I don't see how the sponsor could have ever worked it into this piece of legislation. This one does a lot of things. Recycling deserves its own legislation, and I think we will have it. Both of the sponsors of this bill have already expressed an interest in having that piece of legislation, but it is just so complex.

SENATOR CONTILLO: Are you suggesting that the Bergen County plant and the Essex County plant, when they are built, will not take care of all the waste flow in Bergen and Essex?

COMMISSIONER HUGHEY: Well, they certainly will not take care of it in the area, and Essex -- which, again, is here, and I would



rather they would testify about their own plant -- has built recycling into their plant and has sized their plant accordingly.

SENATOR CONTILLO: Well, that was my point.

COMMISSIONER HUGHEY: Well, they have.

SENATOR CONTILLO: Recycling should be a mandated aspect before the construction of a resource recovery plant, as Essex County has apparently seen the wisdom of doing.

COMMISSIONER HUGHEY: They have factored that into their plant size and I think that they should talk about that.

SENATOR DALTON: Commissioner, I think the point that Senator Contillo is making is that oftentimes we have heard of this bill, rightly or wrongly, as our comprehensive response to the solid waste problems of the present and of the future. What Senator Contillo is pointing out is that recycling has to be part of that response. You know, one aspect of it is the cost and cost reduction; another aspect, obviously, is the pollution problem that comes about if you, say, for instance, burn plastics. I would assume the economic aspect and the pollutant aspect are the two keys.

In order for us, as a Legislature, to really develop a comprehensive response, as you recognize by starting to develop a bill, we have to have recycling as part of that overall component.

COMMISSIONER HUGHEY: I couldn't agree with you more.

SENATOR DALTON: The thing is, what we would like to do in this Committee, is try to deal with that as a whole package, so that when we go to the Senate and to the Legislature we will have a comprehensive and viable response to our solid waste problems in the future.

COMMISSIONER HUGHEY: I would agree with you, except to the extent that I think they have to go simultaneously. I think to recognize that this is not a cure-all, the sponsor of this legislation and I have never said in front of any Committee, or at any hearing, that this answered all of the problems. I don't think we have ever testified on the bill where we didn't say that recycling was part of it. We recognize that to the extent that we are drafting a piece of legislation.

SENATOR DALTON: Right.

COMMISSIONER HUGHEY: However, I do not think that one should hold back the other. I think this stands on its own merit. It is very important, and I think the counties can tell you why. We think that this deserves to move forward.

SENATOR CONTILLO: We heard from the bonding attorneys when they were here initially on this type of legislation-- They had to have a guaranteed source of raw material, which was the garbage. They want to make sure that that plant, when it is built, in order to pay off the bond totals knows precisely how much waste load is going into that plant.

You have sort of a cavalier attitude about the amount of garbage that goes into a plant. You're telling me there is plenty of garbage to go around and not to concern ourselves about that.

COMMISSIONER HUGHEY: Sir, I do not have a cavalier attitude at all. What I am saying is that there will be a lot of garbage going into every plant. The counties which have done this right, and the one that you will have an opportunity to discuss this with today which is further along than any of the others, which is Essex County, have built in those factors. They have to. We review their plans; their bonding houses review their plans; and, in Essex County's case, the Port Authority reviews the plan. So, I am not at all cavalier about it. I think it is predictable and I think that the counties which are moving forward have done it predictably.

I would tell you that on upgraded landfills the same thing occurs. Cape May did not build an upgraded landfill at \$26.00 a ton compared to where you are used to looking, which is \$9.00 a ton, and do it cavalierly. They knew what kind of material was coming in; they knew how they were going to be able to afford the investment. So, the counties which are doing the job as prescribed can answer the questions you asked. I am not at all cavalier about it. I would tell you that I do not feel it is necessary for me to answer the whole range of questions because the counties are a part of this process. The counties which have done it well can answer every one of those questions.

SENATOR CONTILLO: I view a landfill differently than a resource recovery unit, because if you build a landfill and then you go to recycling and you start filling that landfill at a slower rate, that's fine. I think we would all be happy to hear that. But, I think there is a different problem you face with a resource recovery unit which may not be faced with an incinerator if the flow were to slack off.

COMMISSIONER HUGHEY: What I'm saying is I think you will find that the counties which moved toward resource recovery built in recycling.

SENATOR CONTILLO: Well, we'll talk to them. Thank you.

SENATOR DALTON: Commissioner, some of the critics whom I have talked to regarding Assembly Bill 1778 have maintained that the proposed series of taxes on existing landfills to be escrowed to offset higher tipping fees for resource recovery facilities would produce insufficient revenues to have any significant impact for many years. The counties which are prepared to construct and operate these facilities within the next few years would receive scant benefits from the resource recovery investment funds. Similarly, these same counties have already planned for the implementation of resource recovery and would not require additional planning money from the Solid Waste Services Tax Fund. The counties which are not as far along in the development of resource recovery or sophisticated solid waste planning would be encouraged to delay the implementation to receive the maximum benefits from these tax revenues.

How would you respond to those charges?

COMMISSIONER HUGHEY: Actually I have only talked to one county which had anywhere near that feeling. I think the counties which are furthest along realize that what they are doing here is blazing new ground for other people. It will not be an immediate advantage to them, but having been through the process -- I think the sponsor of this bill can talk about one county -- they realize it is really necessary for the counties which are to follow.

In terms of whether people can delay in order to build up the account, I think people are going to find it harder and harder to delay in this State for a variety of reasons, not the least of which is that

we are not hesitant to take them to court anymore. We are doing that, and we will do it in a much bigger way in the year to come.

So, if the argument is right, I think you have to assume bad faith on the part of the counties. I certainly cannot plan solid waste in this State thinking that no county is going to do what it is supposed to do. If I find that to be the case, then it is my obligation to take those counties to court, which I intend to do. But, is it insignificant? Dan, I think it is. I wish we were sitting here in 1972 making the provisions that are provided in this bill to avoid major rate changes in the years ahead, because if we were, we wouldn't be having a rate change in this State right now. We would have planned enough ahead of time to know that we could set aside money and delay future tipping-fee increases.

As you begin this kind of legislation it is just like the Closure Act. It will not do the whole job, but it is a step, and I think it is a very important step.

SENATOR DALTON: I guess my question is, if we are talking about-- You said there are three planned for. Essex, obviously, is out in front. My understanding is that Bergen is starting to come along, Camden-- I don't know about Middlesex, but there is also Hudson. My concern is that for those counties the Resource Recovery Investment Fund is going to mean very little, if anything. You and I have discussed resource recovery and what we're saying is that within the next 10 years we will see no more than five resource recovery plants. Basically, I have just now indicated the counties which we will probably see them from.

Now if, in fact, that is what we will see in the next 10 years, five resource recovery plants from those five counties, and they have not indicated a desire for this resource recovery investment tax -- I mean, they are well along in the planning process already -- why do we need the tax?

COMMISSIONER HUGHEY: As a matter of fact, they have supported it uniformly with, I think, one exception. I have one letter on it from the solid waste planner in Camden County who said he did not like, not the tax, but the extra tax for sending it to another county.

I don't guess I would like it if I were him either because I would be sending my waste to Gloucester County, but I think if I were Gloucester County I would like it. So, I haven't had that opinion expressed to me by any one of the counties which are planning it, or the counties which are not planning it for the next five years.

SENATOR DALTON: I'm expressing it to you, okay?

COMMISSIONER HUGHEY: Okay. I do not happen to think it is a valid argument. In addition to the counties you have discussed, I think I would probably add Ocean County and Atlantic County to that list, which have it in their plans. From among that group you should see the four or five, and there are some counties which may work together to do something that is a scaled-down version of any of the major counties.

My discussions with the counties lead me to believe that they all want to see it. I think the county representative here today will testify in support of this bill.

SENATOR DALTON: I guess my question is, if these plants are going to be built or not be built based upon their own merits, not based upon this investment tax, why do you need the tax? That is my question.

COMMISSIONER HUGHEY: I think it is the difference between going from \$8.00 a ton to maybe \$25.00 a ton, as opposed to maybe \$18.00. I think that is important. To give you an example, what you have to do, Dan, is build a curve from when it starts to when it is going to be completed. What you have accrued in the account is a part of that curve. It can help to offset future tipping fees. It is not going to be dramatic, but I do think it is a step in the right direction. I have yet to have a county very seriously, with one exception, say that the tax should not be a part of that. We're talking here about a 5% to 10% increase over four years, which is very minor, but which begins to make people plan for the accounts that are going to be necessary for the future. I think it is a very important part of the bill.

SENATOR DALTON: At least 50% of the revenues derived from the Solid Waste Services Tax are allocated to DEP for solid waste

planning and programs. Again -- and I won't say critics this time, I will say myself, okay -- this amount, obviously, will serve to underwrite the total DEP budget. What specific solid waste programs does the Department intend to fund from these moneys?

COMMISSIONER HUGHEY: This part of that bill is very similar to one that we talked to you about two years ago which would have stood on its own. That is a step up in the enforcement ability of the Department with regard to solid waste. We have a breakdown of what we project to be able to build with that. It is not ongoing services. We can provide that breakdown to you specifically on questions related to the money that would come to DEP. We prepared it for the JAC, but I don't have it with me; I will get it to you.

SENATOR DALTON: I would be very appreciative. Commissioner, A-1778 seems to ignore the plight of municipalities hosting new or expanded landfills and resource recovery facilities. The bill provides planning funds to the Department and to the counties and investment funds to the counties to facilitate the development of resource recovery. Since the municipalities must bear the burden of accepting the environmental and health hazards associated with landfilling or incinerating solid waste, shouldn't economic incentives or financial remuneration be provided to host municipalities wherein resource recovery facilities or new landfills will be sited?

COMMISSIONER HUGHEY: Actually the bill as amended does address that. There was an existing incentive clause under the existing solid waste law which was proving, at least in the case of Bergen County, to be inadequate for negotiation purposes. I think an amendment which Assemblyman McEnroe accepted will change the incentive pretty dramatically to the benefit of the host municipality. I could be corrected on that. Harry, is that amendment in?

ASSEMBLYMAN McENROE: It is my recollection that it is.

SENATOR DALTON: Now, wait a minute. The exact wording of the amendment is--

MR. CONNELLY: That is not the wording; it is paraphrased.

SENATOR DALTON: Okay. What it does is, it permits by the mutual agreement of the governing bodies of the county and the

municipality wherein a solid waste facility is to be located, the receipt of annual sums of money as host municipality considerations. "These annual payments shall not be less than the tax value of the land used for the facility." Okay? So what you are saying is, at a minimum these annual payments shall not be less than the tax value of the land used for the facility.

COMMISSIONER HUGHEY: Correct.

SENATOR DALTON: As a policy determination, I think that is simply not enough. I think what we have to do is write into this bill an increased incentive for the host municipalities. As I said, just leaving it at "shall not be less than the tax value of the land used for the facility" is totally inadequate.

COMMISSIONER HUGHEY: Dan, I don't necessarily disagree with you and I don't think Assemblyman McEnroe would either. Think of where we came from. The existing bill had a lid on it. We got two interpretations from the Attorney General on the existing Solid Waste Act. This was an attempt to set a minimum as opposed to a maximum. So, we reversed the policy that existed previously. Now, if you want to go a step further, I certainly would not disagree with that, and I don't think the sponsor would.

SENATOR DALTON: I think if we are going to have resource recovery in this State, I mean, that is one of the things-- You know, whether you talk about resource recovery or whether you talk about landfills, you are going to have to provide significant incentives. I think that should be part of this overall bill.

COMMISSIONER HUGHEY: I have no problem with that.

SENATOR DALTON: I have no further questions. Pete, do you have any questions?

SENATOR GARIBALDI: One thing I don't know -- maybe Senator Contillo touched on it -- about the volume required for a resource recovery unit to become economically feasible, is the amount of truck traffic and what that does to the roads. What in this law, or in this proposed legislation addresses a municipality's road structure, because those trucks pulverize the roads? We are still working on the restoration of roads in many of our towns and, again, I have to say the

counties, the State, nor no one else who forced these dump sites within municipalities have come along and said, "You know, we'll help you out. We'll repair your roads." They get all the fees from all those commercial truck rates, but they do not pass anything down to the towns to help them to keep their roads in decent shape.

COMMISSIONER HUGHEY: I think that goes more to Senator Dalton's question than to the first question. It is a question of incentives which has to do with the whole series of infrastructure questions that you are familiar with. If you are treating leachate, you are doing that in a sewer facility. I think that is one of the reasons why we wanted to reverse the "cap" policy, in order to make incentives greater. But, again, I don't think any of us would be disinclined to think that more incentives would not be even more attractive.

SENATOR DALTON: Thank you very much, Commissioner.

COMMISSIONER HUGHEY: Thank you, Senator.

SENATOR DALTON: Is there anyone from the Board of Public Utilities here who would like to testify? (affirmative response) We will now hear from Bob Swain and Kevin Davis from BPU.

ROBERT SWAIN: My name is Bob Swain; I am one of the Board's regulatory officers. With me is Kevin Davis, as Senator Dalton indicated. I guess the reason I was asked to come down here was because I was given the primary responsibility for the Board of coordinating its efforts to implement a resource recovery scenario under what they consider to be existing statutes. Also, Kevin and I met with Assemblyman McEnroe and Commissioner Hughey to discuss various amendments which were incorporated, in part, into the bill.

Under the Board's responsibility as it has seen it under the Solid Waste Utility Control Act, we conducted a series of generic hearings which lasted approximately one year, through which we established a rate-setting mechanism, among other things, under what we consider to be existing law. That law required us, as we found out and as we were advised by the Attorney General's office on this score, that we were required to establish rates for resource recovery facilities on a rate-base rate of return basis. What we did then was, we stretched



what we considered to be our limits on our statutory constraints and established what we believed to be a mechanism under existing law which we thought might encourage private investment in resource recovery facilities under the traditional rate-base rate of return rate-setting methodology.

For your review and benefit, I have with me copies of the order which the Board issued on February 23, 1984. Also, I must say that we are here to support this bill. Our review of the bill was related primarily to the manner in which it affected our rate-setting responsibilities. We are assured, from having reviewed the bill, that it provides two alternatives to the scenario we have developed in our order. We are of the opinion that while some of the conclusions that are reached in there may not necessarily be true -- excuse me, I don't mean not necessarily true -- they may not be drawn on an economic basis, we are of the opinion that there should be provided an opportunity for the counties to avail themselves of any opportunity to develop resource recovery facilities in as expeditious a manner as possible. That is essentially why we are very supportive of this bill.

We are really here to answer any questions you may have on any technical aspects from our perspective. As I have indicated, we met with Assemblyman McEnroe and Commissioner Hughey and proposed several amendments to the bill. I guess that is about it. I have the order here for your benefit. Of course, we have answered several questions you have had informally. The Board is willing to do anything it can to assist you in your analysis, in conjunction with the Department and with Assemblyman McEnroe.

SENATOR DALTON: Paul, do you have any questions?

SENATOR CONTILLO: Why don't you go ahead and do what you want to do first? I'll just hold back for a minute.

SENATOR DALTON: You are in favor of the bill?

MR. SWAIN: Yes, we are.

SENATOR DALTON: Okay. The whole rate regulation of resource recovery-- You have indicated that you would like to maintain your traditional role, is that correct?

MR. SWAIN: Well, we have indicated in the order, Senator, that we feel constrained under our interpretation of existing statutory requirements to regulate resource recovery facilities under the more traditional rate-setting methodologies. There have been varying positions taken in our generic proceeding that indicated that such a rate-setting methodology would discourage private investment in the facilities. It is not that we agree or disagree with those positions. They may be true; they may be false. But, we really just set up a methodology under what we consider to be our requirements under existing law.

So, if the legislation which is proposed would in any way enhance or encourage the development of resource recovery facilities, we would be in favor of it because I believe that is what the Board considers its mandate to be under the two acts.

SENATOR DALTON: Even though the fact is that in many cases the Board could give up its traditional role as far as rate regulation is concerned?

MR. SWAIN: That is correct.

SENATOR DALTON: You would be willing to give that up for the good of resource recovery within the State?

MR. SWAIN: That is essentially correct. I think maybe the bill proposes two alternatives to our traditional rate-setting scenarios, one of which would be -- as I think Commissioner Hughey indicated -- a long-term contractual scenario under which a long-term contract would be looked at on a one-shot basis by the Board and would be approved as being in the public interest.

The other scenario, which is an amendment we proposed and which Assemblyman McEnroe was in favor of, as was Commissioner Hughey, was to present a third alternative, that being to have a county come in, or a vendor come in with a contract to be approved by the Board, but they could ask to have the Board subject it to its more traditional rate type analysis of it, i.e., find a rate base and rate of return over a longer period of time. In that instance, the contract itself would be subject to the continuing jurisdiction of the Board and subject to modification.

SENATOR DALTON: Could resource recovery facilities be financed and constructed in this State without this bill?

MR. SWAIN: Well, that depends upon who you listen to.

SENATOR DALTON: Well, I'm listening to you right now.

MR. SWAIN: I would have to say that we think our methodology provides a means through which they could be financed. Of course, as Commissioner Hughey indicated, there will be a tremendous rate impact of putting these facilities on line. We have tried to mitigate that impact by establishing what we call a real levelized rate-setting methodology which utilizes a rate-base rate of return analysis, but spreads it over a long period of time. We have also taken the position in our generic order that we could also use rate-averaging concepts which are utilized in HMDC, for which they were able to get their bailing facility on line at a lower cost than they otherwise would have been able to do, to further mitigate these costs and, also, to provide a disincentive, as it were, for collectors to go to-- In other words, it would also have to do with waste flows as well, this rate averaging. But, there are those who take the position that there would be a substantial loss of tax incentives if there was any type of rate-base rate of return methodology employed.

Whether or not those assertions are true is really not for the Board to determine. Once it did determine that it was essential under existing law to establish a rate based upon our traditional methodologies, we had to do what we did on the order.

SENATOR DALTON: Don't forget my question now. (laughter)

MR. SWAIN: Your question was, can they be-- I believe perhaps they can, but once those assertions were made, I think--

SENATOR GARIBALDI: (interrupting) What was the question?

MR. SWAIN: The question was, "Can they be built under existing law?"

SENATOR DALTON: The question was, do we need the bill to finance and construct resource recovery facilities?

MR. SWAIN: We would take the position that yes, the bill provides a reasonable alternative and the bill should go through based upon that.

SENATOR DALTON: I am not asking whether you are generally for or against the bill. What I am asking is, do we need the bill to construct and finance resource recovery plants?

MR. SWAIN: We do not believe the bill, if a utility came in under our scenario, could be relied upon. I am hesitant to say we are providing the answer to the entire process. It may well be that we are wrong. That is why we think you might need the bill.

SENATOR DALTON: It just seems strange to me that, given your docket, what you outline in your docket, and your methodology for financing and constructing resource recovery plants, you would then indicate that you need this bill to build resource recovery plants. I mean, what you said in your docket is basically, "We can do it this way without A-1778."

MR. SWAIN: That is correct. We also said in our order that we would encourage any means through which we believe resource recovery facilities could be expeditiously constructed in the State.

SENATOR DALTON: Did you ever think about running for public office, because you are very good? (laughter)

MR. SWAIN: Thank you very much, Senator.

SENATOR CONTILLO: That was not a compliment.

MR. SWAIN: It wasn't a compliment?

SENATOR DALTON: Yes, it was; it was a compliment.

MR. SWAIN: Thank you. Maybe that is why the Commissioner sent me down here to speak.

SENATOR GARIBALDI: Don't express gratitude.

SENATOR DALTON: Although the privatization component in A-1778 purports to be optional, the entire tone of the bill, as well as DEP's public pronouncements on the subject, suggest that the financial community will not invest in utility-regulated resource recovery facilities in New Jersey. Have you, or any representatives of the Board met with any prospective resource recovery vendors or representatives of the financial investment community who have expressed support for a utility-regulated approach to resource recovery?

MR. SWAIN: We have.

SENATOR DALTON: Who was that?

MR. SWAIN: I think the Signal RESCO position, which was placed on the record of our generic proceeding, is supportive of our traditional type of utility regulation.

SENATOR DALTON: Okay. So--

MR. SWAIN: (interrupting) Excuse me, sir. I think there is a representative from Signal RESCO here who will give testimony to that effect.

SENATOR DALTON: Okay. I have no further questions at this time.

SENATOR CONTILLO: How does the Board feel, as we heard on privatization before, about the idea of a municipality making a one-shot contract that has to last for 30 years, the life of the bond?

MR. SWAIN: The Board is really not too much in favor of that; however, we did have built into the legislation another amendment which permits them to have their choice. In fact, I believe the Board's position is consistent with that taken by Commissioner Hughey. I think you are really talking about counties, rather than municipalities. Is that correct?

SENATOR CONTILLO: Yes, that is correct.

MR. SWAIN: It really is their choice to make. This provides them with three options as opposed to the option under existing law. That is why we are supportive of the bill.

SENATOR DALTON: Pete?

SENATOR GARIBALDI: Yes. You mentioned one private firm, Signal RESCO, and I am sure there are many others in the State of New Jersey, if not in the nation, that would love the opportunity to come in and site a resource recovery facility in the State of New Jersey. I'm sure they would provide every possible advantage to the taxpayers because I have heard in many cases, testimony that was provided in certain communities where they were looking to situate and they offered just about everything but the kitchen sink if they would be given that opportunity. Why then do we need to tax taxpayers in order to provide an incentive?

KEVIN DAVIS: It's my turn. We are not involved in the tax surcharges in this bill. The Board has had--

SENATOR GARIBALDI: (interrupting) Well, ultimately, whatever these rates are, you know the taxpayers are going to pay it.

MR. DAVIS: (continuing) no input at all as far as those particular charges are concerned. That is from another angle that we have not dealt with, so we really cannot comment on what is written into the bill as far as taxes and surcharges are concerned.

MR. SWAIN: May I make one comment though? As we indicated before, the rate impact of placing these facilities on line will be substantial. Toward the end that these taxes are utilized to mitigate that great impact, we think there is a benefit to these taxes. We're talking about increasing the costs of disposal in the State of New Jersey anywhere from \$100.00 to \$300.00 once these things come on line. We have heard all sorts of numbers.

SENATOR GARIBALDI: All right, then you raise another point. Should we consider some division in the intent within the four corners of this proposed legislation and remove any suggestion that any fees, or any funds collected as a result of the rate increase or rate structure-- Should we say that there should be no suggestion for resource recovery, that that be just for the restoration of the landfills in existence now and in the future?

MR. SWAIN: I think that the taxes which are being assessed through this vehicle are being utilized for the proper purpose, if that is your question.

SENATOR GARIBALDI: But, it also suggests in here that it is an incentive for resource recovery. It is clearly intended in the legislation that these funds that would be generated would also be utilized for the purpose of stimulating the construction and development of resource recovery throughout the State of New Jersey.

MR. SWAIN: Correct me if I'm wrong, but I think there is also a provision in there that allows these funds to be utilized -- and, of course, I didn't write the bill, sponsor it, or anything -- if a county determines that resource recovery facilities are not feasible in their county and if they so certify that to the Commissioner and the Commissioner agrees with them, then I think the funds can also be disbursed for a secure or sanitary landfill in a particular county. I am not terribly sure on that.

SENATOR DALTON: I think, to go to Senator Garibaldi's questions, you have a mechanism in place within the bill, i.e., the taxes, to mitigate the rate shock. Okay? I think what Senator Garibaldi is getting at is, are there any other procedures or regulatory mechanisms you are working on within the BPU that would also mitigate rate shock, thereby precluding the need for these new taxes?

MR. SWAIN: Well, the methodology that we have worked out is contained in our order. As I understand the implementation of these taxes, they are not contingent upon whether the county makes a determination to proceed under our rate-setting methodology or one of the alternatives proposed through the legislation. Thus, a county that chose to proceed under traditional Board regulation would also be able to avail itself of the tax advantages of this particular bill, and also utilize the method we have developed which we believe will mitigate the rate impact of placing these facilities on line.

SENATOR DALTON: Do you think the method you have developed is a much more effective method for precluding or at least lessening rate shock than the taxes in the bill?

MR. SWAIN: Than the taxes themselves?

SENATOR DALTON: Yes, within the bill.

MR. SWAIN: At the risk of sounding foolish again, we really cannot tell whether we are going in the right direction. We think we are going in the right direction, but we cannot tell until someone comes in to us and says, "We would like to go your route." Then we will see if it works. I hate to predict--

SENATOR CONTILLO: (interrupting) Have you had any proposals?

MR. SWAIN: We have had discussions with a number of counties. Again, they are still, as Commissioner Hughey indicated, in the planning stages. I think the only county that is ready to go right away is Essex County, which has indicated a desire to go the other route. Although we have had some discussions with other counties, they have not come as far as Essex.

SENATOR CONTILLO: Fine. Using the conventional way of building a plant as opposed to privatization?

MR. SWAIN: I think Essex County would prefer to go under the privatization route. The representative from Essex County is here, I think, to give testimony.

SENATOR CONTILLO: No, but have you had any preliminary discussions with counties which are considering the conventional method of building a resource recovery plant?

MR. SWAIN: Yes. In fact, the position taken by Signal RESCO, which was preparing to build a plant in Middlesex County, was to come in under our traditional-- That is on the record of our proceeding. Of course, we can make any documents available to you for your assistance. They were going to come in under our scenario, but apparently they ran into some problems in Middlesex County with respect to siting and other concerns, and they subsequently failed to file their application.

It is a very complicated process through which these things would be reviewed under either scenario proposed by the Department and this legislation or by the Board, so it would take a while in any event.

SENATOR DALTON: Thank you very much.

MR. SWAIN: Thank you. I hope I didn't confuse you too much.

SENATOR DALTON: Susan C. Remis, Department of the Public Advocate, Division of Public Interest Advocacy. Good afternoon, Susan.

SUSAN C. REMIS: Good afternoon, Mr. Chairman and members of the Committee. My name is Susan Remis, and I am appearing today on behalf of Joseph H. Rodriguez, the Public Advocate of the State of New Jersey. I appreciate this opportunity to share with you my views on resource recovery and solid waste disposal. The issue before us -- how to manage our solid waste problems over the next years and decades -- is one that must be considered with great care.

I would like to take just a moment to hand out some materials I brought with me. I have my written statement; I have some specific amendments I would like to see added to this bill; and, I also have a letter from Commissioner Rodriguez and a position paper that my Department prepared on the environmental aspects of resource recovery. If I may just give these materials to the Committee Aide.

SENATOR DALTON: Sure. Thank you.



MS. REMIS: In my testimony today, I plan to highlight some of the Public Advocate's views on solid waste disposal, and then address some of the specifics of Assembly Bill 1778 and Senate Bill 1762.

I would like to address first the importance of eliminating our dependency on landfills. According to DEP, we only two or three years left of landfill capacity in this State; therefore, we need to explore and develop new approaches to solid waste disposal.

Resource recovery facilities can certainly be one component of a comprehensive disposal strategy, but the hazards and costs associated with resource recovery must be addressed. A review of the scientific literature reveals that resource recovery plants emit a number of pollutants into the air, and residue which includes heavy metals, toxic organic substances, and acid gases. These toxic substances are released at rates and in forms that may result in chronic adverse health effects and environmental damage.

For example, DEP reports that resource recovery facilities in New Jersey are expected to generate 283 tons of lead emissions by 1990. Lead is a toxic metal which affects the gastrointestinal system, liver, kidneys, blood, and central nervous system and has been identified as a carcinogenic substance.

Scientists have also consistently found toxic organic substances such as dioxins in the stack and fly-ash emissions from resource recovery plants in both the United States and in Europe.

In addition, resource recovery facilities can produce substantial quantities of acid gases. Even with the controls that New Jersey presently requires, a large resource recovery facility can emit over a ton of hydrogen chloride daily. These acid gas emissions may irritate a person's eyes and throat, produce acid rain, and cause damage to certain crops such as tomatoes and corn.

While we acknowledge resource recovery as a method of solid waste disposal, we should not minimize the environmental and public health hazards associated with these facilities.

As Senators Dalton and Contillo suggested, the most common sense method of reducing the environmental dangers of resource recovery

is simply to burn less garbage. The State Advisory Committee on Recycling states that we can recycle up to 55% of our waste stream, and the State Office on Recycling has established an annual 25% recycling rate as its statewide recycling goal. If New Jersey recycled 25% of its waste stream, we could reduce the amount of solid waste incinerated and the amount of required landfill space by 2,700 tons per day. As a result, fewer and smaller resource recovery facilities could dispose of New Jersey's solid waste. A smaller facility would incinerate less refuse and emit fewer pollutants into the air. It would also generate less residue for disposal in a landfill.

Moreover, a downsized resource recovery plant would require much lower costs. For example, Essex County has downsized its facility by 15% as a result of anticipated recycling programs. Essex County reports that this 15% reduction in plant size will reduce ash residue by at least 39,000 tons each year, and result in a savings of more than \$20 million. If a recycling rate of 25% or higher were accomplished, emissions and costs would drop even further.

Recycling programs will also reduce toxic emissions from resource recovery plants in another way. If certain items, such as metals and plastics, are removed from the waste stream before they are incinerated, the emissions of toxic organic substances, heavy metals, and acid gases will be substantially reduced.

A precombustion separation program will also improve the burning efficiency of resource recovery facilities. Waste components, such as metals and glass, have a higher resource value if they are recycled or reprocessed rather than incinerated for energy. When these materials are removed from the waste stream, the remaining solid waste will have an improved energy content. In order to achieve the recycling benefits I just described, we recommend the following actions:

- 1) DEP should require each resource recovery plant applicant to incorporate a waste reduction program into the plant's operating plan before the facility is permitted to operate;

- 2) Each county should incorporate a mandatory recycling component into its solid waste management plan. Recycling would not

only be environmentally beneficial to the counties, but it would also make economic sense to adopt such programs;

3) New Jersey should aggressively seek to develop markets for recycled goods; and,

4) New Jersey should create economic incentives and financial assistance to encourage waste reduction and recycling programs.

With regard to Assembly Bill 1778 and Senate Bill 1762, this Committee could dramatically improve the economic climate for waste reduction and recycling by amending Sections 13 and 15 of the bill so that the tax funds created by the bill could be used for waste reduction and recycling programs, as well as for resource recovery.

If these measures are adopted, New Jersey will significantly reduce the size of our waste stream, cause fewer pollutants to be emitted from resource recovery facilities, and extend the life of our State's diminishing number of landfills.

In addition to reducing the size of our waste stream, the State of New Jersey should also adopt the most stringent and comprehensive of environmental regulations to reduce emissions of harmful pollutants and address the hazardous nature of the ash residue.

Although DEP is now drafting standards for the design and operation of resource recovery facilities, we believe it is essential that these standards be in place before a facility is permitted to operate.

Our Department will also seek the adoption of standards which will require applicants to incorporate the best available control technology to reduce toxic emissions from their facilities.

DEP should also issue regulations which specify both ambient air standards and emission rates for the heavy metals and toxic organic substances which are emitted from resource recovery plants.

Finally, in order to minimize any adverse health and environmental impacts of resource recovery plants, DEP should, at the outset, establish a program for continuous testing of the effects of the plants' emissions. This testing should include an evaluation of the toxicity of the plants' emissions and of the ash residue.

I am very pleased to report that the Assembly Committee on County Government and Regional Authorities adopted a number of the recommendations that I just outlined. For example, the Assembly Committee amended Section 13 of the bill in a way which allows DEP to use the money collected in the Services Tax Fund for recycling research and planning. The Assembly Committee also amended Section 13 of the bill to allow counties to use the Services Tax Fund money to implement the State recycling plan goals. In addition, the Assembly Committee amended Section 15 of A-1778 to provide counties with Investment Tax Fund money to cover the expenses of building and operating composting and recycling facilities.

With regard to the pollutants, the Assembly Committee adopted an amendment to Section 32 of the bill which requires DEP to adopt design regulations which incorporate state-of-the-art technology to address the pollutants from resource recovery facilities. We are very pleased that the Assembly Committee adopted these amendments and we strongly urge that this Committee amend Senate Bill 1762 in the same manner.

However, there are a few additional amendments which the Department of the Public Advocate believes will clarify and strengthen both Assembly Bill 1778 and Senate Bill 1762. Essentially, these amendments will increase the recycling aspect of the bill, strengthen the environmental safeguards governing the operation and design of resource recovery facilities, and give greater protection to ratepayers.

The following amendments relate to the recycling component of the bill:

First, we would like to see A-1778 include a definition on recycling. The bill as it currently stands only defines a recycling facility. We propose that this Committee adopt the same definition that is used in the New Jersey Recycling Act, namely, "'Recycling' means any process by which materials which would otherwise become solid waste are collected, separated, or processed and returned to the economic mainstream in the form of raw materials or products."

Second, on Page 8, Section 13(4), we recommend that the legislation be changed to allow DEP to have the option of using the moneys collected in the Solid Waste Services Tax Fund for recycling programs, in addition to the recycling research and planning which it now authorizes.

Third, on Page 10, Section 15(c)(2) of the bill, we would like to see that districts also have the authority to use the money in their Investment Tax Fund for recycling programs, in addition to the recycling facilities which the bill now authorizes.

If this Committee adopts these amendments, the tax funds created in Assembly Bill 1778 and Senate Bill 1762 could be used more effectively for waste reduction and recycling programs. In this way, the Committee could substantially improve the economic climate for recycling.

I believe Senator Dalton had an excellent point. We would agree with the Senator that these tax funds should also be used to close and monitor the landfills in our State. Going back to recycling for just a moment, I would like to point out that DEP is currently drafting a mandatory recycling bill, as Commissioner Hughey testified, and the Department of the Public Advocate is very pleased that DEP is drafting this important piece of legislation. We look forward to working with DEP and this Committee to get this essential bill enacted into law. If this Committee chooses not to use Assembly Bill 1778 and Senate Bill 1762 as a vehicle to enact all of the Public Advocate's amendments on recycling, we strongly urge this Committee to incorporate our recycling recommendations into DEP's proposed mandatory recycling bill.

I would also like to propose several amendments which deal more directly with the design and operation of resource recovery facilities. As I mentioned earlier, the Department of the Public Advocate strongly supports the Assembly Committee's amendment which requires DEP to issue design regulations addressing the pollutants which are emitted from resource recovery facilities. However, we do not believe it is clear if "design" regulations include regulations for the operation of and emissions from resource recovery plants. In order

to clarify the legislative intent, provide administrative officials with a clear understanding of their obligations under this bill, and to better protect our public health and environment, we propose that Page 17, Section 32, Lines 4A and 4B be amended to read: "The Department shall adopt rules and regulations for the engineering design of, operation of, and emissions from resource recovery facilities."

As this Committee is well aware, the public is most concerned about the emissions of toxic organic substances and heavy metals from resource recovery facilities. To address these legitimate concerns and, again, to clarify the obligations of the administrative officials under the bill, the Public Advocate recommends that the following language be added to Page 17, Section 32, Line 4H: "The Department's rules and regulations shall also include ambient air standards and emission rates for dioxins, furans, heavy metals, and other non-criteria pollutants which are emitted from resource recovery facilities."

Moreover, the bill does not state whether these regulations should be promulgated before a resource recovery facility is permitted to operate. Accordingly, we recommend that the following language be inserted: "The rules and regulations required in Section 32(a)(2) of this Act shall be in effect before a resource recovery facility is granted a permit to operate."

I have one last proposed amendment which relates to the design regulations required in Section 32 of this bill. The bill states that state-of-the-art air emission technology be installed to control pollutants, but the bill does not define what "state of the art" means. I believe that different people give different definitions to this term. It is unclear whether state of the art requires a resource recovery applicant to install the best available control technology, technology which results in the lowest achievable emissions rate, or merely the generally-accepted industry equipment. In order to clarify the bill's requirements, we recommend that this Committee define "state of the art." Since resource recovery facilities should only operate with the most stringent of environmental standards, the Public Advocate recommends that "state of the art" be defined in

Section 2 as "best available control technology." This is the definition which is used by the Clean Air Act and the Water Pollution Control Act.

I would like to turn briefly to the private contract alternative established in A-1778 and S-1762. It is the Public Advocate's position that the rate-base rate of return approach currently followed by the BPU, along with the flexible rate-setting methods outlined by the BPU as a result of their generic hearings, are sufficient to promote private investment in resource recovery facilities. Such BPU rate regulation will also provide better protection for New Jersey ratepayers. However, as the BPU representative testified, there are some investors who believe that private contracts between counties and vendors are necessary to attract private capital to resource recovery investments. In light of the clear need to explore new solid waste disposal methods, the private contract option may be reasonable. But, this privatization alternative should only be pursued if some specific provisions are added to protect the ratepayers.

The Public Advocate is pleased to report that the Assembly Committee on County Government and Regional Authorities amended Section 26 of the bill to require a new or substantially renegotiated contract to be resubmitted for approval by DEP, BPU, and the Department of Community Affairs. We also support the Assembly Committee's amendment of Section 28 of the bill which clarifies Rate Counsel's finding. We urge that this Committee amend S-1762 in a similar manner.

The Public Advocate also proposes several amendments which will increase the protection provided to ratepayers. First, Section 31 of the bill should be amended to give BPU the authority to award both franchises and subfranchises for solid waste collection and disposal. The bill, as it is currently drafted, gives subfranchise authority to the counties. Under the current scheme, a county will lack the authority to award a subfranchise across county lines even if the composition or volume of the solid waste flow dictates such a result. If BPU retains the subfranchising authority, these determinations can be made in the State's public interest.

Second, a private contract should be reviewed whenever any change is negotiated. Sections 25 and 26 of the bill should, therefore, be amended to reflect these changes.

Third, we must keep in mind that these private contracts could bind a municipality or county for 40 years. Clear review procedures should be written into the bill to ensure that the 90-day review period will not hinder or limit the clear airing of the concerns of all parties. Moreover, 90 days is a very short review period when one considers the long duration of the contracts. The 90-day period may, therefore, need to be extended. I am confident that my Department could work with the BPU to develop procedures to protect the public in the contract review process.

Lastly, Section 33 of the bill now reads: "Any additional expenditures made by a municipality or county necessary to comply with this bill are mandated by State law." This provision should be amended to read: "Any reasonable expenditures."

The members of this Committee are now faced with the tough decision of how the State will dispose of its solid waste in the future. Assembly Bill 1778 and Senate Bill 1762, if enacted, will raise roughly \$24 million a year to subsidize the costs of constructing, operating, and maintaining resource recovery facilities.

If this Committee adopts the recycling and environmental control amendments that the Assembly Committee adopted, as well as the amendments that are proposed by my Department, resource recovery will be conducted in an environmentally-safe manner and with appropriate financial incentives for recycling. Such a response to our solid waste crisis will not only benefit our environment and public health, but will also reduce our dependency on landfills.

Thank you, members of the Committee, for the opportunity to speak to you on this important subject.

SENATOR DALTON: Thank you. Are there any questions from the members of the Committee? (negative response) Thank you very much.

Based upon the ungodly pressure I have been receiving from the members of this Committee, we are about to set a precedent. We are going -- for the first time at any hearing that this Committee has



undertaken in the last three years -- to break an hour for lunch. We will be back here at ten minutes to two.

(RECESS)

#### AFTER RECESS

SENATOR DALTON: We would like to get started again. It should be noted for the record that the Committee invited the Department of Energy to come down to testify with regard to resource recovery's impact upon the energy future of the State. Specifically, Essex County is contemplating the construction of a plant that is going to be a 60 megawatt plant. There are four or five other plants which have been proposed. All of this is going to have an impact in diminishing our energy needs to a certain extent. However, the Department of Energy chose not to attend, and I think that should be shown for the record.

The next person to speak will be Mr. Philip Beachem, Legislative Coordinator, New Jersey Association of Counties. Good afternoon, Phil.

PHILIP BEACHEM: Good afternoon, Senator. My name is Phil Beachem; I am the Legislative Coordinator for the New Jersey Association of Counties. I am appearing today on behalf of our Association, which represents all 21 counties in the State.

The New Jersey Association of Counties has spent the past months reviewing the specific elements of this legislation, and has worked closely with Commissioner Hughey, Assemblyman McEnroe, and their staffs to ensure that this legislation responds to the needs and concerns of the county governments. This extensive review included discussions by our Public Works and Environmental Protection Committee, chaired by Ocean County Freeholder George Buckwald, our Legislative Committee, chaired by Middlesex County Freeholder David Crabel, and finally by the NJAC Board of Directors themselves. At both the

Committee and Board levels, there was strong support for this legislation. Additionally, a presentation by staff members of DEP was made before an NJAC affiliate, the New Jersey Association of County Administrators.

The Association of Counties is pleased to endorse this comprehensive and realistic legislation. We believe that this legislation seriously addresses a major statewide problem and offers needed assistance to the counties in designing long-term solutions to that problem.

County officials throughout the State have been, and continue to be concerned about the protection of our environment for the well-being of current and future generations. We recognize that New Jersey's capacity to safely dispose of solid waste through landfilling has nearly reached its limit. Consequently, many counties have planned for, or are in the process of planning for, the establishment of resource recovery facilities. County officials are committed to resource recovery as an environmentally acceptable method of solid waste disposal. Nonetheless, it must be understood that resource recovery is a very costly proposition, especially when compared to the relatively low cost of landfilling. Therefore, a concerted effort must be made to help bridge the gap between disposal at landfills and disposal through resource recovery. We believe that this legislation accomplishes that purpose in an equitable manner. The legislation strikes a fair balance between the urgent need for environmentally-safe solid waste disposal on the one hand, and the ability of the public to bear the cost for such disposal on the other hand.

The Resource Recovery Investment Tax created by this bill will greatly assist the county governments in making the difficult transition between landfilling and resource recovery. It will provide us with the financial capability to implement our district plans, while at the same time offering a strong incentive for more rapid development of resource recovery operations. Additionally, the Solid Waste Services Tax will establish a stable source of funding for our solid waste management programs, and will allow for the increased enforcement activities which we believe are extremely important. It will also

permit the counties to provide needed assistance to certain municipalities to help offset extraordinary expenses incurred as a result of hosting a solid waste facility. I just might add, Senator, that based on your comments earlier this morning, the counties requested the amendment be put into the bill that would provide this money for the host municipalities.

With regard to the host bonus surcharge established by this legislation, we believe it offers a reasonable and appropriate mechanism for compensating those counties which accept garbage from outside their borders. This element of the legislation has met with approval from both importing and exporting counties.

Finally, we support those provisions of the bill which establish an alternative competitive procurement procedure that addresses the unique aspects of private resource recovery services and encourages private-sector financing through long-term negotiated contracts and designated franchises. These particular components of the legislation offer practical and workable solutions to a highly complex problem.

In closing, let me point out that county governments, as solid waste management districts, are most directly affected by this legislation. We appreciate this opportunity to share our views with the members of this Committee, and we offer our full cooperation in securing passage of this legislation and/or working on any amendments the Committee may have in mind. The New Jersey Association of Counties believes that this legislation will greatly assist the counties in effectively dealing with the serious problem of solid waste and, in so doing, will benefit all the citizens of the State of New Jersey.

SENATOR DALTON: Very good. Paul, do you have any questions?

SENATOR CONTILLO: I have no questions. Thank you.

SENATOR DALTON: Thank you, Phil.

MR. BEACHEM: Thank you, Senator.

SENATOR DALTON: Next we will have Vickie Snyder from Gloucester County.

**VICTORIA SNYDER:** Good afternoon. My name is Vickie Snyder. I am an Environmental Specialist for the County of Gloucester. I apologize;

Freeholder Deputy Fredericks was here to testify, but had to leave because of scheduling conflicts.

On behalf of the County of Gloucester, I would like to thank the Committee for the opportunity to testify before you today on this very comprehensive and complex legislative proposal.

Prior to presenting formal commentary on S-1762, I would like to outline Gloucester County's current status in implementing its solid waste management plan.

On April 18, 1984, the Gloucester County Board of Chosen Freeholders adopted a resolution designating the Signal RESCO Company as the vendor to implement resource recovery in Gloucester County. This action culminated a process begun in May, 1983, and included a national search to which 17 firms submitted detailed responses.

In January, 1984, the Counties of Salem and Gloucester executed an Interdistrict Waste Flow Agreement which details the amount, type, origin, and conditions under which Salem can export waste to Gloucester.

On April 18, 1984, the Gloucester County Board of Chosen Freeholders adopted a resolution to execute an Interdistrict Waste Flow Agreement with Camden County detailing the amount, type, origin, and conditions under which Camden can export waste to Gloucester. Camden's action on this Agreement is expected shortly.

In July, 1983, Gloucester County initiated an extensive waste monitoring program at the Kinsley Landfill, the largest disposer of waste in the State, at an annual cost to the County of between \$80,000 and \$100,000.

This program provides five pieces of information from every truck that enters the landfill: the NJSWA identification number; the hauler's name; the type of waste; the amount of waste; and, the origin of the waste. The landfill averages about 600 trucks per day and reaches more than 700 in peak flow times.

The largest single problem encountered by the County in meeting its plan outline is providing disposal capacity until the resource recovery facility is operational. In 1983, the County designated the Kinsley Landfill as its disposal facility until 1987 or 1988. This element of the plan was based on the following:

1) In 1980, NJDEP permitted a 50-acre section rising 102 feet from its base elevation. Engineering data showed that this portion of the landfill would have a life expectancy of six years receiving 3,000 tons of waste per day.

2) The County anticipated some increased waste flow due to landfill closures and redirections and projected a four and a half year life span.

3) The 50-acre section opened on March 15, 1983. It is projected to be at capacity between October of this year and May of next year. The facility is receiving between 5,000 and 5,500 tons of waste per day.

With this introduction and background, I would now like to present specific and general comments on the proposed legislation and some suggestions as to possible modification.

In an overall context, Gloucester County views this bill as comprised of our major sections: a new legislative mechanism to raise the cost of traditional solid waste disposal to a level where high technology disposal options would be competitive. Further, it would provide a revenue stream to assist solid waste management districts to implement high technology alternatives; a revamping of the public contracts law to accommodate the procurement of high technology, and very expensive solid waste management facilities; incorporating the BPU's regulatory functions into a single statutory format to coordinate DEP and BPU functions as they relate to waste management; and, incorporation of some modifications to the planning functions enumerated in the existing Solid Waste Management Act.

Below are presented specific comments and questions on portions of the proposed legislation:

1) Do the levies under the taxing provisions in Section 3 apply to sole source municipal facilities or sole source industrial/commercial facilities?

2) With reference to the provisions of Section 3 a. dealing with the Solid Waste Services Tax, Gloucester County has the following comments: Based on what we feel is one of the best publications describing the solid waste problems in New Jersey, Throwing It Away in

New Jersey, published by the American Lung Association in cooperation with DEP in 1983, it was estimated that between 11 and 14 million tons of waste are disposed of in New Jersey annually; based on these figures, the proposed twenty-five cent levy for the purposes stated has the potential to yield between \$9.6 million and \$12.3 million annually; Section 13 contains provisions for the use of these revenues and the methods of distribution; NJDEP would receive 50% of this fund with 50% to be distributed to the 22 solid waste management districts and this means that DEP could receive between \$4.8 million and \$6.1 million; and, the 22 management districts would share in like amounts based on population.

Although we fully realize the difficulties in structuring an equitable distribution mechanism, Gloucester County would like to point out some inequities in the proposed system and offer a suggestion for a remedy:

- 1) Gloucester County represents about 2.7% of the State's population;

- 2) Gloucester County, at the Kinsley Landfill, currently provides disposal capacity for approximately 1.5 million tons of waste annually, or between 10.7% and 13.6% of the total estimated waste disposed of in the State; and,

- 3) Gloucester County recommends that the proposed legislation should provide to those management districts, such as Gloucester, Middlesex, and Ocean Counties, and the HMDC, which provide a disproportionate share of disposal capacity, additional funding commensurate with their effort.

The following comments will deal with the mechanisms establishing the Resource Recovery Investment Tax Fund as outlined in Section 3, Subsections b.(1) and b.(2)(a), (b), and (c):

- 1) These provisions provide a mechanism to: raise revenues for resource recovery implementation; provide a method to escalate the revenue stream; in conjunction with Section 11, identify the procedures to adjust the tax so revenues can become commensurate to need; and, in conjunction with Section 14, establish a method to allocate the revenues to the management district accounts.

2) We may quibble whether the tax structure is adequate or inadequate to meet the stated legislative intent of assisting resource recovery implementation, but Gloucester County's main concern lies with the method of allocation. If the provisions of these sections are interpreted correctly, district accounts will be based on the amount of waste generated in each district. If this is the case, Gloucester has some serious reservations with this provision and would offer the following comments:

a. As stated previously, it is estimated that the best estimates of waste disposed of within the State is between 11 and 14 million tons. Now, this range of estimate may well serve planning and other functions at the State level, but when we are considering the distribution of tens of millions of dollars among 22 accounts, I don't think this level of error is acceptable.

b. To illustrate our concern, the following example is offered: In early 1983, Gloucester County began structuring its Interdistrict Waste Flow Agreements. An integral part of these Agreements was the definition of the total amount of waste disposed of at the Kinsley Landfill. Two data sources developed by the State were identified by us; however, due to processing delay, data was only available for 1981.

The facility reporting mechanisms upon which the State bases its collection of closure and recycling taxes showed about 3.8 million cubic yards disposed of at this facility. However, this report does not show the origin of the waste.

The Hauler/Collector Report requires each hauler/collector as a licensing requirement to provide information about the amount, type, and origin of waste collected and the facility at which it was disposed. The report showed about 9.5 million cubic yards disposed of at Kinsley, which is a difference of about 250%.

To close this information gap, I would suggest the following procedure. Recently, the DEP imposed an emergency regulation which requires each hauler to file a form upon entering a disposal facility, identifying the amount, type, and origin of waste. We expect this rule to become permanent. Therefore, we would recommend that an identified

portion of the State's Solid Waste Services Fund be dedicated to close this information gap, through the production of reports from the data gathered from the reporting required by the rules. Rigorous enforcement of the rule by the State can increase the quality of this data, thus increasing confidence in the distribution mechanisms.

As an aside, the amount and type of waste generated within each district is vital to the economical implementation of resource recovery facilities. When you consider it costs between \$75,000 and \$100,000 per ton to construct these facilities, even an error of 50 tons can result in unused capacity costing between \$3.5 million and \$5 million.

My next comments will address the mechanisms establishing and imposing the waste importation tax as outlined in Section 3 c.(1) and (2).

1) At Section 2 e., "district" is defined according to New Jersey statute P.L. 1975, c. 326, Section 10. More than 60%, or 900,000 tons of the waste disposed of in Gloucester County is from out of state. It would seem that the structure of this Section would preclude the levy of this tax on out-of-state waste.

The greatest attraction presented by New Jersey landfills is their low cost. At Kinsley the tipping fee is \$3.13 per cubic yard, and the inability to levy even this small surcharge will not help to control the out-of-state waste flows.

2) The purpose of Section 3 c.(1) and (2) seems to be to provide an incentive to exporting districts to develop their own solid waste management facilities.

3) Since Gloucester generates but 12.5% of the 1.5 million tons disposed of at Kinsley annually, we do not think this levy is adequate. This is especially true since this facility has the lowest tipping fee of any commercial facility in the State. Perhaps if Gloucester was an exporting district our testimony would be different. However, we are not and, therefore, it is our recommendation that a flexible taxing structure would be more appropriate. Perhaps the tax per cubic yard could be graduated, based on the volume or percentage of waste contributed to a facility during a defined time frame.



4) The Section also contains a provision providing for the doubling of the import levy if DEP determines a district has not fulfilled the solid waste management planning responsibilities required by C.13:1E-20 and C.13:1E-21. However, this declaration may be much harder to make without some more definite guidance. Furthermore, some provision should be made to include the importing district in this process.

It would appear, with current language, that out-of-state generators would not be affected by this provision. Some thought should be given to modify this oversight so that the tax can be levied on all imported waste.

My next comments will deal with sections defining the procurement process beginning at Section 18. They are of a general nature, but they are important to current activities being undertaken by Gloucester County to implement resource recovery as a disposal method.

Nearly a year ago, Gloucester County, relying on prior Attorney General opinions, began its resource recovery process. As was noted earlier, Gloucester County has recently named Signal RESCO Company to plan, design, construct, own and operate its resource recovery facility.

Gloucester County feels that delaying a process we are already a year into while waiting for the legislative process to conclude, would seriously impair the County's efforts. Therefore, we would request that districts already well into the process be granted relief from these provisions and be allowed to continue with their selected procedure.

I am providing the Committee with three exhibits. The first is a printout illustrating the results of Gloucester County's waste flow monitoring program. We feel data similar to this is essential to implement the allocation process for the Resource Recovery Investment Tax Fund. Also provided for your review is a six-month summary sheet showing the amount and origin of waste disposed of in Gloucester County. Lastly, we are submitting an April 24, 1984 news article outlining the demise of a waste management facility in Philadelphia to

illustrate the points made about implementing the higher importation tax levy.

On behalf of Gloucester County, I again thank you for the opportunity to comment on this most important legislative proposal.

SENATOR DALTON: Paul?

SENATOR CONTILLO: Do you have a system being planned at the present time?

MS. SNYDER: A resource recovery system?

SENATOR CONTILLO: Yes.

MS. SNYDER: We went through a request for qualification process. We had 17 nationwide firms respond, and out of them we selected Signal RESCO to plan, operate, and construct the resource recovery facility.

SENATOR CONTILLO: Will the rates be subject to the Board of Public Utilities' Commissioners?

MS. SNYDER: Yes.

SENATOR CONTILLO: They will be. Is the privatization process bonded, or how will it be bonded?

MS. SNYDER: That has not been identified yet. Signal RESCO will be putting together a package, and that will be a part of what they will be submitting to us.

SENATOR CONTILLO: Okay.

SENATOR DALTON: Vickie, regarding your suggestions on the out-of-state waste flow and the taxation issue, please be assured that the Committee takes that very seriously.

MS. SNYDER: Thank you.

SENATOR DALTON: Secondly, the procurement procedure, and the fact that you are now a year into the process -- Essex County, obviously, is several years into the process, and other counties, including Bergen County, are into the process -- that, also, will be addressed. I cannot tell you which way it is going to be addressed, but that problem is going to be considered very seriously.

MS. SNYDER: Thank you. That is one of our major concerns.

SENATOR DALTON: Sure. Thank you very much. That was excellent testimony.

MS. SNYDER: Thank you.

SENATOR DALTON: Next we will have Madelyn Hoffman, Statewide Coordinator of SMOKE. Do you have someone with you, Madelyn, who wishes to testify?

MADELYN HOFFMAN: Yes I do, Senator. This is Mrs. June Kruszewski from the Ironbound section of Newark.

SENATOR DALTON: If June would like to come up with you, she may testify also.

MS. HOFFMAN: My name is Madelyn Hoffman. I am the Statewide Coordinator of SMOKE, a coalition of citizens' groups from 13 New Jersey counties who are faced with a proposed garbage incinerator either in their community or in a nearby community.

What I have given you as a package includes a letter which we sent to Assemblyman McEnroe, sponsor of A-1778, in response to hearings which were held by him and amendments that were made by him to A-1778 and, also, testimony given by Dr. Jim Hilbert, who is a Ph.D. scientist who has been advising SMOKE over the last couple of years. This testimony was also submitted to Assemblyman McEnroe at the hearing he held in Newark. I just provided those documents as background information.

Basically, SMOKE is concerned about a number of different issues that need to be addressed before anything like A-1778 is considered and passed. Our first major area of concern is that of air pollution. The document by Dr. Hilbert indicates the amounts and types of pollution, including dioxin emissions, heavy metals emissions, particulates emissions, and acid gases. Let me just say for the record now that DEP, by its own statewide implementation plan for the control of lead, admits that garbage incinerators will be the second largest source of airborne lead in the environment, second only to automobiles by the year 1990. So, we are not talking about small amounts of lead; we are talking about a great deal of lead from incinerators.

Also, scientists have found that the particulates that are the most detrimental to people are the very smallest of particulates, called microparticulates, and any and all of the air emission controls we have seen do not adequately address the issue of the very small, fine particles that, when breathed in, will stay lodged in your lungs.

The larger particulates can be sneezed out or coughed out, or something like that, but the smallest ones are the most deadly. I think that becomes a very serious issue when we talk a little bit later about what sites are currently under consideration for building garbage incinerators.

Our main concern with this air pollution, in addition to the fact that some of the sites which are currently under consideration have very high levels of air pollution already, is that there are no air emission standards coming forth from DEP to address these concerns. They have guidelines, but the guidelines do not address the issue of the microparticulates. The guidelines do not address, specifically, a standard for dioxin and some of the other more dangerous emissions which are expected from incinerators.

The amendment offered by Assemblyman McEnroe to kind of address that issue is one that requires state-of-the-art controls; however, state-of-the-art controls are not necessarily the same thing as what is a safe level of exposure to a particular pollutant. You may use something like an electrostatic precipitator for the control of particulates but, again, as I mentioned before, that doesn't adequately deal with the microparticulates. So, state of the art and safety are two totally different things. It is not enough to require state of the art; you need to also set specific air emission standards.

The other thing we are concerned about with garbage incinerators is that they will not eliminate the need for landfills. I was pleased to hear Commissioner Hughey address that when he spoke to you earlier, because I would say a few years ago, that was not really entering into the picture. We were told that garbage incinerators would be a cure-all for the garbage problem, and would solve our problem with landfills. Now, even the Commissioner of the Department of Environmental Protection is saying we will still need landfill space. One of the main issues regarding landfills and landfill space is the issue of the ash residue from the incinerators. There have been studies done -- again this is in Dr. Hilbert's testimony, backed up by scientific evidence -- which show there are significant levels of dioxin in the ash and there are also significant concentrations of

heavy metals in the ash from incinerators. In fact, California has defined the ash as a hazardous waste. Scientists in Massachusetts also consider ash toxic because of the level of contamination by heavy metals.

So, before any funding were to be put into place for the construction of these incinerators, it would be essential to define and study whether this ash will be hazardous or not. If it is hazardous, that is going to add still more cost to the disposal of our waste because it will have to be treated in a hazardous waste landfill as opposed to a sanitary landfill. So, there would be additional costs involved in taking it to a hazardous waste landfill.

The other main issue is siting. East Brunswick is one town where an incinerator is proposed, and I know Lew Goldshore was here earlier from East Brunswick to speak to that. A couple of the other sites include Manville, which is in Somerset County. There were two residents of Manville here earlier who had to leave after lunch. Manville, as you know, is a place where a lot of people are suffering from asbestos-related lung problems. Those small, fine particles of asbestos have lodged in their lungs. Now we're talking about building a garbage incinerator in that community and adding more fine particulates to the air. These people have suffered quite a bit and, at this point, there is nothing at all which would prevent Somerset County from building a garbage incinerator in the community. There are no siting criteria being spoken about anywhere, not even in the DEP guidelines.

Newark is another site which is proposed, and June will talk more about that later. The highest levels of dioxin in the country have been discovered less than half a mile away from where they want to build this plant. Again, there are no legal siting criteria that would prevent Essex County from doing this. There is also a proposed incinerator for Rahway, which is the middle of refinery land. The current levels of lead in the air there are extremely high; it is a nonattainment area. Going back to what I said before, garbage incinerators are going to be the second largest source of airborne lead by 1990.

It is our feeling -- and we have seen this happen with hazardous waste -- that decisions about where to build an incinerator, at this point, are being made more out of political expediency for political purposes, rather than on environmental issues. Assembly Bill 1778, or any bill that would establish a mechanism for funding before issues like where these incinerators can be sited are addressed, is premature. We may wind up 10 or 15 years from now regretting the fact that we built something in these areas because of all of the environmental problems that will be posed. We have already had that problem with landfills. They were considered state of the art 15 or 20 years ago. We do not want to now irreversibly pollute our air in the same way that we have polluted so much of our water.

Another interesting thing from this morning's testimony is the whole aspect of cost. I was not much comforted by Commissioner Hughey talking about how we are going to try to minimize the impact of rate shock because he is not talking about doing anything to lower the cost of garbage disposal. Instead, he is talking more about trying to appease the people and fool the people into thinking that the costs are not going up that high, kind of trying to lull us to sleep for a few years. I think some of the research we have done has shown that recycling as an alternative can be a lot less expensive and can deal with just about as much of the waste. In fact, Signal RESCO, in its environmental impact statement submitted to East Brunswick, admitted that they would only deal with 63% of the waste. A lot of the waste had to be brought to a landfill straight off because it couldn't burn, and then other parts of the waste would be brought to the landfill as ash. So, they admitted to 63%, which I would think is probably a little bit conservative because they want to sell their incinerators.

Dr. Marwan Sadat from the State Department of Environmental Protection admitted that 55% recycling was possible. So here we are talking about a difference of maybe 8%, and yet we are talking about \$300 million to build one incinerator. If you took that \$300 million and put it into recycling programs, you would probably wind up dealing with about as much waste over the long haul.

We have been talking about crisis a lot this morning. What people have failed to mention is that an incinerator won't be on line tomorrow, and it won't be on line in six months, whereas a recycling program could begin right away. In fact, Woodbury, New Jersey, is currently recycling 55% of its waste. Three years ago, they were only recycling 10%. So, they have gone a very long way in a three-year time period. In that same three-year time period, there might have been a lot of money spent on research into garbage incineration, and they wouldn't have been as far along down the road as they are at this point. So, I think yes, we do have a crisis, but that the garbage incinerator is not an immediate solution to that crisis either. Recycling could very well be in many cases.

I was impressed by Senator Contillo's question earlier, "If you build an incinerator, how much recycling can you do and how much demand is there on the waste to go into that incinerator?" It is our feeling overall as a coalition that an incinerator, if you build the incinerator first, will serve as a disincentive to recycling. I was quoting an instance in Akron, Ohio, where there was a fairly comprehensive paper recycling program. Once incinerators were on the agenda, however, that paper became municipal property because the municipality had to supply a certain amount of garbage each year to the incinerator in order to make it economically feasible. The privatization aspect which is being discussed in this bill as well, actually enables counties to enter into these "put up or pay" contracts, where for 40 years they guarantee a certain amount of waste. I would think that no operator is going to put in \$300 million on a facility if they cannot be guaranteed that they are going to get enough waste to make it economically feasible over the long haul so they can make the money back on their investment.

So, yes, if we build these incinerators first I think it will serve as a disincentive to recycling over the long haul. Now, there are counties -- I happen to come from Newark, which is in Essex County -- where the county is addressing the issue of recycling, but they are addressing the issue of recycling-- They are talking about building a 2,200 ton per day facility and then recycling between 10% and 15% of

the waste. We heard testimony this morning indicating that 55% is possible; the representative from the Department of the Public Advocate indicated that. As long as that 2,200 ton per day facility is going to be constructed, I do not think we will ever get beyond the 10% to 15% recycling because that becomes too much of a demand on the waste which the incinerator needs. Yes, people will say there may not be a market for plastic, or there may not be a market for this, or there may not be a market for that, but if every county were doing it and doing it seriously, those markets could be created. If the money that is now being spent on garbage incinerator proposals would be used for that kind of thing, we would be a long way in the right direction.

Basically, what we propose as a coalition is that-- We do not support A-1778 as it stands. If there were certain things addressed by the bill, we might then consider supporting it. Those things are: that there would be a 50/50 split between the moneys collected in the fund, 50% for recycling and 50% for garbage incineration, where it was clear that garbage incineration was not the same thing as recycling. That is one point I forgot to mention earlier. These garbage incinerators are called resource recovery plants, but if you look at a recycling program like Woodbury's and you put that against a garbage incinerator, it is easy to see that the amount of resources recovered by this incinerator are minimal in comparison.

So, if we talk about a 50/50 split, prior to this hearing I did not think about also allocating moneys for landfill closure, so that 50/50 split could be amended to include something like that as well. Our main purpose behind that was to get the money allocated for the implementation of recycling programs, as opposed to research, development, and so on, because we believe that once we begin to implement these programs we will find that the need for incineration, or any other very high cost technology, might be minimized, if not altogether eliminated.

We also need siting criteria before garbage incinerators can be built to eliminate a problem like Manville, where an incinerator would be built in the middle of an area that is already suffering a



lot from existing air pollution. We would also want air emission standards addressing issues like particulate emissions -- microparticulates in particular -- dioxin, formaldehyde, cadmium, lead, and chromium, the whole range of emissions that are going to come out of these incinerators. We would also want a definition of the ash prior to any law guaranteeing funding for these, because that could very well escalate the costs of disposing of garbage again even more.

Lastly, we know the Department is considering a mandatory comprehensive recycling act. We applaud that. We feel it is in large part due to the debate that has been raised over the last couple of years as to the fact that there are alternatives to garbage incineration. However, as it looks right now, the recycling that is going to be proposed by DEP is going to be more on the side of 10% to 15%, as opposed to going the other way, you know, trying to recycle as much as possible before going ahead with anything else. I believe they still remain committed to building garbage incinerators, whether it be in one community or five communities around the State. The process for building them and for siting them has to be a very rational one. At this point, we do not feel that that rationality and that planning is there.

That is all I have to say.

SENATOR DALTON: Mrs. Kruszewski?

JUNE KRUSZEWSKI: Good afternoon. I am June Kruszewski. I am here as a resident of the Ironbound. I was born and raised in the Ironbound. We have so many things wrong with the Ironbound that a garbage incinerator or a resource recovery facility will not help us one bit.

We are down there amongst chemicals, paint factories, petroleum factories, and everything you can imagine. We have more pollution in the Ironbound than practically anywhere else in the State. On top of all the problems, we had dioxin down there, as you well know. The DEP has still not cleaned it up because they still do not have a plan.

We are fighting every day of our lives to breathe, and here we are, right in the middle of the Ironbound, right where they are going to put this garbage incinerator. They tell us, the residents,

that it isn't the Ironbound, that it is Port Newark. We have been living there all our lives. This is on Blanchard Street. It's 500 feet away from Diamond Alkali. It's right near where Sherwin-Williams is. It is right near the Farmers' Market. And they tell us it is not the Ironbound.

As residents, we have been fighting constantly. We are fighting more pollution and more toxics. We have a warehouse over near Penn Station that had 10,000 drums in it when we started to fight them. We had to take them to court. We have been in Morristown six times on that case. We went to court about the dioxin because DEP did not clean it up. They did not give the people in the neighborhood a good health test. They handed them a form, a paper form, and told them to fill it out, and then give it back to them. No one was there to show them the form; no one was there to explain it to them. The forms disappeared all of a sudden. The workers in the factory-- There is an article in the paper this morning. The people who worked at Diamond Alkali were never contacted. Half of them are dead now because they didn't know what they had. They didn't know about dioxin. We as children never knew about dioxin. We didn't know about dioxin until we found out about Agent Orange, until we knew about the plant closing, until DEP came down and told us all about the dioxin. Then they told us about the other plant, Brady's, which was contaminated. And, what did they do? They enclosed it with plastic. That was supposed to prevent it from harming us.

Now we have this garbage incinerator. We do not want it down there. We are trying to prevent it from coming down there. We want our neighborhood cleaned up. We are residents, and we would like you to consider our lives, and our children, and the senior citizens. We have two projects with a thousand people in them. Now, if you tell the people to move, where are they going to go? No one wants urban people in their neighborhood. As I said, we have these two projects. We have all these people; we have 50,000 residents in a five-mile area. And, we're going to put a garbage incinerator there? That's inhumane. Thank you.

SENATOR DALTON: Thank you, Mrs. Kruszewski. Thank you very much. Paul, do you have any questions?

SENATOR CONTILLO: No, thank you.

SENATOR DALTON: Thank you again.

MRS. KRUSZEWSKI: Thank you.

SENATOR DALTON: Next we will hear from Jim Lanard, New Jersey Environmental Lobby.

**JAMES LANARD:** Thank you, Senator. I can be very brief, since many of the comments which were made by the representatives from the Public Advocate's office and SMOKE, who just testified, are comments that the Environmental Lobby endorses. I will not go over those points. I will just list several others which I think should be considered.

One is that the communities which are going to be the hosts for these facilities are going to have community organizations and residents very concerned about the siting of such a facility in their back yard. One way we think we should help those community residents resolve this question of whether there should be a site in their community is to provide them with technical assistance which they could use to make their own determination of the adequacy of the plans and the program that would be proposed for that area. I think the legislation could be amended then to provide funds for community organizations which could actually submit a proposal, or a bid to a State agency, maybe the Department of Environmental Protection. There could be competition among different community groups, if there were different groups which existed on this issue, to see who could get the funding. I guess there would also be regulations adopted that would identify how the moneys could be spent and possibly who could be contracted with to help the communities through their assistance.

Specifically, I have in mind that there might be a regulation that would identify the engineering firms that could be hired to do an assessment of the proposed facility's environmental impact statement, so we would know that the results coming out of the community's research were provided by competent and certified experts.

The second issue, which was addressed recently by SMOKE, is the siting issue, and I think we need to have some siting criteria adopted by regulation or by mandate as soon as possible.

We would like to take the next step past mandatory recycling and see the legislation include mandatory beverage container deposit legislation, which would also guarantee an additional 5% of the waste stream being removed from incinerators before incineration.

We agree that the standards should be adopted before permitting, and we think that a major issue -- again mentioned by SMOKE, and not addressed so far in the legislation -- is the waste. There are two types of waste. SMOKE mentioned one, which is the ash from the incineration process. The other has to do with the waste that is recovered in the pollution control equipment, specifically the scrubbers and the filters, whether they are electrostatic precipitators or fabric filters. That pollution is of special concern to the Environmental Lobby because the reason the controls are on is to prevent the ambient environment from receiving those ashes and gases. Once they are condensed and once they are collected, it seems to me by definition they already are hazardous, because that is why they are being prohibited from being emitted into the community environment. Therefore, it seems very simple to define that waste as hazardous and to make sure that it goes to a hazardous landfill or to a hazardous waste facility of some type.

We would like to reserve our comments on the economics issue, Senator, if we may. I assume the Committee will be holding at least a Committee meeting before you vote on this bill. We will provide our comments to you on the economics at that time.

SENATOR DALTON: Paul, do you have any questions?

SENATOR CONTILLO: No, thank you.

SENATOR DALTON: Jim, regarding the whole issue of the ash or residue that is captured by the scrubbers, filters, or whatever, if, in fact, you define that as hazardous waste, I would assume it would then have to be taken to a facility or facilities that are being established by the Dodd Commission. Okay? However, those facilities, as you well know, are years away. No one probably knows that better than you do. Where then, in fact, if you have Essex County which will be coming on board within the next several years, would you take that material?

MR. LANARD: The first place I would not take them would be to an existing landfill because of the leachate problems you have in almost any facility in the State. One thing that is being considered, I think, by the Dodd Commission, and which could be considered for this waste, is to go to the industries in our State that strive to be good neighbors and good business partners in our State, and ask them who are currently storing hazardous waste on their facilities permitted by the State, to accept some of this waste for an interim period of time pending the siting of these hazardous waste facilities. It is clear to us, from our insufficient information I might add, that these industries could accommodate this interim storage period until the facilities are permitted in the future.

SENATOR DALTON: I do not have any further questions; thank you.

MR. LANARD: Thank you.

SENATOR DALTON: I would like to start getting into the industry; however, it has just been pointed out that there are some people here from Essex County. I know that Senator Contillo, in particular, was interested in hearing their testimony. Is there anyone here from East Orange? Is there anyone representing East Orange? (no response) Is there a representative of Lew Goldshore here?

UNIDENTIFIED PERSON FROM AUDIENCE: Yes.

SENATOR DALTON: Do you want to testify?

UNIDENTIFIED PERSON FROM AUDIENCE: Yes. I would just like to read a statement.

SENATOR DALTON: How long is the statement?

UNIDENTIFIED PERSON FROM AUDIENCE: About three pages.

SENATOR DALTON: Why don't you give it to the--

UNIDENTIFIED PERSON FROM AUDIENCE: I believe you have a copy.

SENATOR DALTON: Does the hearing reporter have a copy, because we can have her include the statement in the transcript? This would be in order to expedite the testimony here if we could.

What I would like to do is hear Mr. Pylar's testimony and then go immediately into the industry because their testimony is most

important to this hearing. Whichever way the industry wants to work it-- If you want to come up and do it separately, or if you want to come up collectively to do it, whichever you prefer-- However, what we are trying to do is eliminate anyone from being redundant. So, whichever way you prefer will be fine. Mr. Pytlar?

**THEODORE PYTLAR:** Thank you, Mr. Chairman. My name is Ted Pytlar. I am the Director of the Division of Solid Waste Management in Essex County's Department of Planning and Economic Development. I am here today to testify on the bill. I will start out by just giving you a little background, other than what has been given, on our solid waste management situation in Essex County, and will then get to our comments on the bill.

It is possible to make these relative determinations. Essex County may have the worst garbage disposal crisis right now of any county in the State. We do not have any landfills, nor have we ever had within the boundaries of Essex County. We rely on landfills outside of our boundaries in the Hackensack Meadowlands district. The landfill we are currently utilizing for disposal, and the past two that we have utilized, are all landfills that had been previously shut down because of having been filled to capacity with garbage. They have had to be reopened to accept our waste due to the inability to site new facilities in our region.

We have been working in Essex County for about the last four or five years on a solution for our garbage disposal problem, which includes the maximum expansion of recycling, as well as the construction of a waste-to-energy plant.

We support this bill as it stands now as a logical extension of the 1975 amendments to the New Jersey Solid Waste Management Act, which gave the counties the responsibility for dealing with their garbage problems. This bill gives the counties the extra incentives and clarified regulatory framework which is needed to enable them to go ahead with developing and carrying out their solid waste plants.

From Essex County's point of view, we have two amendments to suggest to the bill that we feel would strengthen it. One is to create a sales tax exemption for the acquisition of resource recovery

equipment, as has been previously extended for the procurement of recycling equipment in the State Recycling Act. The other would be to designate Essex County as a franchise versus a franchise area, as we have already been designated by the Board of Public Utilities.

Just for a little background on that second request, in July, 1982, Essex County petitioned the Board of Public Utilities for designation as a franchise -- a waste disposal franchise. Our final designation from the Board was as a franchise area. We feel, from the point of view of developing waste-to-energy facilities, that the granting of a specific franchise to a county would be a little stronger and would provide a little more certainty which would enable the counties to carry out their obligations with respect to waste deliveries to these plants.

I would also like to comment on the issue which you have been hearing a little bit about today of DEP's emission guidelines versus the need for standards for resource recovery facilities. In our view, there are two main questions in this area which need to be addressed. The first is, are DEP's regulations as contained in the guidelines stringent enough as they stand? The second is, can DEP be trusted to require that these guidelines be adhered to in their permits for the construction and operation of these plants? The answer to the first question regarding the stringency of the guidelines, we feel, is clearly "Yes." Often DEP's guidelines are compared unfavorably to the guidelines which have been put forth by the State of California. We found in our detailed analysis of the two that DEP's guidelines are, in many cases, more stringent, more specific, and more enforceable on a long-term basis to provide safe environmental regulation of these facilities than are California's guidelines.

As you know, opponents of these guidelines and of these facilities in general have consistently opposed them. However, from our numerous attempts to follow up on the reasons they have stated for their opposition, we have been unable in any case to find any substantiated support for their claims and conclusions regarding any negative health impacts of these facilities and regarding any deficiencies in DEP's guidelines. Therefore, verbal debate occurs

regarding the health impacts of resource recovery facilities, particularly mass-burning incineration facilities. It is so important that I think you would agree it has to give way to written substantiation and a willingness to provide backup for the claims that are made by the parties.

A good example of the stringency of DEP's guidelines is the requirements that they have already put forth regarding the preparation of the environmental impact statements for these facilities. The impact statement that we had to prepare for the Essex County facility was 1,500 pages long and contained a detailed scientific analysis of the specific emissions from our plant and the specific predictions of ground-level impacts and their potential impacts on public health. We analyzed over 20 pollutants that are projected to be emitted from the plant, including the pollutants which are governed by State and Federal regulations, and the others, such as heavy metals and organics, which are not. The impression that can be given is that there is no mechanism which exists for assessing the impacts of these pollutants on public health. That is not correct. We have State and Federal regulations regarding a certain set of pollutants, which are known as "criteria pollutants," and in the areas where we have no State or Federal regulations specifically enunciating ambient concentration levels which are allowable, DEP has required that we do detailed risk assessments utilizing a compounded set of worst-case assumptions to assess the effect of emissions from such things as heavy metals and organics on public health. For example, Ms. Hoffman brought up the matter of microparticulates being emitted from a facility and said that they are not adequately addressed by DEP. Well, DEP has required us, in our assessments, to really go a step further in the consideration of microparticulates. We have assumed that all of the emissions -- whether they are attached to the microparticulates or to larger particulates -- are accessible to people's lungs in order to have any negative health impact that they might have, and that all of the pollutants that come out of the stack and are inhaled by people, assuming that they are at the point of maximum impact to the facility-- We assume that all of those are going to be active in the person in



terms of having their maximum potential health impact. We also assume that people are exposed to the emissions of the facility at the point of maximum impact for 24 hours for 70 years consistently.

So, we have been more conservative -- and we have been doing that under DEP's requirements -- than people who are criticizing DEP recognize, I think, or would lead you to recognize.

The second question is regarding the ability to trust DEP to require that the standards or the regulations they have set in their guidelines are going to be adhered to in their permits. The process which will be followed by DEP to let everyone see whether they have done that or not is that they will draft the permits and the conditions for those permits, which will be made public prior to a public hearing on a resource recovery facility, prior to the point at which DEP makes the decision to actually grant the permits. The public and all interested parties will have a chance to study those draft permits and to comment on them at the hearing.

In Essex County, we have proceeded very far down the line -- which has been said here today several times -- following DEP's requirements and moving toward a public hearing and public scrutiny of the draft permits which DEP will put forward. The requirement that DEP promulgate standards rather than guidelines for resource recovery facilities prior to the permitting of those facilities would delay our project, we feel, by at least a year, which would be necessitated by the legal process involved in putting forth standards. We think that in Essex County we deserve the right to go to our hearing, to have the public see how DEP intends to regulate these facilities, and to see whether the trust which we advocate in DEP's ability to do this is justified or not. At that time, they could make a determination whether DEP is really doing the job that they claim and that we would support they are doing on these facilities.

So, on behalf of Essex County, I would suggest that you do not follow that recommendation regarding the mandate for emission standards.

There are many other issues regarding the environmental impacts of resource recovery which I could cover here. However, to

illustrate I will just touch on one of them that has been mentioned, which is the matter of the ash from a resource recovery facility. It is true that ash, at times, has been found to be hazardous, but that is as a result of being subject to a test involving very strong acid which is unable to separate any hazardous metals from the ash itself. So, ash, even if it is found hazardous, is not something like liquid benzene or something which poses an immediate threat to the surroundings. However, in most cases when these tests have been done, the ash has not been found hazardous. In Europe, in many cases, the ash is put to productive uses.

If our ash will be required by the State to be tested using those very stringent conditions with very aggressive acid testing, and if it is found to be hazardous, we will, of course, have to take it to a hazardous waste disposal facility. We have had to identify one already in that instance, and we would probably take it somewhere in Pennsylvania if no facilities exist in New Jersey.

However, we feel that the weight of the testing and the information that is actually available on the characteristics of the ash show now that the probability is very high that the ash will not be found hazardous. We also dispute the contention that California has classified ash as hazardous. Our understanding is that California says ash from a resource recovery facility is hazardous only if the materials the facility processes are hazardous.

Thank you, Senator, for your time. I will be happy to answer any questions you might have.

SENATOR DALTON: Senator Contillo?

SENATOR CONTILLO: Maybe you could give the Committee the benefit of some of your experience now that Essex County has come so far down the road. Who is going to set up the plant for you? Have you solidified that?

MR. PYTLAR: In Essex County, we entered into a joint public-sector partnership with the Port Authority of New York and New Jersey in 1981 to develop our project and to go ahead with our procurement process. We decided, as have many other counties, to go ahead with what is called a "full-service procurement process," which I

think is also being called privatization now in New Jersey. We are currently negotiating with a company known as American Refuels Company, which is a joint venture of Browning-Ferris Industries and Air Products Incorporated, to build a facility in Essex County. This would be the European design of a mass-burning type of facility which would generate electricity.

Our choice of American Refuels is based on a competitive procurement process where we received 23 statements of interest in submitting proposals to us. We prequalified four out of those 23 firms and received three in-depth proposals for the construction and operation of our facility. The firm which we hire, if it is American Refuels, will have the contractual responsibility to design, build, and operate the facility for 20 years under a set of contractual performance guarantees to us which will include meeting all State and Federal emissions requirements. They will include the processing of a minimum tonnage of waste each year. They will include processing the waste efficiently so as to have a certain specified level of residue quality which will show that it has been processed, and processed efficiently. They will also include certain other things, which we feel will give us a total package that will give us confidence in the reliability of the system to reliably, economically, and in an environmentally-sound way process our waste over a long period of time.

SENATOR CONTILLO: Will they be responsible for dealing with the question of whether or not it is hazardous waste and disposing of that residue, or will that be the County's responsibility?

MR. PYTLAR: Well, they will have to undertake the testing, or maybe the testing could be done jointly. I would assume the testing would be done under the auspices of DEP. If it is found to be hazardous, it would be our responsibility on the government's side to locate the disposal site for it, and the public would bear the extra costs for the disposal of the ash in that situation.

SENATOR CONTILLO: May I ask you how you decided simply not to do plant incineration, or why you decided to go for resource recovery?

MR. PYTLAR: Okay. This is a question similar to one asked us by Assemblyman Hollenbeck last year which we responded to in detail.

SENATOR CONTILLO: It is the same question I asked the--

MR. PYTLAR: (interrupting) Right, and I will give you the response we sent to Assemblyman Hollenbeck at that time. We did a detailed analysis of that question for him and found that it is clearly cheaper to go with waste-to-energy than straight incineration. The extra money you spend on the heat recovery equipment in the facility is more than paid off by the revenues you receive from the sale of that energy, whether it be electricity or steam. In addition to that, over time if you simply have a disposal plant, as you know, the costs are only going to go up because you are not generating any product from that plant. So, your operating costs will go up constantly and the fees will have to reflect that. In a waste-to-energy plant you have the generation of a product which is sold and which helps you to offset your disposal fee.

Also, the whole genesis of this type of technology was such that they were constantly looking for ways to improve the efficiency of the destruction of the garbage and to improve the emission control efficiency of the plants. The cooling of the flue gases is very important in that whole framework. It was found that the best way to do that, and the most efficient way to do that, was to basically recover the heat from the flue gases, which cooled them down and enabled the air pollution control equipment to work better. If you did not have that heat recovery for energy production, you would probably have to spray water into your flue gases, which would actually create another pollution source from your plants and make it a much bigger problem to deal with the emissions from the plants.

SENATOR CONTILLO: In other words, it was an easy call as far as you were concerned?

MR. PYTLAR: Yes.

SENATOR CONTILLO: It was not a difficult choice?

MR. PYTLAR: Not in that sense, no.

SENATOR DALTON: If I may interrupt the Senator just on the point he is raising, what is the track record of this company or of the joint venture in resource recovery plants?

MR. PYTLAR: They are the American licensees of a European design which is owned by a firm named Deutsche Babcock in Germany. About 50 of those plants have been built throughout the world, several in the size class we are talking about. American Refuels itself has not built a plant yet under this license. This would be the first one they build; however, that just reemphasizes the importance of the various guarantees and contractual obligations that we will be putting them under.

SENATOR DALTON: Has the German method been used here in the United States?

MR. PYTLAR: Well, this design is not substantially different from the Signal RESCO design or the Ogden Martin design. Those companies are also American licensees of European technologies, which also burn the garbage using the same basic process to effect an efficient burning. They do have plants operating in the United States at Saugus, Chicago, and down in St. Petersburg, Florida. I would say they are the most notable ones and the ones most similar to ours. There is a plant that is just starting up in Peekskill, New York, which is exactly the same size as the Essex County plant will be. It has three 750-ton-per-day furnace boilers, as will ours. Once that plant passes its acceptance tests, which I have been informed it is going through right now, it would be a very good plant to see as an example of what we are going to do.

SENATOR DALTON: I'm sorry, Paul.

SENATOR CONTILLO: You have sort of eaten into my next question, so I might be a little bit repetitious. Can you take me to a plant the same size that you are about to build that does everything your plant is going to do?

MR. PYTLAR: Do you mean right now in the United States?

SENATOR CONTILLO: Yes. If you want to take me to Europe that is all right too, but I prefer to drive in a car.

MR. PYTLAR: I'll tell the County Executive about that.

SENATOR CONTILLO: Start in this country.

MR. PYTLAR: I would say the plant that has been operating and which has established an operating track record most like ours

would be the St. Petersburg, Florida plant, which opened early in 1983. It is a 2,000-ton-per-day plant versus a 2,250-ton-per-day plant, so it is very close to ours. It doesn't have as good air pollution control as will be required in New Jersey because that plant only has electrostatic precipitators. Ours will have acid gas scrubbers and electrostatic precipitators. Our precipitators will be more efficient than theirs; they will be basically bigger. In Europe and in Japan, I can take you to see hundreds of these plants that have been operating.

SENATOR CONTILLO: You mentioned Saugus, Massachusetts, where they do not produce electricity.

MR. PYTLAR: I believe Saugus has been producing steam for sale to General Electric. They are now converting to electricity.

SENATOR CONTILLO: Okay, but at the present time they are not making electricity?

MR. PYTLAR: That is simply a matter of adding turbines and generators. That is not really a pollution question.

SENATOR CONTILLO: It seems to me that all of the plants are simply this or simply that. They are almost the same, you know, but none of them are the same.

MR. PYTLAR: Well, the St. Petersburg plant produces electricity.

SENATOR CONTILLO: It does, but it does not produce the level of air quality that you say you will produce in Essex County.

MR. PYTLAR: Our plant will have more efficient--

SENATOR CONTILLO: (interrupting) How about Peekskill? Does that maybe combine all of the--

MR. PYTLAR: (interrupting) Peekskill has precipitators, but not scrubbers. New Jersey is only one of two states in the United States which require acid gas scrubbers on these plants, along with California. So, in other states you will generally not see those.

SENATOR CONTILLO: What does that add to the plant in costs percentage-wise?

MR. PYTLAR: What does that add? That adds about \$5.00 to \$7.00 per ton in tipping fee costs to the plant. Most of it is

actually operating expenses. The extra capital expenditure is about \$18 million or \$20 million.

SENATOR CONTILLO: Was the Plant in Peekskill made, manufactured, or built by the same people who are going to build the Essex plant?

MR. PYTLAR: No, that is a Signal RESCO plant. Signal RESCO is one of the firms that submitted a proposal to us, but we decided to go with the other firm based on the business and environmental proposals they made to us.

SENATOR CONTILLO: Did they build the plant in St. Petersburg, Florida -- the people who are going to build your plant?

MR. PYTLAR: No. As I told Senator Dalton, American Refuels has not yet built a plant under their license to Deutsche Babcock. This will be their first plant in the United States.

SENATOR CONTILLO: Earlier on, one of the first statements you made was that you decided to go into the highest level of recycling possible. I am very interested in that portion of it. Could you just enlighten us a little more about that? Have you decided what that is? Did you decide to include newspaper?

MR. PYTLAR: When we came to the point in time that we had to make our final decisions on the sizing of our waste-to-energy plant, we wanted to look at the relationship on an economic and operational basis between waste-to-energy and recycling in detail. There was a very long-standing debate that you shouldn't take burnable things out of your waste for recycling because it would hurt the waste-to-energy plant.

We did an analysis of that -- an engineering analysis -- predicting the various levels of recycling in terms of the expansion of recycling in Essex County, to assess what effect that would have on the waste-to-energy plant, to assess how that would be done economically throughout the County, and to assess the public's receptiveness to recycling. We found, in fact, when you plan on recycling both burnable and nonburnable things, like newspapers on one hand and glass and bottles on the other, that the net effect favors waste-to-energy because it raises the fuel value of the garbage. In other words,

taking out the nonburnables has a greater effect than taking out the burnables. We looked at things for which there are markets in New Jersey -- newspaper, corrugated cardboard, high-grade office paper, all kinds of bottles, and all kinds of cans. We postulated various recycling scenarios on up to 35% waste stream reduction doing that type of analysis. Based upon that analysis and based upon our findings about recycling, we decided to reduce the size of the waste-to-energy plant by 15% to anticipate the expansion of recycling in Essex County by more than three times what its current level is. Right now we recycle somewhat less than 5% of our waste.

Now, in a County like Essex where we have about half of our population distributed between our inner urban areas and suburban areas, we feel that is really a great stride forward, because while the notable success stories in recycling have been in suburban areas, the notable failures in recycling thus far, in terms of finding a way to make recycling happen, have been in the urban areas. We think that through a system of urban redemption centers we can greatly increase the amount of recycling going on in urban areas such as Newark, Irvington, East Orange, and Orange. However, it is not a sure thing because no one has ever done it anywhere before. Recycling has not worked well in the cities for various reasons. We think we can do better, but in that sense a goal of reducing the waste stream by 15% in a County like Essex, we think, is a major step forward.

What we did to make that real was, we modified our County Solid Waste Management Plan. What we said in our County Solid Waste Management Plan was, when the waste-to-energy facility opens, all the towns in the County will have to bring their waste there. However, none of the waste that is delivered there can have more than negligible amounts of newspapers, bottles, all kinds of cans, corrugated cardboard, or high-grade office paper in it.

SENATOR CONTILLO: What about plastic bottles?

MR. PYTLAR: We did not include plastic because as far as we know right now, there is no reliable market for us to sell plastic bottles. The plastic bottles coming out of New York City's bottle bill, we understand, are being so-called "land banked." In other



words, someone is storing them trying to figure out what to do with them. There have been some developments in the area of marketing plastic bottles, but right now you could not point to a place where I could take 200 tons of plastic bottles that might come out of Essex County everyday and sell them. From the point of view of proper planning, we feel we have to be able to tell people who are making recommendations to that, that you can, in fact, market the things that we are advocating for recycling.

SENATOR CONTILLO: Or, there may be no place to bring them because there is not yet a stable supply.

MR. PYTLAR: Well, I don't know if that is really the relationship. The relationship may be that it costs more to recycle a plastic bottle than it does to produce one in terms of the energy used.

SENATOR CONTILLO: But, your decision was based on the fact that there was no market for the plastic?

MR. PYTLAR: Our decision was based on our ability to get market commitments; that's right.

SENATOR CONTILLO: Okay. Roughly, if your average is 15%, what are you saying -- maybe 5% to 10% in the city and 20% to 25% in the suburbs?

MR. PYTLAR: That's right. We anticipate more in the suburbs.

SENATOR CONTILLO: What would you figure would be a reasonable recycling percentage in a suburban area?

MR. PYTLAR: Well, it is going to vary by town. I think one thing you can't forget about is that some towns have a situation which makes recycling more feasible and the potential for it better than other towns. You have the notable example of Woodbury, which is recycling half or more of its garbage. You have the Town of Montclair in Essex County, one of the long-standing recycling successes, which is recycling about 15% of its garbage. The reasons for the difference in level vary. The two big things that affect recycling are what you can actually market and the level of participation you are going to get from your residents and from the businesses in your town. I would say a Town like Montclair, where there is a good recycling program, at best

receives about 75% cooperation. In other words, 25% of the people and businesses do not do it. You can never expect 100% of the people and businesses anywhere to recycle. That is going to hold your levels down. I would say, however, that an aggressive suburban recycling program could shoot for 25%. While I think that is sticking your neck out, I think it is well worth doing in terms of what we should be doing in managing our solid waste in New Jersey.

SENATOR CONTILLO: In all of your calculations are you assuming mandatory recycling, or is this strictly voluntary?

MR. PYTLAR: Absolutely mandatory. Mandatory recycling is very important in terms of getting the highest levels of cooperation you can get. The County does not have a position on the bill which DEP is working on now for mandatory recycling, but there is a question, I think, which we all have to consider, and that is whether a State level mandate is going to have the good effect that municipal mandates have. A municipal ordinance has a very good effect in making people aware of recycling and getting them to cooperate. I don't know if the State telling people to recycle would have the same good effect.

SENATOR DALTON: What do you feel the distinction is?

MR. PYTLAR: Well, a recycling mandate is strictly a conscience thing. Obviously, you do not enforce it a lot, although I know Woodbury does some pretty aggressive things in enforcing it. You know, you are not going to put people in jail. Obviously, you are not going to fine them extremely heavily. It is really just making people aware that recycling is important. I think that can be done better at the local level and that the message gets across better because you have a better contact among the local elected officials, the community groups, and so forth, who are really the network, as you know, in a town which makes things happen. I am not saying that a State level mandate is something I do not think is good, but I think there have to be other things that go with it.

SENATOR DALTON: Such as?

MR. PYTLAR: Such as strong commitments provided by the State that every municipality could market their recyclable materials. I don't think the State can justifiably tell people they must have

recycling and not also tell them they can be assured they can market their materials. As you know, down in South Jersey some programs are having problems now with marketing glass because of the switch to plastic. So, it is not all a rosy picture and we have to be sensible about what is needed to make recycling happen.

I think statewide mandatory recycling is something that is our ultimate goal, surely. How we get there is the question. Doing it right is very important.

SENATOR CONTILLO: How did you mandate it in Essex County?

MR. PYTLAR: Well, in Essex County, as I said, we modified our solid waste plan to say that no more than negligible amounts of those recyclable materials shall be in the waste stream. Obviously, we have flexibility in this when defining "negligible," but what we mean by that is that every town should have a mandatory separation ordinance for the multi-materials in their town. They should have programs to support it. We are providing the technical assistance in Essex County for all of our towns to create those kinds of programs.

SENATOR CONTILLO: Technical, but not financial?

MR. PYTLAR: No, financial too. We are helping them to identify funding sources and, of course, the Recycling Act is a major funding source you have to tap.

SENATOR CONTILLO: Is that adequate now?

MR. PYTLAR: It is not adequate to do the whole job. We might fund some of it out of our energy recovery financing. We are also going to build a facility--

SENATOR CONTILLO: (interrupting) There is more funding in the existing plan. Would that be useful to a County like Essex now?

MR. PYTLAR: Yes, we are considering that. We are also going to build a secondary plant which we call "a materials recovery facility." This will allow the collection of mixed recyclables from curbside and will allow them to be processed at a central facility for marketing. That will allow much greater convenience for the residents in terms of putting out recyclable materials. They will not have to separate all the different materials. Obviously, a lot of people do not want to do that. We are going to allow people to put things out

mixed. They will be taken to this plant where, through a series of simple hand-sorting steps, crushers, and magnets you can separate the recyclables into marketable materials.

SENATOR CONTILLO: But, apparently there is no question in your mind, because you put a lot of effort into your recycling program, that you really shouldn't go forward with resource recovery until you have settled the recycling program.

MR. PYTLAR: Yes, I would say that is true. We definitely set out to do that and we think we did it. The tricky question about it is what you can really achieve in recycling. I think that is a big unknown. I think we should be very aggressive and optimistic about it in New Jersey, but we shouldn't be imprudent or insensible about what is really doable.

SENATOR CONTILLO: Thank you. Will you make some of your data -- some of the things we have discussed -- available to me in the future?

MR. PYTLAR: Certainly. I will send you some of the information we have.

SENATOR DALTON: What I would like to do is focus for just a brief moment on the role of the Port Authority. What was their role in bringing about the plant in Essex County?

MR. PYTLAR: We recognized that in going ahead with our project it would require a tremendous amount of technical expertise from the engineering, legal, and financial sides. We looked at some information, some guides that had been produced regarding how to go about developing a waste-to-energy project, and saw that the money involved in putting that expertise together, where we certainly did not have it on staff in the County, was substantial. In fact, it might be as much as a quarter of a million dollars a year or more for a county to build a major resource recovery facility. We recognized that at the time -- and I won't get into the details of exactly why -- the Port Authority was a possibility for us to work with in doing that. We recognized its expertise in those areas, and we decided that if we could structure the proper working relationship between the Port Authority and the County, it would be beneficial and desirable for the County to go ahead with them in the development of a project.

Basically, we went to them with an idea about how we could work together. We were able to work it out, and we decided to move ahead. That occurred in early 1981 and since then we have been working together on the development of our project.

SENATOR DALTON: What financial assistance have they been to you?

MR. PYTLAR: They are going to issue Port Authority bonds to help to finance the project. They are also helping us to put the overall financing package together, which will include private equity in the privatization scheme we are using from American Refuels. It will also include some of the assistance we're getting from the State from the Natural Resources Bond Act, which we had applied for a few years ago now, I guess.

SENATOR DALTON: I am a South Jersey legislator, obviously with a parochial view, and there is a grabble on for casino moneys now. I would be interested to know if the Port Authority would like to come down and help us with resource recovery. Maybe we could make a trade-off.

MR. PYTLAR: Well, you have the Delaware River Bridge and Tunnel. Maybe you can juice them up a little.

SENATOR DALTON: The concern I have is that I assume Essex County is formally supporting the bill.

MR. PYTLAR: Yes, we are.

SENATOR DALTON: We're talking about the Investment Tax Fund, but Essex County would receive very little from that Fund. Why then would you be in support of that component of the bill?

MR. PYTLAR: Well, while we would not receive a lot from that Fund, we would receive something, and we feel it would help us to finance our project and to avoid the rate shock, which has been spoken about today. We feel that is very real, as you know, when a major project comes on line and the towns have to pay for it.

We also feel that what has obviously been lacking in New Jersey since the counties were given the job of dealing with the garbage problem is basically a clear set of guidelines and regulations that are cogent and understandable. They would let you see a route to

get to where you are going. There have always been questions regarding how to deal with the waste flow control issue when working with the BPU. How do you deal with the rate regulation when working with the BPU? How does the permitting process work? What is proper to do in terms of procurement of a private firm, and what is the proper relationship that a county has in that respect, given our public bidding laws in New Jersey? Your question to Mr. Swain earlier was, "Can it be done without it?" Well, probably yes, but it is so complicated and so overwhelming at times that if we are really serious about moving ahead and dealing with the problems of solid waste in New Jersey, we need to clarify things. We need to clarify the whole institutional and legal framework that exists, which would help us to move along.

We need a basic place to look for: What do you have to do to develop a resource recovery project of any sort in New Jersey? It is very beneficial, I think, for any county at this point in time.

SENATOR DALTON: That deals with the institutional framework. What I'm talking about is the financial framework within the bill. You're going from one fairly significant component of that financial framework, and you're going to receive very little. Why then are you so supportive of the bill?

MR. PYTLAR: I would say that the financial framework will provide up-front planning money for people, which is, as I said, very important. It is just as important as getting the tipping fees down -- just having the money to do the planning in order to move yourself ahead.

Even though we're not going to get a lot of money, we think the bill is good. It is needed in New Jersey to move the State ahead.

SENATOR DALTON: If you eliminate the taxes and just maintain the "how to" within the bill -- in other words, the steps needed to go to resource recovery -- do you feel the bill is still worthwhile?

MR. PYTLAR: Yes, it is. Within the confines of full disclosure, full participation of everyone who is interested, and full adherence to environmental requirements, the bill provides a good framework in which to work.

It brings in some new players we hadn't seen before like DCA, etc., and it funds the Public Advocate's intervention such as power plants, which we find a little bit questionable because basically the public is going to pay for that directly out of tipping fees. Overall, it provides everyone with a role. It clarifies the role, so if you are going ahead on a project now, assuming this bill is in place, you will know what you have to do and with whom you have to talk. With a skillful planning and development approach, I think you can have confidence that you are going to get somewhere within a certain period of time. That is something which is unpredictable now.

SENATOR DALTON: I agree with you completely. I am just trying to justify taxing the residents of the State of New Jersey to the extent we propose taxing them in this bill, particularly since we are sitting on a surplus. The framework, however, that you endorse is something I agree with and I think is needed.

How does the government of Essex County propose to avoid rate shock to the residents?

MR. PYTLAR: As we said, one of the reasons why we went with the Port Authority is because they have a very sound financial footing. They can issue bonds at a lower interest rate than the County can for this project. That is one thing that will help us save money.

We are also pursuing sources of financial assistance such as the Natural Resources Bond Act, in which we'll get a \$15 million loan from the State.

SENATOR DALTON: You've agreed, DEP has agreed, and now this Committee has to agree.

MR. PYTLAR: Right. I sort of lose track of where the bill is at times, but I know it is working its way through. We're looking at every way we can to cut down the price. As I said, we are also looking for a very strong package of contractual guarantees from a firm which we think can do the job and do it right.

As we have experienced with utilities-- Someone made a statement about nuclear power plants earlier today. You have often had experiences with utility cost overruns. We are not in that mode in Essex County. We have a fixed-price contract which can go up if there

is a tornado and it knocks the plant down. But, it cannot go up because the firm blows it and spends too much money. They have to eat it, and we think that is a very important part of our relationship. They have to do the job that they have characterized to us that they can do, and we have satisfied ourselves to a certain level that they can do it. They are on the hook, and we think that is very important.

SENATOR DALTON: My last question is, why Ironbound? Why site a facility there as opposed to other parts of the County?

MR. PYTLAR: When we began our process of developing a project to deal with our garbage problems in Essex, we did a substantial amount of site analyses in the County. We analyzed sites throughout the County, and we ultimately had information on 45 sites through various sources of information. We had several criteria which we utilized in choosing a site: local zoning; adjacent land use; vehicular access; benefits to the economic growth stimulus that a plant would provide; and, any local constraints to safe operation. So, we stacked all the sites up against those, and the site we chose is clearly the best site in the County.

One of the notable strengths it has is vehicular access for vehicles coming to the site from outside of Newark and traveling directly to it on the highways -- either Route 280 and the Turnpike, or Route 78 and Route 1. They can exit about 100 feet from the site and go right onto special access roads to the site.

While the Ironbound community feels heavily impacted by past pollution, from our analysis of these projects, these facilities are not inherently dangerous. They have proven they can work safely throughout the world, and this has been done for years.

Once you choose a site which is good, you have to do the full environmental analysis which is required by DEP to identify the points of maximum impact from emissions -- identify what those levels of emissions are for all pollutants. Then you do a risk assessment on some of the more exotics, such as dioxin and heavy metals, to see what the health impacts are of the facility. If the facility is operating right, or if it is only operating half-right, what are the health impacts under worst-case conditions, worst-case weather conditions,



etc.? Essex County isn't the only place where these kinds of analyses have been done.

In Zurich, Switzerland, Canada, and the Netherlands, they have also conducted very similar analyses. The weight of the evidence and the conclusions are really uniform. While these plants do give off emissions which are justifiably a concern to us all, the amounts that they give off and the exposures which are actually created are far from being a danger to health.

For example, in Ontario, they have set an air standard for dioxin. The maximum impact of our plant will be 30,000 times less than the standard set in Ontario, which is a very strict one.

We think we have gone through a very extensive process in analyzing these things, as we have been required to do by DEP. We think that will be obvious when they put forth the draft permits. We believe these draft permits are going to be very strict and are going to answer a lot of the questions that are still unanswered. It is really a matter of trusting DEP, which I know a lot of people have a hesitancy to do -- to see that they are going to do the job they say they are going to do.

SENATOR DALTON: Thank you very much.

SENATOR CONTILLO: I have one question.

SENATOR DALTON: Make it quick because--

SENATOR CONTILLO: (interrupting) It is a quick one. It is a one-line question. Can you tell us the cost per ton when a new facility opens, assuming that the Port Authority bonds will have to be paid off?

MR. PYTLAR: I would say just under \$20.00 per ton barring any unforeseen circumstances. That is what we are projecting right now.

SENATOR CONTILLO: Twenty dollars?

MR. PYTLAR: That is my one-line answer. If you want details-- (laughter)

SENATOR DALTON: Thank you very much. We appreciate it. Is Art Young still here? (affirmative response) Art, Jeff Ross indicated to me that he has to catch a plane, so I'm looking to you. If Jeff

misses his plane, he can get mad at you instead of me. How would you like to work this? (Mr. Young replies from audience, but transcriber is unable to hear answer.)

SENATOR DALTON: Okay, so we'll start off with Jeff. Jeff, if you make your plane, you can thank Art. (laughter)

JEFFREY D. ROSS: Good afternoon, Mr. Chairman. I am here today on behalf of the New Jersey Chapter of the National Solid Wastes Management Association. Our Association membership includes companies involved in all aspects of solid and hazardous waste collection and disposal, including two national companies -- Browning-Ferris Industries and Signal RESCO, Inc. -- which are at the forefront of resource recovery development in the State.

NSWMA has consistently supported resource recovery as an integral part of planned, environmentally-sound, and economically-efficient solid waste management. A-1778 is designed to assist solid waste management districts to implement resource recovery X by offering a more flexible framework for rate regulation. It also institutes disposal taxes with a twofold purpose: closing the gap between low landfill and high resource recovery disposal rates; and, providing funds to subsidize resource recovery construction.

NSWMA presented detailed comments on A-1778 before the Assembly County Government and Regional Authorities Committee on April 19 in Newark, New Jersey. I have included the major points of that in my testimony, and for brevity's sake, I will just submit them for the record.

SENATOR DALTON: Okay, the whole thing will be read into the record.

MR. ROSS: There are a couple of concepts and provisions of a general nature that we continue to have reservations about in this legislation. They include the following:

Generally, we object to the concept of using solid waste haulers and landfill operators as State tax collectors. In recent years, the industry has been burdened with collection and, in some cases, the escrowing and auditing of taxes for recycling, landfill closure, and the cleanup of abandoned sites. Passing these new taxes

onto waste customers sounds straightforward in bill form, but has caused many unanticipated accounting and billing problems for our members and hostility by our customers.

Secondly, we see little benefit to be derived from the proposed Solid Waste Services Tax. Half of this amount would constitute a dedicated fund underwriting DEP's solid waste budget. NSWMA has always believed that departmental spending should be subject to legislative review through the normal budget process.

Next, there are several comments I would like to direct to some of the provisions that were added to A-1778 when it was approved by the Assembly County Government and Regional Authorities Committee.

One concern we continue to have is that we recommended to the Assembly Committee that Section 15 c.(1) -- uses of the District Resource Recovery Investment Tax Fund -- be clarified to guarantee resource recovery tipping fee subsidies to all district users. The legislation provided that the District Fund may be used "to provide gradual transition between resource recovery facility rates and sanitary landfill facility rates." This seems to indicate that the money should be used for everyone's benefit. Our concern is that districts might be tempted to use the Fund only in the form of grants to municipalities that provide their own waste collection services. This, of course, would be unfair to residents and businesses in towns without municipally-financed waste collection service. These consumers would be subject to the new taxes, but would receive no subsidy in return. The Assembly Committee did not address this important concern, and we urge this Committee to address this potential inequity by including the language I provided for you.

Basically, all I am asking is that you insert the words "to reduce the rates charged to all users of a resource recovery facility."

The Assembly Committee also adopted an amendment on Page 8, Section 13, Line 17 allowing use of the Solid Waste Services Tax Fund for implementation of the goals of the State Recycling Plan. We are supportive of recycling in the overall waste management scheme. Recycling preserves our natural resources and reduces the total amount of waste which ultimately must be disposed. However, to appropriate

funds to promote the goals of the State Recycling Plan seems inconsistent with the immediate goals of this legislative proposal, which is to facilitate the construction and operation of resource recovery facilities as expeditiously as possible.

The role and form of recycling in New Jersey currently is being addressed in legislative proposals specifically limited to this aspect of solid waste management. In fact, several of these proposals are currently pending before this Committee, including S-1531 by Senator Cowan and S-1865 by Senator Contillo, both of which expand and extend the Recycling Act of 1981. Furthermore, the DEP is currently preparing legislation to implement a mandatory recycling scheme and has created a task force to solicit our industry's expertise and views. In short, we suggest that A-1778 keep its focus on resource recovery and leave recycling to more deliberate and comprehensive treatment in other bills.

We also are concerned with an amendment adopted by the Assembly Committee on Page 8, Section 13, Line 29, which would allow a district to appoint a citizens' advisory committee. An appointed citizens' advisory committee or an existing advisory solid waste committee could develop and implement oversight projects and conduct community awareness programs regarding resource recovery facilities. Citizen participation in environmental planning is an important and legitimate role which our industry recognizes. We are only concerned with the extent of the participation and how it will effectively fit into achieving the goals of A-1778. Thus, we naturally are concerned with the word "oversight" which clearly seems to indicate that any citizens' advisory group will have legal authority or powers separate from the district planning mechanism. It is important to clarify in this section that the citizens' advisory group will not have independent legal remedies or powers to impede decisions made by the planning district.

My final concern is with an amendment adopted by the Assembly Committee on Page 16, Section 32, Line 4, which reads: "The Department shall adopt rules and regulations for the engineering design of resource recovery facilities to include a requirement that

state-of-the-art air emission technology be installed to control the emission of hydrocarbons, particulates, etc."

For waste-to-energy facilities, state of the art could mean electrostatic precipitators that are capable of controlling pollution to the level acceptable by the United States Environmental Protection Agency. Our concern is that state-of-the-art air emission technology may not be applicable to resource recovery facilities. For example, state-of-the-art air emission technology for coal-fired or oil-fired facilities may not be applicable to resource recovery facilities. While that technology is still state of the art for control of the listed pollutants in general, it might be unproven technology for waste-to-energy facilities for a variety of reasons. Full-service contractors in this industry generally believe that they can successfully employ emission control systems under the Clean Air Act definition of best-available control technology.

We are aware of public concern with respect to trace emissions of dioxin and other pollutants from waste-to-energy facilities. All indications point to the fact that such emissions from these facilities may be routinely controlled by using best-available control technology within normally acceptable limits. I wish to point out, however, that technology to detect pollution has superseded the engineering data available on: (a) the causes of how such pollution is generated in a combustion facility; (b) the overall effect of such pollution on the environment; and, (c) the interrelationship of over-controlling one pollutant and the resulting emissions of other pollutants.

In other words, we have the ability to detect all kinds of trace pollutants which this industry believes it can control within acceptable limits, but the industry cannot tell you at this point how to design these facilities to eliminate the problem. Today, the practical solution appears to lie somewhere in the trade-off of whether or not you wish to bury solid waste or incinerate it, and how much you want to pay to do either. In the future, when we have more information available to us, waste-to-energy facilities may be constructed differently. In both cases, the DEP and the permitting process already provide the flexibility to control air emissions.

We recommend that this amendment be carefully examined, along with the air emission controls already mandated by the DEP. If the determination is made that this amendment is still needed, we would recommend that it be revised to read:

"The Department should adopt rules and regulations to include a requirement that the best-available control technology be employed to control the emission of hydrocarbons, particulates, etc."

That concludes my comments.

SENATOR DALTON: Thank you very much, Jeff. Paul?

SENATOR CONTILLO: I have no questions.

MR. ROSS: Thank you very much.

SENATOR DALTON: Our next witness is Richard Felago.

**RICHARD FELAGO:** I would like to read this brief statement, and then I will be happy to answer any questions. I think my statement will answer some of the questions that came up earlier regarding some of the specific aspects of planned financing, etc.

I am Richard Felago, Project Manager of Business Development, in charge of New Jersey projects for Signal RESCO, Inc. I appreciate the opportunity to appear before this Committee to offer comments on the proposed legislation.

Signal RESCO was formed as a result of the merger of Wheelabrator-Frye, Inc. of Hampton, New Hampshire, and The Signal Companies, Inc. of La Jolla California, and was created through the integration of the refuse-to-energy business activities of both companies -- the Energy Systems Division of Wheelabrator-Frye and the Solid Waste Systems Division of UOP, Inc., a subsidiary of Signal.

Signal RESCO, Inc. pioneered the private ownership of resource recovery facilities in the United States with its RESCO project in Saugus, Massachusetts, which has been operating continuously since 1975. That is a 1500-ton plant producing steam which is now being converted to electricity production. Currently, Signal RESCO has the following projects in various stages of implementation:

Our 2000-ton-per-day Pinellas County facility located in St. Petersburg, Florida commenced operations in May, 1983. A third 1000-ton-per-day unit has already been financed by the County; construction on that unit will commence shortly.

Westchester RESCO, Peekskill, New York, a 2250-ton-per-day facility began acceptance testing in July, 1984. Commercial operations are scheduled for August, 1984. As a matter of fact, it is in acceptance testing right now.

The 2250-ton-per-day Baltimore RESCO facility currently under construction near the newly renovated harbor area of Baltimore is more than 70% complete, with operations expected toward the end of 1984. That is also an electric generating facility.

Construction on the 1500-ton-per-day North Andover project commenced in 1983, with commercial operations expected in 1985.

We are in active negotiations for projects in Bridgeport, Connecticut, a 1500-ton plant; Worcester, Massachusetts, a 600-ton plant; Brooklyn, New York, a 3000-ton plant; and, San Diego, California, a 1500-ton plant. These are all electric generation facilities.

Signal RESCO is actively involved in the Edgeboro RESCO project for Middlesex County, and as you heard earlier, Signal RESCO has been selected by Gloucester County as a developer of that County's resource recovery project.

The proposed legislation, Senate Bill 1762, has been introduced as an attempt to foster the "orderly development" of resource recovery projects in New Jersey. It seeks to accomplish this objective in two ways: (1) a series of taxes on existing landfills to be escrowed to offset higher tipping fees at resource recovery facilities; and, (2) institution of a procurement process for resource recovery implementation.

The New Jersey Department of Environmental Protection is to be commended for taking an active role in attempting to solve the solid waste disposal crisis facing New Jersey and for supporting the implementation of resource recovery as a means to meet that crisis. The DEP recognizes, as does the BPU in its Decision and Order of February 23, 1984 of the generic proceeding on resource recovery, that it is the price disparity between high-technology resource recovery facilities and low-technology landfills which has delayed the implementation of these important projects. The DEP further recognizes

the fact that there will be instances in which two or more districts will need to work together to find a mutually-agreeable solution to their solid waste disposal problem and DEP trying to find a means for "host" districts to be compensated for accepting waste from other districts.

Signal RESCO has several concerns, however, regarding whether or not the legislation as proposed will accomplish its objective of hastening the development of resource recovery in New Jersey, either through the use of the disposal tax planned or through the use of the procurement process.

The legislation deals with the imposition of several new taxes, all for various funds. Using current waste generation statistics of 0.8 per ton per person per year, the resource recovery investment tax will raise approximately \$6 million in the first year from New Jersey sources to be distributed among the 21 solid waste districts. Recognizing further the fact that administrative costs will reduce that amount, it would appear that a significant impact will not be made toward reducing resource recovery costs for several years, unless a significant quantity of waste continues to be imported from out of State. As we all know, New Jersey does not have several years to wait before implementing resource recovery, nor do its citizens wish to create a new incentive to import waste from out of State.

The task of administering these various taxes is also a source of concern. By its own admission, the DEP is understaffed. Will sufficient staff be allocated to cope with the additional record keeping required by the imposition of these new taxes? We see that as a practical problem.

Senate Bill 1762 addresses a procurement process for the selection of a project developer. We believe a more expeditious method would be to allow counties to select a developer based on a comprehensive review of qualifications, and allow that selected developer a time frame in which to complete project implementation using the existing mechanism of shared review by DEP and BPU as stipulated in the Solid Waste Management Act and the Solid Waste Utility Control Act. This method assures maximum public scrutiny and testimony as an application moves through the approval process.



In its testimony last year before the Board of Public Utilities at the generic hearings on resource recovery, Signal RESCO stated its belief that the BPU should retain responsibility to assure that all persons engaged in resource recovery provide safe, adequate, and proper service on a continuing basis. Signal RESCO believes that the BPU is positioned best to evaluate the financial wherewithal and technical capability of various organizations. We also find a certain level of comfort on the part of many county and local elected officials in having a State level body whose responsibility it is to review capabilities and proposals, and determine tariffs and prices, all in the public interest.

As the leading supplier of resource recovery systems in the country, Signal RESCO believes that the utility environment in New Jersey has the potential to implement projects faster than the alternative method proposed in this legislation. My own experience is that each municipality or county -- usually a first-time participant in such a negotiation -- tends to reinvent the wheel. A single entity such as BPU would provide a repository of knowledge; for example, why certain risks are shared. In this manner, given a risks-and-pricing scenario, BPU could hasten development of the project by applying the previously obtained knowledge to accelerate the hearings and rate-setting procedure. This accumulation of knowledge would not be obtained in any other procurement environment. With a State level body, we expect later projects to move progressively more quickly as projects are developed throughout the State.

The best mechanism for resource recovery implementation is already in place. In fact, Gloucester County has just decided to procure a system through selection of a developer, and the project will proceed in accordance with existing law on the basis of the BPU's forward-looking order from the generic hearings on resource recovery. To change that mechanism could require a redrafting of N.J.S.A. 48:13A et seq., a lengthy process. Further, to change the mechanism at this juncture, before a resource recovery application has been through the system, could interject an element of uncertainty into project implementation and cause reluctance on the part of investors to undertake financing in these capital-intensive projects.

Regarding subfranchising, Signal RESCO believes that once an area is designated as a franchise area, no subfranchise subsequently awarded should alter the terms of any franchise awarded by the BPU. Any such subfranchise area designations, of course, should conform to the solid waste management plan. This is necessary to assure a contractor of a continuing availability of waste to support the technical and economic requirements of the facility serving that district.

Signal RESCO believes that the BPU should retain jurisdiction, and upon petition and approval by the BPU, should grant to such person a franchise or subfranchise which would confer on that petitioner the exclusive right to receive and dispose of processable solid waste (excluding recyclables) in a designated franchise or subfranchise area. Again, this assures that technical and economic requirements of the plant would be met.

Signal RESCO appreciates the efforts of the Legislature to deal with the solid waste dilemma facing New Jersey and applauds the effort to move the State toward the future with technologically-efficient and environmentally-sound solid waste disposal.

That concludes my prepared statement.

SENATOR DALTON: Would you like to go to the next person with you? (affirmative response)

CHARLES H. JACOBSON: Thank you, Senator. My name is Charles Jacobson, and I am a Certified Public Accountant. I have represented Edgeboro Disposal for all the years it has been subject to the BPU control.

The main thrust of the legislation we are discussing today is to encourage the proper development of waste disposal in the State of New Jersey. Commissioner Hughey, in his remarks, noted that there are only eight major land disposal companies in existence today, and Edgeboro is one of those eight companies. He also noted that there are no new landfills that have been opened in the State of New Jersey.

I am going to try to address myself to one of the problems we have had in operating a landfill. One of the requirements in handling

waste in the State of New Jersey is to encourage the traditional landfill. We are speaking of resource recovery and recycling, and it has been testified to here today that we are going to need the traditional landfill to handle the residue and the excess unrecyclable material.

The landfills operate under the Board of Public Utilities, and they set all the rules governing rates -- tariffs that landfills can charge. One of the methodologies discussed this morning was that the BPU uses a return on rate base. I would like to address myself to the inadequacy of that rule. That methodology is fine and good for New Jersey Bell Telephone, Public Service, and other large public utilities, but when you talk about a landfill employing the same methodology, it becomes very difficult.

The problem area we have is, tariff increases are restricted to the rate base. The rate of return that has been allowed by the BPU is somewhere about 10% or 12%. Where in the world are you going to get anyone to invest any real money in a traditional landfill with that kind of rate of return? Who do you know who would invest money with that modest a return and take the risks that are inherent in operating a landfill?

There is another area that is very restricted on the part of the BPU. It is in evaluating and permitting assets to be included in the rate base. Having worked on a number of rate cases, and having dealt with staff, the Public Advocate, and intervenors, there is a horrendous burden put on the landfill, particularly where you have a low-cost basis of property that may have cost you \$100 an acre many years ago. If you use \$100 per acre in determining your rate base, and the value of the land today may be \$20,000 or \$50,000 an acre, it is totally unrealistic.

We have a landfill in Morris County that changed hands, and the Board stuck with the position that they didn't recognize the true value of the land -- what was actually paid for the land. They were not permitted to raise their tariff in a realistic fashion, and they ultimately went bankrupt.

Over the years, we ran an analysis of the percentage of net earnings to the gross revenues at Edgeboro, and compared it to a national company. Over the last five years, Edgeboro Disposal has realized a 4.92 return on gross revenues. That is totally unrealistic, whereas Waste Management, in an analysis in a Standard and Poor's report -- which, incidentally does not own a landfill in the State of New Jersey, and there is probably a very good reason -- realized a return on their gross revenues of 10.58.

The questions were raised, "Why don't we have more landfills developing? Why is there a diminishing number of landfills?" The reason is because large public companies do not want to take the risk.

SENATOR DALTON: Isn't it also true that government entities don't want large companies in their Solid Waste Management Act because of the fact that they may encourage out-of-state waste flow?

MR. JACOBSON: That is quite possible, Senator. On the other hand, with the changing state of the art -- the art of operating and maintaining a properly-run landfill -- large infusions of capital are involved.

SENATOR DALTON: I understand that part; I understand the point you are making. You are indicating that it is a financial reason, but I was thinking perhaps it could be more of a government institutional reason as to why private companies aren't getting more involved. In government, the county SWACS (Solid Waste Advisory Committees) may not be in a position or politically may not want to encourage more private investment in "landfills within the State."

Chuck, perhaps you can address yourself to this. You are, in fact, encouraging an out-of-state flow there. Do you understand what I mean?

CHARLES McMULLIN: Yes, I can respond. The question of encouraging an out-of-state flow is really a matter of whether you are going to regulate the solid waste industry as a utility. Therefore, one that has a sticker can walk in. It seems to me that the one who gives out the sticker is the one who determines who can ultimately pass through our door. In this State, the DEP and the PUC provide the stickers.

The second issue relative to an out-of-state--

SENATOR DALTON: (interrupting) Wait a minute. Given the Supreme Court decision--

MR. McMULLIN: (continuing) That is exactly my second point.

SENATOR DALTON: Okay.

MR. McMULLIN: The second point in dealing with an out-of-state issue is that I know when I go to a restaurant in Philadelphia, I don't bring back my garbage. I don't bring my money back either. Hence, we have an interstate issue.

Thirdly, in my judgment, industry, and State and local government have never cooperated to deal with that subject. It has been very popular to take the position of, "I want it out tomorrow morning." Well, that doesn't happen for many very practical reasons, one being public health. We believe -- and, I'll get into that -- that there should be a structured mechanism to, in fact, get them out because we are dealing with a position in this State which, I think, is an economic crime. We're burning up cheap capacity because we're taking it out of State as soon as it gets expensive. Simultaneously, we are penalizing our residents by considering additional taxes. To me, it is a double whipsaw on the residents of the State of New Jersey.

SENATOR DALTON: I'm very sorry for interrupting you, Mr. Jacobson.

MR. JACOBSON: That is fine. Just to add to that, Senator, we have a substantial percentage of waste coming from New York, and we have no control over it. It comes in, and we can't turn it away at the door. Whether we own the facility, or Waste Management or some other large public company owns it, they would be in exactly the same position.

Some of the legislation that we think is needed to help alleviate difficulties in maintaining and encouraging the establishment of the traditional landfills is:

Tariff adjustments should be based on a percentage of net earnings after taxes, or a rate-base rate of return, whichever is larger, and then change the methodology of determining the rate base.

Another major inequity that we need legislation to cure is to allow the purchaser of a landfill in a bona fide arms-length

transaction to use the actual cost of the facility and the equipment in determining his rate base. It makes absolutely no sense to force a purchaser of a facility to use historical costs that may have related back 10, 15, or 20 years ago.

Shorten the period in which the BPU has to act on a petitioner's request for a tariff increase. Some cases take as long as nine months to be finalized at very, very substantial professional costs -- sometimes to the tune of \$100,000 to \$150,000 to get a tariff increase adjustment through.

Another mechanism that should be adopted and enacted upon is an automatic annual increase in the tariff based on a recognized economic index.

I would also like to comment on the "host community" amendment to the legislation. I would like to say that Edgeboro, with the acquiescence of the BPU, is currently involved in discussions with East Brunswick, our host community, to fund the capital improvement totally for approximately \$2 million. This is for road construction. Some days there are 800 trucks passing over Edgeboro Road. That irritates the local taxpayers, residents, and industry. Something should be done to improve the road system. If the BPU will permit us to adjust the tariff accordingly, we intend to allocate those funds directly for that improvement.

Thank you for giving me the opportunity to speak on this matter. Mr. McMullin will speak next.

MR. McMULLIN: My name is Charles McMullin, and I am President of Kinsley Landfill. We operate a substantial landfill located in Gloucester County, Deptford Township, New Jersey.

As as been previously stated, Kinsley is the recipient of a substantial amount of waste coming from both in and out of State. Today I would like to address the problem as we see it.

The proposed legislation, in our judgment, does not really address the problem in terms of providing a solution. Rather, it puts us into another iteration of several years and then coming back to the Committee.

I have a couple of charts I want to show you. I will make my presentation brief. I think the first thing you have to look at is the issue of Chapter 326. In my own personal judgment, I do not believe we have had more than a half a dozen solid waste plants in the State of New Jersey. The reason is because, as you may know, the requirements under Chapter 326 call for the siting of facilities that identify the capacity for the particular county in question over a 10-year period. To my knowledge, I know Gloucester is not one, nor is Camden. I know Middlesex is no longer one at this point; it was at one point in time. Burlington County has yet to move forward on its proposal. So, I would go back to the heart of the issue, which is decision-making.

This chart before you shows the amount of solid waste that has gone into Kinsley from 1973 to 1983. You can see that it has increased tenfold. In fact, there are some notable dates. (referring to chart) This is when Chapter 326 was passed; this is when it became effective; and, the first plans came in here. What occurred with the first plans was, the DEP finally had the statutory muscle to close landfills that were frankly dumps. As you can see by the jumps, there are specific landfills that were, in fact, closed for very legitimate reasons. From that perspective, Chapter 326 has been very good with respect to environmental cleanup -- stopping existing sites from continuing.

However, the other side of that is, you all know that garbage has to go somewhere. As you can see, the rate in 1983 indicates that 4.9 million yards of material went into Kinsley Landfill. I can tell you that that is just too much material coming into the landfill.

I spoke before about the issue regarding out-of-state waste. We are now focusing on out of State the other way. As you may know, North Jersey has begun to go into Pennsylvania, and South Jersey is now considering it. If you look at the costs that are identified as the expansion of Kinsley -- and, that expansion has been necessitated by the fact that other counties, as well as out-of-state materials, have increased -- you'll see that the cost of going anywhere but to the expansion of Kinsley is sizeable.

For instance, with Kinsley the cost of solid waste in Gloucester County would be roughly \$1 million a year. To go anywhere else, it would be \$6 million or \$7 million a year. You talk about economic shock to resource recovery, and that may be three to five years from now. I think today Gloucester and Camden Counties have economic shock in terms of landfilling. I can tell you emphatically that the landfills that are identified are of an inferior environmental design.

This all brings about the point of the legislation, which is that the answer may not necessarily be taxes. In fact, I find the taxes to be quite unfair because on one hand, we are allowing out-of-state people to burn out cheap capacity, and on the other hand, we're penalizing the people in New Jersey who are going to live with resource recovery and landfills by having to pay more today.

I think the problem we are dealing with is a structural problem within Chapter 326. Chapter 326 was a decision-making tool that, in my judgment, did not look to each of the 22 districts having resource recovery plants. It didn't expect each of the 22 districts to have the economic expertise that would be located in a State agency such as the BPU to evaluate the landfilling, recycling, or resource recovery facility economics-- The 22 districts were not envisioned to have the environmental expertise to evaluate the detailed hydrogeological integrity of a landfill, nor to evaluate the impact of a high-tech resource recovery facility. In my judgment, they were clearly left to the State of New Jersey -- the DEP on environmental matters, and the BPU on economic matters. Those two agencies -- like it or not -- do represent us, and I rely upon them as an industry, as well as a person, to take care of my pocketbook, as well as my health.

The problem we are confronted with today is that in my judgment, there is a need for facilities in this State. It isn't just a need for resource recovery, landfilling, or recycling. What we are looking for, as the Senator talked about before, is a proper mix. How much resource recovery? How much recycling? How much landfilling? There is a multi-dimensional problem insofar as it is clearly economic because resource recovery is very expensive compared to landfilling.



It is somewhat technical because how much of the recycle stream can you get out by having garbage trucks going down the same road? Can we separate it so it meets with market specifications? It is also economic in terms of, can we afford to send our garbage trucks down the road twice to pick up newspapers, bottles, and cans? Thirdly, it is also environmental.

The dilemma we are currently facing was clearly stated this morning and I agree. The crisis was here a year ago, and we really have a problem. How many of these facilities is the requisite amount? That, in my judgment, was the key charge to the County Solid Waste Coordinators, and that, in fact, is the key issue that we have not yet resolved. There may be a lot of reasons for saying we need more taxes and more money, but the fact of the matter is, we did not make the decisions, and here we are today being asked to discuss and promote substantial taxes on the citizens of New Jersey when we still do not know what we want.

What we have done at Kinsley is, we have developed a chart based upon the proposed taxes. What this shows is that Kinsley would take substantial amounts of materials -- somewhere near 6,000 tons per day -- and, after a five-year period, it would only generate \$17 million. What are you going to do in a County such as Morris where they don't have landfills? What are you going to do with a County such as Essex where you don't have landfills? In our humble opinion, while this may not look very nice -- and, it might be a solution for Gloucester County -- it clearly is not a solution relative to the State of New Jersey.

We went one step further and said, "Okay, we don't want to leave you hanging, so what is the solution?" We think the solution is to go back to the issue of a mix of facilities. Over here where it says, "Present Costs" is our current cost to dispose of a yard of solid waste. According to the Mitre Report -- that was one of the technical reports that was prepared for the DEP -- it was the amount per cubic yard for resource recovery in the Gloucester County plant. What we said was, "This is going to be an economic shock in the future." I showed you economic shock before in the present. If we were to just

get approval in terms of expanding the landfill, all we would do is move the problem from 1984 to 1989. That is clearly not the point.

The point is, we should grapple with the issue of what types of facilities are required. In Kinsley's plan, what we have done is, we have looked at 1,000 tons per day of resource recovery and 1,500 tons per day of recycling. The balance is landfill, and within five years, we will remove the City of Philadelphia from the State of New Jersey.

As a result of doing those things, what we will come up with is a price per cubic yard of \$5.75. That is assuming resource recovery at \$45.00 per ton; it is assuming recycling at \$15.00 per ton; and, it is assuming our current rate relative to Kinsley's landfilling.

SENATOR CONTILLO: At what?

MR. McMULLIN: At \$3.13 per yard. There has been some discussion that landfilling is going to be very, very expensive. Our design cost is for a double-liner -- three feet of clay on our natural clay base, as well as a liner on top of it. The liner is similar to your nameplates.

Even with those improvements, as well as the leachate collection system, we do not expect to have any substantial change in the tipping fee at Kinsley Landfill. We, as a company in this business, recognize that we can ill-afford to utilize our available land without prior processing of solid waste. To that end, in the Kinsley plan as we have identified it -- and, this can be applied anywhere in the State-- We should do something quickly.

What is the one thing you can do quickly? Obviously, I think you can get into recycling. Recycling, I believe, is going to be difficult, as has been discussed here today, particularly from a sewer separation approach.

We have recognized that maybe in suburbia it does work to moderate degrees, but in other types of communities, it does not work. We believe that taking mixed municipal refuse out of the solid waste collection truck and putting it into a separation plant will do two things:

Number one, it can be implemented, assuming permits, within a year because there are no stack issues. It is essentially a sorting and mixing issue.

Number two, we get a very good issue on the quality, which gets into the environmental issue of the stack later on, as well as the quantity of garbage.

Number three, for every ton you pull out, you save somewhere in the vicinity of about \$100,000 in capital costs. Therefore, the cost of the ultimate incineration plant will be down because the sizing will be constrained.

We believe the public is demanding that something be done today. We have talked about Chapter 326 and resource recovery in Chapter 76; we have talked about upgrading the landfills. I think Edgeboro has a secure facility, and I know Kinsley has a secure facility. I am unhappy to say that I don't think there are too many others in the State. We should have those, and we should have them now. We should have recycling, and we can have it now. We should also have resource recovery because in order to exist on \$2.00 or \$3.00 per cubic yard landfills, I think we are kidding ourselves. As was stated by Vickie Snyder in her testimony, we opened up a 50-acre section of our facility in 1982, and it is already near capacity. That is 100 feet, so in two years, we used 25 acres. I am not proud to say that because I think there is a better way.

What we are talking about with regard to the proposed legislation -- and, I agree with my colleagues' comments -- I think very much puts that into the future. I think that causes a real problem today with regard to how we are going to handle our waste. We have to deal with the out of State. It is not going to go away. Let me back up.

Last summer Kinsley went to the Board of Public Utilities because we were afraid Morris County was coming down to Kinsley Landfill. As you can appreciate, Gloucester County isn't too delighted to take the people we take now, let alone Morris County. We went in to get a franchise, and the franchise admittedly was to keep garbage out. So far, the BPU has let just about everyone in. In the opinion of our lawyers, once you have a franchise, you have the issue that the burden of allowing someone else's garbage coming in is on them. It has an effect upon our existing service area. It is much like if you live

next to Public Service and want to use it, but because you are in the Atlantic City Electric service area, you can't go in there. Obviously, it is magnified somewhat from the solid waste's utility side.

We believe that the franchise approach or the contracting approach of New Jersey counties getting together with these interdistrict waste flow orders will provide the standard by which either Philadelphia or New York will either sign up on the same basis or get out. Until we do that, we are continuing to play games. Frankly, we are tired of taking so much garbage, as well as so much abuse, and we think there is a much better way to go.

Regarding the issue of resource recovery versus landfilling, the fact of the matter is that they are going to coexist. What we have in the Kinsley plan is how they, in fact, do coexist. What we have in the present legislation, as well as the legislation which is proposed, is competition among facilities. It is amazing that relative to today, everyone has too much garbage, but relative to five years from now, everyone will want to hold onto their garbage.

We think the biggest thing you could do to help the solid waste industry provide the essential service is to force the counties to make decisions. The county that is receiving the garbage, at that point in time, should be able to make the decision for those who are sending it. That will say, "Guys, act or get off the pot." I think now -- eight years into the planning process -- is eight years of planning whereby everyone should know enough to make the decision. Decisions are not easy, but the day-to-day effect of the decision is shown on that first chart, which shows our volume went up 10 times in 10 years. Frankly, it is impossible for us to keep up with that rate. It is totally the antithesis of our corporation philosophy.

I didn't get into the issue of the bill because I believe the taxing is distressing. It does not deal with the problem. I think dealing with the problem is, how do we utilize our existing cheap capacity? The way to utilize it is to have the utility involved in resource recovery, material separation at the plant, and residue. Once you have done that, you come up with the middle-ground number as opposed to the two extremes. That is how you avoid economic shock. If

you go back to this (referring to chart), even in small Gloucester County-- Seventeen million dollars, while it may seem significant, really isn't when you think about the cost of the plant. If you recognize that \$17 million is being generated by a facility such as Kinsley with 700 or 800 trucks per day, you can see that if you're dealing with that amount of action and that small an effect, then maybe we are dealing with this from the wrong perspective -- or, you want to triple and quadruple the tax. I would submit that the former is truly the case.

SENATOR CONTILLO: I don't follow your math. I have trouble coming up with \$5.75 with the mix of \$45.00 per ton for resource recovery, \$15.00 for sewer separation, and \$10.00 for--

MR. McMULLIN: (interrupting) It is a weighted average.

SENATOR CONTILLO: Oh, that is per cubic yard.

MR. McMULLIN: That is correct.

SENATOR CONTILLO: You were giving me numbers per ton before.

MR. McMULLIN: To come up with the \$5.75, it is a weighted average of those numbers. It is 1000 times \$45.00 per ton; 1500 times \$15.00 per ton; and, then the remainder for five years is for landfilling. That would provide you with an average over a 10-year period of \$5.75. I can submit the details on that to you.

SENATOR CONTILLO: Okay, will you do that for me?

MR. McMULLIN: Sure.

SENATOR CONTILLO: Thank you.

SENATOR DALTON: Are there any other questions? Paul?

SENATOR CONTILLO: The other point you made which is new to me, is to allow the county to set the rate for the receiving district, which will encourage counties to take it upon themselves to do it.

MR. McMULLIN: Senator, prior to coming to Kinsley, I was the Solid Waste Director of Middlesex County. I was involved in the first plan that was submitted.

In 1979, we were trying to get the same counties you read about in the newspapers today to sign up or get out. And, here we are -- 1979 to 1983, four years of my own personal frustration relative to Middlesex County. Frankly, Gloucester County is in the same position.

Just because I am at the landfill site in Gloucester doesn't make the problem any different. In Middlesex, the solid waste disposal facility operators are having a problem dealing with that type of volume. They haven't been able to come up with a solution to that. Frankly, neither has the County.

I think the Commissioner said it this morning. We now have Chapter 326, and it rewards those who do not act responsibly in terms of the specific requirements of the Act. One of the problems I've had all along with Chapter 326 is, if you have the problem, then you deal with it and resolve it. We have counties which don't generate any garbage, and then we have 22 districts of which probably half don't have landfills of any merit -- all involved in this with equal weight. At some point in time, one has to address the problem by saying, "Cut the decision because you're hurting the people in Middlesex and Gloucester."

If you removed all of the waste from our landfill, except Gloucester County's, our facility would probably take them into the next century -- at \$2.00.

SENATOR CONTILLO: Okay, I have one more question. Aside from your proposal, which is a new thought to me and is very interesting, if it is not implemented, your suggestion is to increase the tax, even though your basic proposal is not to have enrollment go this way.

MR. McMULLIN: Well, the point I want to make is, if you think that \$17 million in Gloucester County is going to prevent economic shock-- I think the Commissioner stated it will not. I think you have a couple of choices: You can substantially increase the tax, which I do not support; or, I think you have to have decisions made in New Jersey which force decisions. In the opinion of our counsel, you can force that once you have equal applications to both sides of the river.

If we have to sign a loan, then they have to sign a loan, etc. In that way, you will resolve that they are either in forever or out forever. If they are not going to burn out your cheap capacity -- a love them and leave them type of situation-- That is what we are dealing with.

SENATOR CONTILLO: In other words, you want to get married.  
(laughter)

MR. McMULLIN: Or divorced -- either one.

SENATOR DALTON: Chuck, I don't understand that. What you are saying is that what we have to do is, we have to have someone -- and, I suspect it is the Commissioner of the DEP -- come down and say, "Gloucester County, make provisions for your future solid waste planning. One of those has to be how you are going to deal with the City of Philadelphia." Is that right?

MR. McMULLIN: No, I think that is already in the statute. I think they have to do that. The Achilles heel of Chapter 326 has been these Interdistrict Waste Flow Agreements. The ones which have been signed say they are going to last for five years, but nobody knows why.

Somerset was for a couple of years. A couple of years have gone by, and they still don't have anything. Do you follow me?

The point is this: We have to make decisions in-State, either by the counties getting together, or what I'm suggesting is, if they don't get together in six months or a year, then the receiving county should have absolute authority over that material. Once we have done that, we will have established a standard by which the rest of the world -- meaning beyond the Delaware and the Hudson Rivers -- has to act.

Then we can go to Philadelphia and New York, and say, "Look, we have signed with Salem, Camden, Gloucester, and the counties in the northern part of the State, so, you either get out within the three-year period or whatever is reasonable" -- we have various milestones -- "or, you sign up for the whole shooting match." That, frankly, could reach the point that they may say, "Good, take it for 20 years."

SENATOR DALTON: Yes, that is why I said, "Why wouldn't they want to do that?"

MR. McMULLIN: Because I have a hard time believing that in either case, they would want an "X" hundred million dollar rateable on the other side of the water.

SENATOR CONTILLO: At \$5.75 per cubic yard?

MR. McMULLIN: That is a good point. They would be operating under the premise of the larger number with no rate-averaging involved. It may backfire, but the point is, what progress have we made during the last eight years relative to this issue?

As you may know, North Jersey is going to Pennsylvania now. So, this whole exclusionary issue has always been sort of scary. Now we're sending out of State. In light of that, I don't know how you are going to shut off in-State arbitrarily. Do you follow me on that?

SENATOR DALTON: I guess my--

MR. McMULLIN: (interrupting) We are hung up on one point. I think you have to make a proposition to the City of New York and the City of Philadelphia and say, "Guys, you either come with us as everyone else has for a long term, or get out from under this schedule." I think that is the best position we have identified in dealing with this problem.

SENATOR DALTON: My response to that is, if I am Mayor of Philadelphia and I see cheap dumping over in New Jersey, why wouldn't I want to go with it for a long term?

MR. McMULLIN: It is because at that point, it would be my view that-- He might.

SENATOR DALTON: I would rather do that than build my own facility.

MR. McMULLIN: Then he might do that.

SENATOR DALTON: I would have no environmental headaches, no financial headaches, and no siting problems. I would say, "I'll send it over to New Jersey." I mean, that is what we have right now.

MR. McMULLIN: No, you don't have that right now.

SENATOR DALTON: What do we have now?

MR. McMULLIN: If you were to put up a plant in Gloucester County, do you believe you would get the City of Philadelphia? They may come to Kinsley when Gloucester is going to Signal RESCO.

SENATOR DALTON: Let's assume--

MR. McMULLIN: (interrupting) That would be the worst case for everyone.



SENATOR DALTON: Let's assume the Kinsley plant, and let's assume that you say to Mayor Goode, "You will pay \$5.75 per cubic yard for the next 20 years." Okay? If I was Mayor Goode, I would probably think, "Boy, that is not a bad deal."

MR. McMULLIN: You're right; it is an excellent deal. If you take the Essex deal, I would buy two of them at their prices.

SENATOR DALTON: Yes.

MR. McMULLIN: The point is that this assumes the City would be leaving in five years. If the City were to stay, then we would have two options: one would be to continue landfilling with their incorporation, which I think is wrong; and, two would be to size the facility from 1000 to whatever is required. At that point in time, you would have two sub-options: one would be to offer this rate just to New Jersey people, and to offer the full resource recovery rate to Philadelphia; or, two, would be to have a combined rate for everyone. I don't know the answer to that.

SENATOR DALTON: Let's apply the same type of philosophy to the bill at hand. We have the Assembly bill which imposes two sets of taxes -- one is a sub-set -- and then provides a private contractor with two options as far as rate regulation goes.

Given your thoughts, how can this bill be improved? Are you suggesting we eliminate the taxes, period?

MR. McMULLIN: I don't believe that the taxes are required because of what this chart shows. I think there is an existing mechanism that could work at our facility or any other major facility in the State, which would avoid this whole economic issue of shock.

SENATOR DALTON: And, that is developing a proper mix, as you call it?

MR. McMULLIN: That is correct.

SENATOR CONTILLO: In some places, you can't develop. There are no landfills in lots of places. For example, they can't do this mix in Essex, and they probably can't do it in Bergen.

MR. McMULLIN: Well, if that is the case, then I would say Essex should take the tax today.

SENATOR CONTILLO: I think this is sort of a parochial approach. It can't be a statewide approach. I'm not saying that is bad--

MR. McMULLIN: (interrupting) I think the approach has been that we are going to come up with "the" answer for our solid waste problem. They are very different. I think Middlesex is very similar to Gloucester, but I have to say you are right. In Hudson and Essex, I think you have a very different situation.

SENATOR DALTON: This Committee, by the way, never purported that this bill was a comprehensive approach to solid waste. This bill is one option that, as the Commissioner said, we should be looking at. We all said several months ago that this was the solution, but it isn't. What we are trying to do here -- both Senator Contillo and myself -- is to determine in our own minds that if you are going to get resource recovery in Essex, Bergen, Camden, and Ocean without the investment tax--

My thought about the tax is-- I am not a big fan of taxes. Why would we have it? Will it be just to tax people more? I mean, we're going to get resource recovery anyhow.

The second part then becomes the service tax and how you allocate it. My thought about that is, you might be able to meet the objectives of that tax out of the General Fund instead of imposing--

MR. McMULLIN: (interrupting) Maybe you should.

SENATOR DALTON: Yes, really -- instead of imposing the tax. What I am suggesting is, there is one part of the bill that purports to be a stimulus to resource recovery, but I don't understand where it is. Where is the stimulus? You are going to get it anyhow.

MR. McMULLIN: I think that answers the Senator's question. If Essex, Bergen, and the other counties you mentioned go ahead without it, then I would say maybe you don't need it for them. I just don't know. But, relative to the Gloucester and Middlesex situation where you have this opportunity, I don't believe there is a stimulus.

I think the whole issue has come down to two things:

Siting: There has been some discussion about rewarding the host community. It was discussed before, and we believe that Deptford

Township takes a hell of a lot of heat by us being there. We run a secure facility, but that doesn't cut it. They take a lot of heat. There are 700 trucks coming into that facility everyday. They should be compensated because no one else either wanted to or was forced to. In our judgment, in some places that will overcome the siting issue.

Decision-making: The decision-making issue is that Gloucester and Middlesex have had to absorb all of this garbage for too long, while the other people went on to all of these ethereal studies of resource recovery and trips here, there, and everywhere. The fact of the matter is, garbage is generated everyday and it has to go somewhere everyday. We are punishing the communities and the counties, as well as the operators, for doing the job.

SENATOR DALTON: Oh, I agree. Do you have any comments about that, Mr. Felago?

MR. FELAGO: I was formerly with Mitre, and I left before that particular work was done. You may be able to apply some effect in the early years. It has been touted in various places. It has been called a revenue-stabilization fund. The idea has been that there is a pot there where you can reduce the rate shock of the early-year changes, and then it would continue up, so that if you looked at the return on a net-present value basis, it would remain constant. But, you had started out with a more attractive tipping fee.

I think I am in agreement with the statements that were made. The example I tried to give showed what I think is the conclusion you have already come to. It seems it will make a very insignificant impact. To raise taxes even higher to the point where it would make a significant impact, I can only question whether that would be at all palatable.

SENATOR DALTON: I thought it was very interesting that you were more enthusiastic about the traditional Board of Public Utilities' approach to regulating than the Board of Public Utilities was. (laughter)

SENATOR CONTILLO: Besides the Essex County facility, is there any other facility-- Each facility you spoke about is a traditional facility. Besides the one that the Port Authority is

involved with, are there any other facilities that you know of which get involved in the privatization concept?

MR. FELAGO: We have been involved in Middlesex County for a number of years now, and we hope to be very close to filing on that project. We have done a significant amount of work. The environmental impact statements are completed and ready to go. We have to iron out a couple of things before we file, but nonetheless, we have done quite a bit of work.

SENATOR CONTILLO: So, you go both ways.

MR. FELAGO: As my statement says, we have been involved with five projects that have been procured through the other method. What we see is, given the environment and given the SWMA and SWUCA in New Jersey, the reasons why they were passed, why they exist, and how things are done now is-- We see that as not only a workable framework, but as I said before, we see it potentially as a framework that could accelerate implementation as the subsequent projects come along. We see a good number of projects as future potential in this State.

I might give you an example to spell that out a little more. I am involved in negotiations with the Bridgeport facility. We were selected, and as matter of fact, within the last week and one-half, we have come to agreement on a memorandum of all major issues with the Connecticut Resources Recovery Authority, which is the implementing agency in the State of Connecticut. We were selected to replace an RDF facility -- Echo Fuel II, which received some notariety some years ago.

SENATOR CONTILLO: Is that a resource recovery plant?

MR. FELAGO: It was an RDF facility.

SENATOR CONTILLO: You throw initials around like--

MR. FELAGO: (interrupting) I'm sorry. It was what they called a Refuse Derived Fuel facility; it was what they called a fine RDF. The material went through a front-end separation threading -- shredding and separation, and multiple separation--

SENATOR CONTILLO: (interrupting) Was it like the one in Hempstead?

MR. FELAGO: Well, that is a wet-pulping process. That is different. It is another RDF process that didn't work.

Some lessons have been learned about Refuse Derived Fuel production facilities, which is why we are proponents of the mass-burn concept. The mass-burn concept is when you take the material and burn it; you don't process it.

SENATOR CONTILLO: That is a process that has been proven and it has been used and used and used.

MR. FELAGO: Yes. There are over 400 plants using the mass-burn technology worldwide. A Swiss firm, Von Rolle, now has over 190 plants either operating, under construction, or in the design phase. The Saugus facility is a Von Rolle plant. Von Rolle owns 400 plants total, so it has a significant operating record. Of course, we have the other facilities in the United States that I mentioned before.

Regarding Bridgeport, we are going to replace an RDF facility. Let me just give you a little bit of background. That was a facility where they did all that shredding, secondary shredding and separating. They took the combustible fraction and put it into a tremendous ball mill. The diameter of the ball mill was probably from that corner of the window up to the corner of the ceiling; that is how big it was. It was full of steel balls about two inches in diameter. What they did was, they injected hot sulphuric acid and brittled this material to create a fine-powdered RDF. The theory was excellent, but the problem was, they could never quite bring the plant through acceptance testing. It never got off the ground. History was that CEA went bankrupt, and that facility was abandoned. We are going to replace it. That is an aside just for background.

The point of the story is, when we got into negotiations, we began over again. Some of the people were familiar with the financing that had been done on the Peekskill plant, which is now coming on line. That was financed in November, 1982. I would say that the first two or three months were spent with: "Well, you did this in Westchester. We're looking at this now. Why was this done, and how did this come out? Why did you wind up this way?" What happened was, for the first four or five months of negotiations, it was an education process as to how all of that came about.

Once there was an understanding concerning trade-offs of the revenue stream and various risks assumed by both parties -- once they understood that -- I think things moved a lot more rapidly. So, we spent five or six months in an historical education process, and then we spent two or three months getting down to the issues. Now we have a memorandum of understanding.

I submit that if the team had essentially been the same team which had been through that process, it would have been an inherent understanding of why those things were traded, why the price came out as it did, and which risks were traded off for what reasons. I think the process probably could have been cut by a number of months.

The potential we see in New Jersey is, if you have that State regulatory body-- Many county officials from many different counties have said to me that they are kind of comfortable with the idea that there is a State body which is going to review this process and they are going to look at it. They can test financial wherewithal. I mean, they have had to look at the Three Mile Island settlement. They can understand how these costs and risks should be traded off. Hopefully, it would become almost a repetitive cookie-cutter process.

SENATOR DALTON: They can also take the political heat if things go wrong.

MR. FELAGO: Well, we have had that suggested too.

SENATOR DALTON: That might be another reason why they are comfortable.

MR. FELAGO: Exactly. That is exactly right, but from a project implementation standpoint, isn't that a positive aspect? That is absolutely the case. I have heard that from a number of quarters.

As a matter of fact, as a consultant, I was one of the coauthors of the Resource Recovery Management Model, which has been used by many counties to implement resource recovery, according to the method that is in A-1778. I know it intimately. It has been referred to and used around the country many times.

However, I might submit that given the utility environment in the State of New Jersey, it is unique. It is a different place. It looks at a different way of doing things, and in our opinion, it offers

the potential for accelerated implementation as these projects come on line. It makes it an exciting environment in which to implement projects. It is different than the other 49 states; there is no question about that.

SENATOR CONTILLO: Do you feel that some of the projected Federal changes in the tax laws are going to change the two options?

MR. FELAGO: Bridgeport happens to be exempt. I presume you are referring to the IDB cap?

SENATOR CONTILLO: Yes.

MR. FELAGO: Given the population of the State of New Jersey and the "cap," since it is on a per-year basis, we don't think it will have a significant impact on the major projects that are likely to go ahead. We have looked at that. It seems there will be enough money raised, given the funding level by using IDB's in the State over the last several years. I don't think it would work if you had a plant in every district, but I sincerely doubt there is going to be a plant in every district. We don't see that as a major impact on financing.

SENATOR DALTON: Thank you very much. We appreciate your testimony; it was very enlightening.

SENATOR CONTILLO: It was enlightening, Mr. Chairman.

SENATOR DALTON: That concludes our hearing.

**(HEARING CONCLUDED)**





**APPENDIX**





**State of New Jersey**  
**BOARD OF PUBLIC UTILITIES**  
1100 RAYMOND BLVD.  
NEWARK, NEW JERSEY 07102

**LEGAL**

**IN THE MATTER OF RESOURCE )**  
**RECOVERY GENERIC PROCEEDING )**

**DECISION AND ORDER**

**DOCKET NO. 833-236**

**Margaret M. Foti, Deputy Attorney General,  
on behalf of the Staff of the Board of Public Utilities**

**Stephen B. Genzer, Deputy Public Advocate, for the  
Department of the Public Advocate, Division of Rate Counsel**

**Sandra T. Ayres, Assistant Deputy Public Advocate, for the  
Department of the Public Advocate, Division of Public  
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**Riker, Danzig, Scherer & Hyland, by William F. Hyland, Esq. and  
Edward K. DeHope, Esq., for Signal Resco**

**Francis E. Delany, Jr., Esq., for Public Service Electric & Gas Company**

**Carella, Byrne, Bain & Gilfillian, by Peter G. Stewart, Esq., and  
John C. Gilfillian, Esq., for Browning-Ferris Industries**

**Berry, Kagan, Privitera & Sahradek, by John C. Sahradek, Esq.,  
for the County of Ocean**

**E. Allen Nickerson, Esq., for the Camden County Division of Solid Waste  
Management**

**Rosen, Gelman & Weiss, by James H. Laskey, Esq., for Kinsley Landfill**

**Kirsten, Friedman & Cherin, by Dennis C. Linken, Esq., and John Enright, Esq.,  
for Jersey Central Power & Light Company**

**Theodore A. Schwartz, Esq., for Ocean County Landfill**

**Donald D. Phillips, Esq., for Waste to Energy, Inc.**

**Lowenstein, Sandler, Brochin, Kohl, Fisher & Boylan, by  
Keith Ansbacher, Esq., for the County of Essex**

BY THE BOARD:

The Board wishes to make clear that the purpose of this proceeding and the Order which follows is to encourage expeditious resource recovery development by establishing a favorable regulatory climate for private investment in such ventures, which will at the same time insure safe, adequate and proper service at just and reasonable rates. In this vein, it should be noted that the manner in which this Board will exercise its jurisdiction over such facilities will be governed both by the statutory constraints which delineate the extent of its regulatory control over solid waste disposition as well as the individual needs of solid waste management districts. These needs can only be assessed after scrutinization of individual applications under N.J.S.A. 48:13A-1 et seq., on a case-by-case basis. Thus, in regulating resource recovery facilities this Board will be governed by the conviction that there exists a compelling need for it to remain flexible so as to retain the capability to address the diverse concerns that most surely will arise as individual applications are filed. Accordingly, the recommendations set forth herein are to be construed as guidelines as this Board cannot possibly anticipate all such concerns at this time.

In order to insure that all views of those potentially affected by waste to energy development were presented in this proceeding, the participation of responsible State and local government entities, the investment community, entrepreneurs of successful resource recovery projects in other jurisdictions, representatives of New Jersey's electric public utilities, and representatives of solid waste collectors operating in this State was solicited and encouraged by the Board. The positions of a number of the eighty-three participants, together with testimony adduced at five evidentiary hearings held concurrently with a number of informal meetings, comprise the voluminous record of this proceeding upon which this Order is based. The Board acknowledges with appreciation the time and effort expended by those who participated in this proceeding and stresses the need for continuing cooperation by all responsible individuals and entities if resource recovery projects are to be successfully developed in this State pursuant to the legislature's mandate.

On March 23, 1983, a preliminary meeting was held at the Board's offices whereat a procedural mechanism was established through which informational evidence could be presented to the Board by those interested in the development of resource recovery in this State. It was determined that participation in and dissemination of information through this proceeding would be enhanced by its bifurcation into a phase dealing with the franchising of resource recovery projects (waste flow) and a phase dealing with tariff design procedures and mechanisms. The Board will address each phase of this proceeding and the issues developed by the parties therein individually.

#### JURISDICTION

The contemporaneous enactment of the Solid Waste Management Act (L. 1970, c. 39, as amended by L. 1975, c. 326; N.J.S.A. 13:1E-1 et seq.) and the Solid Waste Utility Control Act of 1970 (L. 1970, c. 40, as amended by L. 1975, c. 326; N.J.S.A. 48:13A-1 et seq.) evidenced the legislature's concern over the manner in which collection, disposal and utilization of solid waste generated within this State was affecting the health, safety and welfare of its citizenry, N.J.S.A. 13:1E-2a, and constituted an attempt to alleviate this concern through the establishment of a systematic and integrated approach to solid waste disposition. Concurrent jurisdiction and responsibility for implementation of the legislative scheme embodied in the foregoing Acts was delegated by the legislature to the Department of Environmental Protection (Department or DEP) and the Board of Public Utilities (Board or BPU).

Pursuant thereto, the Department was vested with broad planning powers and responsibilities and hence authorized to coordinate solid waste management planning at local, regional and State levels. The exercise of these responsibilities in conjunction with DEP's other plenary powers has given the Department pervasive control over environmental aspects of solid waste collection and disposal in accordance with legislative design. The legislature's intent that the Board have equally broad regulatory powers over economic aspects of solid waste disposition was manifested by its designation of solid

waste disposal facilities as public utilities. N.J.S.A. 13:1E-27. As recognized by the legislature, central to the successful implementation of this systematic and integrated approach, is the rapid development of environmentally secure and economically viable resource recovery systems in this State. N.J.S.A. 13:1E-2(7). The purpose of the instant generic proceeding is to explore the means through which this legislative mandate can be expediently accomplished.

#### POLICY CONSIDERATIONS

Development of a Board policy on resource recovery must be prefaced with a reiteration of the Board's fundamental regulatory responsibilities. These responsibilities have evolved over time and have been recognized as the sine qua non of utility regulation. In general terms, they are to protect the public interest. More specifically, they are the protection of ratepayers' interests. There are three major elements of ratepayer protection:

- (1) The responsibility to assure ratepayers that utilities will provide safe, adequate and proper service at the lowest reasonable cost. N.J.S.A. 48:2-21, 48:2-23.
- (2) The responsibility to establish a regulatory environment in which utilities can attract capital at a reasonable cost, and have an opportunity to realize Board allowed returns on investment. FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944); Public Service Coordinated Transport v. State, 5 N.J. 196 (1950).
- (3) The responsibility to establish surveillance and auditing procedures to assure ratepayers that utilities are exerting all efforts to control costs and efficiently manage their firms. N.J.S.A. 48:2-13.

These responsibilities are relevant, with equal emphasis, to the regulation of resource recovery facilities. Deviation from a commitment to meet these responsibilities would be unacceptable. The Board has conducted this generic proceeding to explore innovative regulatory policies and develop a positive regulatory attitude toward the rational expansion of resource recovery facilities. Regardless of the ultimate details of our regulatory policy, our commitment to the protection of ratepayers is unchanged.

This generic proceeding has produced numerous complex technological, financial, legal, and economic questions that should be addressed in a thoughtful analytical framework. What are these questions, how do they interrelate and how can the answers be utilized to structure a comprehensive regulatory policy for resource recovery facilities?

The following areas are critical to the development of a policy on resource recovery:

- (1) Allocation of waste flows to competing facilities, i.e., landfills and resource recovery facilities.

This area involves the analysis of three interrelated regulatory tools: franchising policy, waste flow orders, and rate averaging. All parties to this proceeding recognize that waste flows are the very life blood of this emerging industry. Absent a well-defined institutional arrangement for assuring waste flows, it is probable that private capital will not be available to fund these projects.

- (2) Economic regulations: revenue requirements.

Assuming for the moment that adequate waste flows are assured to a resource recovery facility, what kind of economic regulation is best suited to stimulate development and continue the Board's commitment to protecting ratepayers' interests? Under

consideration are the traditional rate base/rate of return regulatory schemes (with variations), long-term contracts, or combinations of techniques. The primary choice is between the costs/benefits of ongoing revenue requirement review (i.e., rate cases) versus long-term agreements.

(3) Economic regulation: tariff design.

The financial viability of a resource recovery facility depends on the cash flows generated from the transformation of waste to energy. Waste flows can lead to three sources of cash flows: (a) disposal tipping fees, (b) sales of electric energy, and (c) sales of metals and other recyclable materials. The analytical problems in this area relate to the choice between cost based rate setting and principles which allow for recognition of policy goals in rate setting (e.g., rate averaging).

From the Board's perspective there are a number of objectives or indexes which are relevant to evaluating competing regulatory environments. These are:

- (1) Avoidance of "rate shock" for users of landfills and resource recovery facilities.
- (2) Relative efficiencies in getting resource recovery facilities sited, licensed, and financed.
- (3) Adaptability of regulatory environment to new technologies.
- (4) Adaptability of regulatory environment to extraordinary events such as plant abandonment or potential bankruptcy.

There are trade-offs between risk reducing regulatory guarantees and ratepayer protection. Risk abatement (e.g., waste flow guarantees or assured electric sales, etc.) by either legislation or Board Order must be effectively factored into an overall risk assessment for the protection of the ratepayer.

#### WASTE FLOWS

##### Franchising

A review of the record reveals unanimity of opinion over the necessity that waste to energy facilities have an adequate flow of solid waste which will provide each facility with adequate revenue streams. Indeed, without a guarantee of sufficient quantities of processible solid waste, resource recovery facilities would find it difficult to generate sufficient income to satisfy debt service requirements and meet ongoing operation and maintenance expenses. It is clear, therefore, that successful resource recovery development is critically dependent upon institutional mechanisms that assure each such facility an adequate flow of processible waste throughout the duration of its financing.

The flow of waste to disposal facilities in this State has heretofore been effected through the joint waste flow orders of the BPU and DEP. While this mechanism provides a means through which the Board and the Department can direct solid waste to operational resource recovery facilities, the record reveals that some of the participants to this proceeding are desirous of a more substantial assurance that sufficient quantities of waste will be directed to such facilities once they are constructed. The Board is of the opinion, as are the majority of the parties, that its exercise of the franchising authority vested in it by N.J.S.A. 48:13A-5, in conjunction with the Board's other plenary powers of enforcement and waste flow direction, will provide such an assurance. As the manner in which this authority is exercised will be contingent upon the diverse needs of each respective applicant after such needs are quantified by analysis on a case-by-case basis, it is essential that the Board maintain the flexibility necessary to address such individual needs. We believe that N.J.S.A. 48:13A-5 permits us to do so.

N.J.S.A. 48:13A-5, as it relates to disposal facilities, provides in pertinent part that:

The Board ... shall, after hearing, by order in writing, when it finds that the public interest requires, designate ... any solid waste management district as a franchise area to be served by one or more persons engaged in solid waste disposal at rates and charges published in tariffs or contracts accepted for filing by the Board....

In construing the import of the foregoing statute, the Supreme Court has observed that:

The PUC unquestionably has the authority under N.J.S.A. 48:13A-5 to allocate franchise areas to solid waste disposal and collection utilities. In Re Application of Saddle River, 71 N.J. 14, 31 (1976),

and that:

If specific resource recovery plants or other collectors or disposal facilities believe they need a franchise grant to assure economic survival, they should apply to the BPU on a case-by-case basis. A.A. Mastrangelo, Inc. v. Department of Environmental Protection, 90 N.J. 666, 686 (1982).

Thus, we construe N.J.S.A. 48:13A-5 as empowering the Board to both designate any solid waste management district as a franchise disposal area and as enabling the BPU to confer individual franchises upon solid waste disposal facilities operating within such disposal areas. Under this construction, the degree of participation of individual solid waste management districts in the franchising process will be left to their discretion. Outlined herein are two of many ways through which such discretion might be exercised.

A solid waste management district or county that decides to fully participate in the franchise process could first apply to the Board in a separate proceeding for designation of its solid waste management district as a franchise disposal area.<sup>1/</sup> Thereafter, a suitable owner/operator who could ultimately be the recipient of franchise privileges and conditions should apply to the Board for the same. Under this scenario, the solid waste management district, as the primary planning entity within its district, would support or oppose a franchise petition in the event the owner/operator were to seek a franchise. The Board believes that ideally, applications for designation of franchise disposal areas and applications for franchises should be considered simultaneously. The Board recognizes that in certain instances it may be necessary to bifurcate the process, thus designating a solid waste management district as a franchise disposal area without simultaneously designating a franchise. It must be emphasized, however, that the mere designation of a franchise disposal area, in our view, does not in and of itself confer any franchise privileges or responsibilities upon any existing facilities.

A second, but by no means exclusive alternative to the foregoing approach, would permit a private company which ultimately will own and operate the facility, to apply directly to the Board for a franchise.<sup>2/</sup> Under this approach the potential owner/operator would trigger the mechanisms for requisite approvals by petitioning the Board for a certificate of public convenience and necessity pursuant to N.J.S.A. 48:13A-6, and, if it so desires, for a franchise under N.J.S.A. 48:13A-5. The Board will not grant a franchise until the:

- 
- 1/ This is the approach utilized by Essex County whose Solid Waste Management District was designated a franchise disposal area by Decision and Order of this Board dated July 22, 1983, in Docket Number 827-650. Camden County has filed a similar petition which is being considered by the Board in Docket Number 839-760.
  - 2/ This approach is under consideration by Middlesex County. See P-14, Testimony of Signal Resco, at 3-5, 5/31/83.

...franchise area for ... solid waste disposal conforms to the solid waste management plan of the solid waste management district in which the franchise area is to be located, as such plan shall have been approved by the Department of Environmental Protection. N.J.S.A. 48:13A-5 (Emphasis supplied).

Nor will it certificate an owner/operator:

...until the proposed ... disposal system has been registered with and approved by the State Department of Environmental Protection as provided by law, N.J.S.A. 48:13A-6. (Emphasis supplied)

Thus, absent previous DEP approval, the filing of either request with the Board will necessitate prior or simultaneous filings with DEP as to the system's conformance with the district plan. Department approval of the proposed facility's inclusion in the solid waste management plan of the affected district is necessary since Board approval may not contravene such plan.

Upon resolution of the threshold issue of whether the proposed system conforms to the applicable district plan, both the Board and the Department will be in a position to then conduct proceedings wherein the merits of individual applications are considered. It is anticipated that through these proceedings, as well as through amendment of solid waste management plans, individual districts or developers will be provided a forum within which to ensure that their economic and environmental concerns are addressed and accommodated. Under the second approach, however, individual districts will place the burden of going forward upon the owner/operator they have selected.

The plethora of variations to either of the above approaches serve to underscore this Board's belief that individual applications under N.J.S.A. 48:13A-1 et. seq. may, and must be tailored to the individual needs of each respective solid waste management district and the owner/operators which will provide service therein. Petitions will thus be scrutinized on a case-by-case basis, given the obvious legislative intentment that the Board, the DEP and individual districts have the latitude to tailor such applications to the varying needs of the respective solid waste management districts. In determining such needs, individual districts should work with the Board staff to develop their proposed plans.

#### Waste Flows: Rate Averaging

Resource recovery technology is now characterized by capitalization, operation, and maintenance costs in excess of the cost reflected in current landfill tipping fees. The differences between landfill rates and resource recovery rates will act as a serious disincentive to the flow of wastes to these facilities. In order to reduce these disincentives and reinforce compliance with waste flow orders, regulators can employ a rate averaging concept in the relevant solid waste market.

Under a rate averaging scheme, the cost-based tipping fees for all waste disposal facilities within a district or series of districts are averaged. Municipalities and haulers which use landfill facilities whose disposal fees are below the average fee will pay the average. The excess these disposers pay over the cost-based tipping fee will serve as a subsidy to resource recovery facilities which require tipping fees above the average, but only collect the average. As a result, all users of landfills or resource recovery facilities in a given area will pay the same tipping fee regardless of where they dump. Hence, there will be no apparent economic incentive to avoid using a resource recovery facility due to a higher tipping fee.



This Board has approved the adoption of a uniform system of rate averaging by the Hackensack Meadowlands Development Commission, which operates a solid waste baling facility. In the Matter of the HMDC Uniform System of Rate Averaging, Docket No. 814-429, 7/12/82. Implementation of similar rate averaging schemes may be desirable in districts which are integrating resource recovery into their solid waste master plans. This Board will encourage such efforts by the respective solid waste management districts since we believe such schemes to be equitable, with concomitant benefits resulting from reduced rates for solid waste disposition.

Moreover, without a system of rate averaging, customers residing in areas designated as being within a facility's franchise could, based solely on their location, be forced to pay higher tipping fees. In addition, all residents within a district, whether utilizing a resource recovery facility or not, will be accruing benefits from the operation of said facility. Diversion of a portion of a district's waste flow to a resource recovery plant will effectively prolong the operational period of surrounding landfills, without significantly contributing to the dilemma of land scarcity within a district. If fees were to be set individually based on each disposal facility's cost base, residents disposing in landfills might, by virtue of the operation of a resource recovery plant, have access to low-cost waste disposal over a long period of time at the expense of the resource recovery disposers. Hence, depending upon the individual needs of each respective solid waste district or districts, it may be appropriate to establish a uniform system through which the costs associated with all disposal facilities within the same are allocated evenly to all ratepayers.

We wish to emphasize that the Board will use both its franchising authority and its ability to rate average to the maximum extent practicable to insure an adequate waste flow to resource recovery facilities, thereby contributing to their economic viability.

#### ECONOMIC REGULATION

The second phase of this proceeding, dealing with tariff design procedures and regulation mechanisms, produced a dichotomy of opinion. While we have determined that the above concern for proper waste-flow direction should more appropriately be resolved on a case-by-case basis, the Board believes that the divergent positions ascribed to by the participants in the second phase require resolution in this opinion. At the same time, however, this Board does not wish to foreclose the filing of petitions that may vary in one way or another from its recommendations herein. The Board again reiterates its conviction that it will be necessary to maintain flexibility so as to encourage resource recovery implementation in this State.

For purposes of brevity, the positions of the parties shall be succinctly summarized. The Signal Resco Company has taken the position that the Board is mandated by statute and judicial construction thereof to employ traditional rate base, rate of return techniques in the rate regulation of resource recovery facilities once they come on line. This position is endorsed by the Public Advocate. Signal Resco also maintains that such regulation will not hinder private investment in resource recovery in this State and that it may, in fact, enhance it. This assertion has been supported by at least one major investment banking firm, Lazard Freres & Co.

Browning Ferris Industries (BFI), supported by the DEP and a number of financial institutions, maintains that Board regulation of resource recovery facilities on a rate base, rate of return basis will stifle private investment in resource recovery development.<sup>3/</sup> BFI suggests alternatively that the Board permit the filing of service contracts between the facility and those that would dispose of waste, reviewing the same under a standard of overall fairness, on a one time basis. Thereafter, the Board would have no regulatory control over or responsibility for the operation of the facility or the conduct of the vendor.

N.J.S.A. 48:2-21.2 provides in pertinent part that:

In arriving at any determination as to the justness or reasonableness of any existing rate, fare or charge or in prescribing a just and reasonable rate, fare or charge, the board shall not be bound:

1. To find a rate base, if it determines that

...

(c) the product or service is a new offering and not covered by an existing rate, fare or charge approved by the board.

When the board shall prescribe a rate, fare or charge without finding a rate base, it shall, in its determination, make a finding of the facts on the basis of which it prescribed such rate, fare or charge. (Emphasis supplied)

Similarly, pursuant to N.J.A.C. 14:3-9.6 public utilities are permitted to enter into contracts with customers for the sale of services at rates differing from those set forth in tariffs on file with the Board provided copies of such contracts are filed not less than thirty (30) days prior to their effective date (See also In Re Application of Saddle River, supra., at 22-23, 30-33). Such contracts are subject to Board review and may be modified at any time in the public interest. Finally, N.J.S.A. 48:13A-5 permits franchise designation by the Board, provided persons engaged in solid waste disposal do so at:

...rates and charges published in tariffs or contracts accepted for filing by the board ... (Emphasis supplied).

- 
- 3/ This position is premised upon BFI's opinion that rate base, rate of return regulation will result in substantial negative tax consequences which will discourage private investment. Specifically, BFI is concerned that such regulation will cause a private investor to lose energy tax credits, and will preclude accelerated depreciation.

BFI contends that it will be unable to avail itself of the energy tax credit if investment in the facility is treated as investment in property considered "public utility property" where such property is (a) used for the sale of electric energy; and (b) rates for the sale of electricity are established using a traditional rate of return formula.

The Board believes that for tax purposes resource recovery facilities will be considered as being primarily dedicated to solid waste disposition and that the electricity generated by such disposition will be considered a by-product thereof. More importantly this Board has established that rates for the sale of electricity to electric utilities produced by cogenerators will not be set on a rate base, rate of return basis but, as discussed more fully hereinbelow, pursuant to standards enunciated by the Board under guidelines of the Public Utilities Regulatory Policy Act (PURPA).

Similarly, where applicable, this Board has, and will continue to permit the normalization of depreciation.

Notwithstanding the above, we are of the opinion that resource recovery facilities will be required to submit to rate base, rate of return regulation. Therefore, the Public Advocate's interpretation of the law as it regards this issue is correct in that:

currently Title 48 generally and cases interpreting it, require rate base/rate of return findings to be made after plenary proceedings in order to determine just and reasonable rates. See Re Revision of Rate by Redi-Flo Corp., 76 N.J. 21 (1978); In re Intrastate Industrial Sand Rates, 66 N.J. 12 (1974); Public Service Coordinated Transport v. State, supra. (Position Paper on Behalf of the Public Advocate, BPU Docket No. 833-236, 9/19/83, at 10).

Indeed, we believe that such rate treatment is not only required by law but, more importantly that it will promote resource recovery development and, at the same time, protect the ratepayer.

It is the Board's opinion, therefore, that we are required by existing law to fix just and reasonable rates for resource recovery facilities by determining the fair value of utility property (rate base), examining utility expenses and fixing a fair rate of return to investors commensurate with the risks associated with their investment. Public Service Coordinated Transport, supra., at 216. We are equally convinced that this Board is empowered to employ such innovative rate-making techniques as are necessary to address the critical and unusual problems that assuredly will arise as this State moves into resource recovery implementation. In the matter of the Petition of Jersey Central Power & Light Co., 85 N.J. 520, 532 (1981). Here follows some, but not all of, the innovative techniques that we believe are within our power to employ in conjunction with traditional regulatory tools.

#### Revenue Requirements

The revenue requirement for tipping fees, under traditional rate base, rate of return regulation, would be obtained by calculating the difference between the total revenue requirement, as determined by operation and maintenance costs, depreciation expense, taxes, and return on rate base, and revenues generated from "other" sources, such as electricity sales, and ferrous metal sales. The resultant figure, when divided by the total tonnage of waste received, would yield a cost-based tipping fee.

Analysis of the probable trends which such revenue requirement determinants will follow over the projected life of the facility indicates that a pricing policy based on traditional year-by-year cost of service standards may be inappropriate. Tipping fees in the initial year of operation would have to generate revenues to pay a return on the full value of facility investment. Because the initial capital investment in a resource recovery facility is quite substantial, a severe rate impact, relative to present landfill tipping fees, would undoubtedly result. Unlike traditional utilities, resource recovery facility revenues are generated from the sales of the process by-products, electricity and ferrous metals, which are expected to rise over time and thus provide a mechanism through which the rising costs of operation and maintenance can be offset.

It clearly would not be prudent to implement a pricing scheme which calls for initial rates greatly in excess of those charged for the alternative service, landfilling, with rates dropping in the future at the same time the economic value of that service was increasing. Not only is the inherent rate shock of such a policy undesirable, but it would create a situation whereby decreasing prices would be paid for a service whose value could be increasing. Accordingly, while the Board will not dictate the specific rate treatment to be accorded resource recovery facilities in this Decision and Order, the Board believes that a framework for tipping fee rates could be based upon the use of long-term levelization of costs. Such a pricing policy could facilitate a more equitable distribution of revenue requirements over the period such a policy is in effect. Included in this levelization process would be a recognition of expected capital outlays over the period being considered. Although each facility is to be treated as an individual utility,

pursuant to N.J.S.A. 13:1E-27, these capital expenditures would, unlike traditional utilities, only take the form of replacement or modification of existing facility components. Plant capacity is expected to remain constant. It therefore would be desirable to levelize rates over the economic life of the facility, thus providing revenue stability for prospective investors.

The testimony of Signal Resco supports the use of nominal levelization in calculating tipping fees. With this method the tipping fee revenue requirements are calculated exactly as in the traditional method, with one exception. An inflation factor is applied to the value of each component cost or revenue item and revenue requirements are calculated over the useful life of the plant. The present value of the revenue requirement in each year is then calculated. The sum of these is the present value of revenue requirements over the life of the plant. Nominal levelization entails the calculation of equal annual "payments" over the life of the plant, much like mortgage payments. The sum of the present values of these "payments" has the same present value as the total revenue requirements over the life of the plant. As related above, since the DEP and the Board are in a position to essentially guarantee a relatively constant, predictable waste flow, the division of the levelized annual revenue requirement by the annual tonnage of waste expected will yield a tipping fee which is constant over the life of the facility.

Since the tipping fee under a nominal levelizing methodology would be the same each year in current dollars, the net effect would be that ratepayers in the out years will be paying increasingly less in constant, or real, dollars for the same service. In addition, although this tipping fee would be lower than the initial fee under traditional rate base calculation, it would still be significant cause for rate shock to consumers.

In order to properly distribute the pricing burden to all ratepayers, both present and future, the Board is of the opinion that the real levelization of prices must be considered in our evaluation of options. This method is intended to more closely track the scarcity of solid waste disposal.

As with nominal levelization, the calculation begins with the present value of the revenue requirement over the life of the plant. Real levelization entails the calculation of annual payments which increase each year at the rate of inflation. As with nominal levelization, the sum of the present values of these annual payments has the same present value as the total revenue requirement over the life of the plant. Incorporation of an annual inflation escalator into the tipping fee will allow for the initial fee to be set at a level significantly lower than that necessitated by a nominal levelizing structure.

The net result of real price levelizing is equivalent to the nominal levelizing procedure, that is, at maturity the entire investment principal will have been paid off, while providing investors with the agreed upon return. However, while the nominally levelized tariffs provide for equal current dollar tipping fees each year, real levelization calls for the rates to increase each year in approximate concurrence with the inflation rate, thus providing a mechanism whereby all ratepayers, both present and future, will pay, to the extent practicable, the same constant dollar values for waste disposal. This would be appropriate since the value of the service provided remains constant, or may in fact, actually be increasing as scarcity of the alternative, landfill disposal, becomes a greater problem.

Further, this rate method for a single resource recovery facility can be combined with the rate averaging concept for the solid waste disposal sites in a district, or a series of districts, to provide for equitable rate treatment for all those utilizing said facilities.

#### Small Power Production

Pursuant to section 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA) (16 U.S.C.A. 8324a-3), the Board has established guidelines governing the pricing policy of electricity sales by resource recovery facilities and other qualifying facilities (QF). Decision and Order, 10/14/81; Order of Clarification, 12/7/83, Docket No. 8010-687.

Pursuant thereto, the Board has set 110% of the PJM billing rate as the minimum avoided energy cost and has established a mechanism for the calculation of avoided capacity cost, Id. In that Order we opined that:

It is our firm belief ... that the negotiation of long term contracts that are tailored to the specific characteristics of a particular QF will maximize benefits to the QF as well as to the affected utility and its ratepayers. Id., at 2.

The Board remains convinced that proper management of resource recovery facilities will be best served by long-term contractual arrangements which establish a price for the sale of electricity for the term of the financing of the facility. Contract provisions can provide for stability in the revenue stream of electric sales, improve the financial viability of the project, serve to attract investment therein and reduce rate impact. In short, individual contracts can be developed to meet the unique cash flow needs of individual resource recovery facilities. Furthermore, an accurate appraisal of the total revenues generated by electricity sales over the lifetime of the contract will facilitate calculation of, as well as reduce, total revenue requirements of the facility. The Board and its staff are prepared to assist in these negotiations where needed.

Inasmuch as electricity policy is a contributing determinant in calculating a proper tipping fee levelization, this Board recommends a contract life equal in duration to the period levelized prices are in effect, that is, the economic life of the facility.

#### Levelized Adjustment Clause

There is, of course, substantial uncertainty implicit in the long-term levelization process herein discussed. Calculation of operation and maintenance costs for any given year could be based on the estimated effect of inflation. Similarly, projections for revenues generated from electricity and ferrous metal sales are predicated on the expectation of a guaranteed volume of waste flow.

The Board recognizes that variations from predicted levels of expense and revenue generation may occur, given the length of time encompassed by tipping fee levelization. We believe it may be appropriate then, to include an adjustment clause in the tipping fee, thus providing a mechanism through which any significant shortfalls or excesses can be recovered without significantly compromising the integrity of the levelized pricing structure. Similarly, this adjustment charge will serve to reimburse ratepayers in the event that excess revenues exist.

The levelized adjustment charge should only be employed to deal with "uncontrollable" circumstances. These could include extraordinary unexpected price increases in materials needed for operation and maintenance activities. Also, shortfalls in revenues generated from tipping fees and sales of electricity and ferrous metals, caused by a lengthy facility shutdown, or perhaps a trash hauler's strike, could be considered uncontrollable, and thus eligible for recovery in an adjustment charge. In accordance with Redi-Flo., supra., said adjustment proceedings must be tied to a base rate docket.

The Board will not, however, consider inclusion of unanticipated capital expenditures in any levelized adjustment charges. Petitions for the recovery of such costs, which may be necessitated by environmental requirements, technological improvements, and other unanticipated costs, will have to be filed with the Board as a base rate petition. Such petitions should be filed prior to incurrence of said cost, unless emergency circumstances dictate otherwise. In these circumstances the Board will make use of any appropriate regulatory mechanism, including but not limited to its authority under N.J.S.A. 48:2-21.1 (adjustment of rates during pendency of hearing), to insure the expeditious recovery of such costs.

Use of an adjustment clause of this type will surely reduce the level of uncertainty of cost recovery of a resource recovery investment. Hence, a levelized rate in conjunction with an adjustment clause will both reduce risk to investors (and their required returns), as well as reduce ratepayer cost, relative to either a long term contract

or standard rate base/rate of return regulation. The dual mechanisms should therefore be viewed as a signal to ratepayer and investor alike that their respective costs and risks will be effectively minimized and balanced by the Board.

#### CONCLUSION

We believe that the Board, as evidenced by the above, has sufficient regulatory tools to accomplish the mandate of the legislature. Through the use of traditional utility franchising concepts, and rate averaging schemes the financial integrity of resource recovery facilities can be assured by proper waste flow direction. Also, while it is clear that the hereinabove recommended ratemaking mechanisms are outgrowths of traditional approaches to economic utility regulation, they are, in fact, tailored and modified to meet the private industry needs of these new facilities while at the same time insuring protection of communities and ratepayers. They are, we believe, indicative of the Board's conviction that to accomplish this mandate our approach to resource recovery must be innovative, aggressive and reflect a firm commitment to do what is needed to insure its successful implementation. At the same time, the Board is not omniscient and it must be recognized that alternatives to those proposed herein exist and may be appropriate to explore.

In sum, the development of resource recovery in this State is of vital importance, in that this technology can both assure the adequate and safe disposal of solid waste over the long term, and create additional electric capacity. Because of this unique duality of benefits, the Board is willing to use less traditional regulatory mechanisms which, previously and for all other utility industries under our jurisdiction, are not necessary or preferred. Our State's landfill dilemma in and of itself calls for such measures. Moreover, these ratemaking mechanisms play a creative dual role in that they will not only promote resource recovery development, but also minimize the rate impact of the emerging industry on the New Jersey solid waste ratepayers.

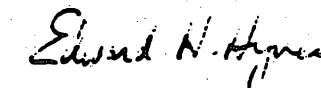
The long range effectiveness of resource recovery, to a large extent, will depend on the stimulation and commitment made to this development of the technology in the formative years.

DATED: February 23, 1984

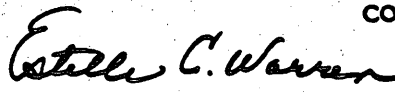
BOARD OF PUBLIC UTILITIES  
BY:

  
BARBARA A. CURRAN  
PRESIDENT

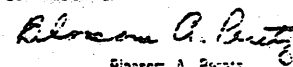
  
GEORGE H. BARBOUR  
COMMISSIONER

  
EDWARD H. HYNES  
COMMISSIONER

ATTEST:

  
ESTELLE C. WARREN  
ACTING SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utility Commissioners.

  
Blossom A. Paratz  
Secretary

# SMOKE



July 16, 1984

Hearing before Senator Dalton and the Senate Committee on  
Energy and the Environment

submitted by Madelyn Hoffman, coordinator of SMOKE

(201) 589-4668

## WHAT WE PROPOSE:

Enclosed are copies of testimony submitted to Assemblyman Harry McEnroe concerning A-1778. The testimony indicates the reasons why we could not support his bill. Since that testimony was submitted, several amendments have been made to Assemblyman McEnroe's bill. However, these amendments do not address our concerns and we still do not support A-1778.

## We propose the following:

1. That instead of simply allowing for the possibility of recycling being one way of disposing of the garbage, the bill should mandate that of the money collected by the tax, at least 50% of it should go toward the implementation of recycling programs and the definitions should clearly state that recycling is not the same thing as incineration. If this were done, it is quite possible that within a short period of time we would see that incineration is not necessary.
2. That siting criteria must be mandated prior to any incinerator receiving a permit. This is a critical item because of the need to protect areas already suffering from air pollution and water pollution from the further pollution these incinerators will cause.
3. That "state of the art" air pollution controls are not enough to protect people from the air pollution expected from garbage incinerators. There must be standards, scientifically determine which indicate what a safe level of exposure to each of the chemicals will be.
4. The ash residue must be defined. In some states it has been defined as hazardous.

Statewide Movement Opposing Killer Environments

May 11, 1984

Assemblyman McEnroe  
12 Sloan Street  
South Orange, New Jersey 07079

Dear Assemblyman McEnroe:

Thank you for your recent invitation to Dr. James Hilbert of SMOKE to appear before a meeting of your County Government and Regional Authorities Committee, to speak on the issue of toxic air emissions expected from garbage incinerators. Because this meeting is scheduled for a week day morning, no one of our technical experts will be able to attend. So this letter will have to serve as SMOKE's comments on the indicated topic.

First of all, the toxic air emissions expected from these incinerators are one of the main reasons why we spoke out against A-1778 at the hearing held on April 19 in Newark. You have testimony from both Dr. James Hilbert and Dr. Stephen Stoldt from that hearing addressing the serious air pollution problems that will be created from garbage incinerators.

In summary, those problems include emissions of dioxins and dibenzofurans, among the most toxic chemicals known; heavy metals in an unprecedented variety and amount, including lead, cadmium, antimony, nickel, chromium, mercury and arsenic, implicated in all kinds of health problems. These chemicals are found on microparticulates which preferentially get through air pollution control equipment, disperse for miles and are easily breathed in and absorbed into the lungs. Many other emissions, including vinyl chloride and formaldehyde, both known carcinogens, are also expected from garbage incinerators.

It has been shown that even common pollutants (e.g. carbon monoxide and hydrochloric acid), are emitted in much higher amounts from garbage incinerators than from oil or coal fired burners. (according to DEP's own figures)

Both your committee and others, including the New Jersey Department of Environmental Protection are well aware of our concerns about the lack of regulations which exist to protect New Jersey residents from these new sources of pollution.

**\* Statewide Movement Opposing Killer Environments:**  
SMOKE Objective - an environmentally sound disposal of our municipal waste

2012



And yet, your bill (A-1776) still speaks of committing huge amounts of money to one technology (garbage incineration) only - unproven technology with many health and environmental risks that the DEP has shown it is not going to address.

However, we would like to make it clear that even if you attempt to address concerns about toxic air emissions, we still will not support your bill. The California Air Resources Board recently proposed the strictest air emission guidelines for incinerators in the country and still concluded that these guidelines will not guarantee safety.

Therefore, as we indicated to you on April 19 and to others on numerous occasions, it is SMOKE's position that the maximum amount of recycling should be achieved, before any other decisions are made. Marwan Sadat, from the DEP, at a recent gathering of the League of Women Voters admitted that it would be possible to recycle 55% of our waste. Others indicated that this has already been achieved in Woodbury, New Jersey and that certainly more was possible.

And what about incineration? Signal-Resco, in its environmental impact statement, admitted that only 63% of the waste stream could be incinerated. And yet you're talking about releasing millions of dollars to subsidize the construction of garbage incinerators, when recycling is safer, cheaper and conserves resources?

The only way this goal will be achieved is if money is appropriated for establishment of statewide mandatory recycling, for recycling industries, and markets for recycled goods. Garbage incineration is not recycling. At least of the money that is now appropriated or that would be appropriated for garbage burners, must be spent on recycling.

If we don't proceed that way we'll just be "throwing money" at a problem. We will be locked in to a polluting technology for up to 40 years.

We would also like to say that the issue of toxic air emissions is not one that should be addressed by your committee on County Government and Regional Authorities. Your committee is not equipped to address this problem. The issue of toxic air emissions is most appropriately handled by those committees in both the Senate and the Assembly whose main concern is environmental.

SMOKE urges those committees to convene to address this extremely important issue. Let's make this discussion an environmental one, not a political one. And, further, we strongly recommend that such hearings be held in the evening, not during the day. Our scientists and our members work during the day at their jobs and can not be available for daytime hearings. We are not municipal, county or state officials, or industry representatives who get paid for attending these hearings. Holding hearings on such important matters during the day shows an indifference to the voice of the community and makes investigation of this serious environmental issue totally for show and without meaning.

Thank you for giving us an opportunity to present these comments to you.

Sincerely,

(201) 451-4113 Madison Hoffman

James M. Hilbert, Jr.

Stephen H. Stitt, Ph.D.

: Peggy McNutt, Legislative Services  
all legislators

TESTIMONY OF JAMES HILBERT, PH.D., HEAD OF RESIST

Throughout the past few years of tight budgets in government, when expensive projects in military, educational, or social spending would be proposed, we have been told that problems are not solved by simply "throwing money at them". The bill we are discussing today (A1778) is a perfect example. The idea of committing funds to sound solid waste planning and management is appealing, but this bill commits huge amounts of money to one technology (garbage incineration) - an unproven technology with many health and environmental risks that the DEP has shown it is not prepared to deal with. This money will be used to build large scale incinerators for which there are no clear siting criteria and only a few outdated air quality regulations. Passage of this bill would mean that we are throwing money at the solid waste problem in hopes of a quick solution when the DEP and the counties have not done the basic homework and planning needed to provide a solid waste management plan which will protect the health and safety of the general public.

We detail some of the unique pollution problems of garbage incineration that this bill would be helping to spread:

**DIOXINS:** Dioxin emissions continue to be reported by scientists around the world when these garbage incinerators are examined. These chemicals are among the most harmful known.

The frequency of reports, and the amounts that are found, seem to be increasing over the time. Recently, for instance, Italian scientists found enough dioxins were emitted (on average) from each of 20 Italian incinerators to produce the same dose (according to scientists in the Netherlands) for over 200 million people. This dioxin came from incinerators which averaged 8 times smaller than the proposed "reduced-size" Morris Co. plant and 26 times smaller than the existing plant here in Newark. Scientists who have investigated incinerator emissions for toxicity have found them to have enormous toxic potential, not

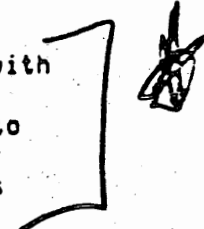
Just because of dioxins, but because of the combined effects of dioxins and the many other chemicals (e.g. dibenzofurans, formaldehyde, polycyclic hydrocarbons and others discussed below). Despite the grave risks, the DEP has given no indication that it will ever issue standards or exposure limits for dioxins, dibenzofurans or the other chemicals I've mentioned - and don't look to the EPA, because it doesn't have them either.

**HEAVY METALS:** Garbage incinerators emit an unprecedented variety and amount of heavy metals. Of these, there are several metals which are extremely toxic, even at low levels. These metals (e.g. lead, cadmium, antimony, nickel, chromium, mercury and arsenic) will likely have garbage incinerators as one of their prime, if not their major source, in New Jersey. Lead is a good example. It is a kidney and heart poison in very low levels, and researchers have found that levels of lead previously thought safe can damage children's brains and impair learning ability. A Star-Ledger article on March 26 puts the enormous health risks of heavy metal pollution from garbage incinerators in perspective - and shows what little the DEP is likely to do about that problem. According to that article, a major source of lead pollution emits 5 tons per year into our air, and the DEP is not likely to ensure the public's safety from these sources. Yet according to the DEP's own published figures, a garbage incinerator as large as the proposed "reduced-size" Morris Co. facility will emit 12 tons of lead a year, and the Essex facility 40 tons per year. Can we expect the DEP to protect us from so much lead, when it can't even regulate the current emissions? Still not addressed by the DEP are cadmium and the other extremely toxic heavy metals I've listed above - no guidelines, no regulations, but a lot of risks.

**PARTICULATES:** As has been repeatedly pointed out, the pollutants I have mentioned are mainly found on microscopic particles which preferentially escape pollution control equipment, disperse over great distances, and are easily

breathed into the lungs from which the poisons can very easily be absorbed into the body. The DEP's own figures indicate that particulate emissions are twice that of a comparable oil-fired boiler. Furthermore, a much greater fraction of the particulates emitted by a garbage incinerator are the more hazardous submicroparticulates. While other states are considering stringent submicroparticulate regulations, New Jersey's proposed guidelines neglect submicroparticulates altogether, and the proposed guidelines for total particulates are far less stringent than the "state-of-the-art" as proposed in California.

ACID GASES: Acid gas emissions will be substantial from garbage incinerators - over 2400 tons of sulfates and nitrogen oxides from the Newark plant alone are predicted by the DEP. The acid gas of chief concern, however, is hydrogen chloride (HCl) which, unlike the others, becomes a strong, corrosive acid immediately upon contacting moisture in the air. If you like acid rain, you'll love garbage incinerators. Federal regulations for a hazardous waste incinerator specify 99% removal of HCl. If a hazardous waste incinerator, with essentially more chlorine input than a garbage incinerator, can be expected to meet that level, why does the DEP propose a guideline that is ten times less stringent for garbage incinerators?



LANDFILLS: Incinerators are often sold as the means to eliminate landfills. They don't - up to 30% of what goes in must still be landfilled, most as incinerator ash. The DEP seems to believe that the most important factor in disposal of ash is the volume that it fills, not the hazard it presents. Incinerator ash puts all the toxic chemicals mentioned above into that smaller landfill volume. The ash is considered hazardous waste in California, and State Massachusetts testers have also concluded it should be classified as hazardous. As of now, the DEP has no policy for it. Perhaps it will require a hazardous waste disposal facility for the ash. However, those of us who have

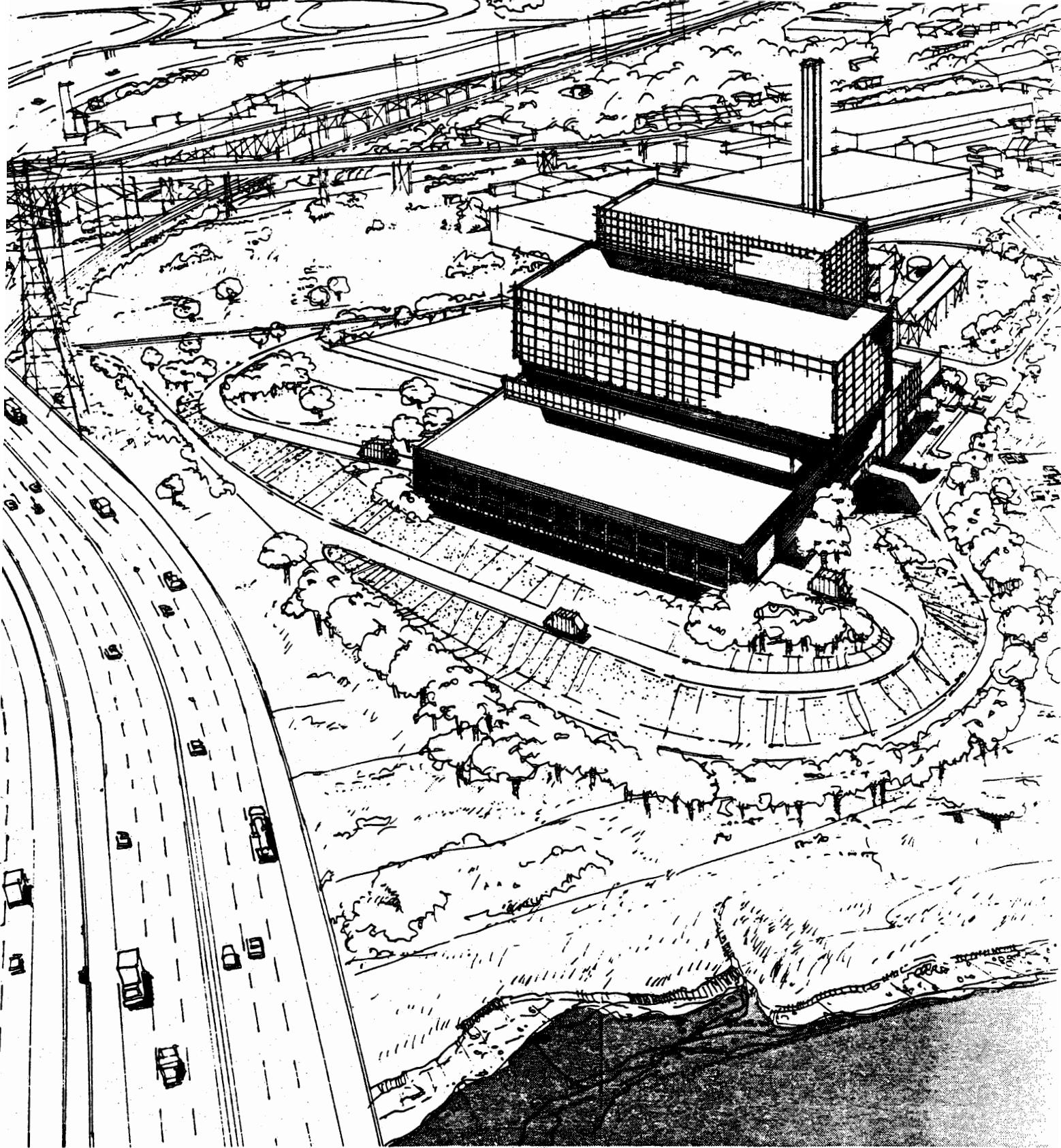
watched the siting process of hazardous waste facilities in the state unfold know what a difficult process that is, and how little we need a major new source of hazardous waste to make the problem worse.

**SITING:** As of now there are no clear siting criteria for these plants - no mechanism to prevent the placing of an incinerator in an improper environment. County freeholders (as in Morris) have said that they are looking to the DEP for leadership in siting, while the DEP is contending that it is not their responsibility. Yet the plants are still being sited. In Morris County, eight potential sites were chosen, and it appears closeness to energy users was the only criterion used. Two of these sites in the Picatinny Arsenal area are located directly over a Federally-designated Sole Source Aquifer that recharges the Rockaway River. The aquifer and the river are the sources of drinking water for hundreds of thousands of people. Another example of poor siting - placing the plant in Newark so close to such a densely populated area; one in which the highest level of dioxin contamination in the country is already located.

**IMPACT ON RECYCLING:** Recycling is true resource recovery; the recovering of materials with more energy saving than is potentially gained by burning the materials. Furthermore, recycling makes no threat to the environment. While this bill throws money at garbage incineration, there is no comparable funding for recycling. Funds for recycling would launch a statewide program with the capability of taking care of as much solid waste as incineration. The DEP has decided the future of recycling is limited; the decision is based only on the present situation, where there is a shortage of solid data on the potential of source separation. Certainly the DEP's announced 25% "ceiling" for the amount that can be recycled is an artificial one. Are recycling and incineration compatible? The people of Akron, Ohio might say no, since they are prohibited from recycling their newspapers so they may be incinerated. Before we are

locked in to incinerator technology, the State needs to thoroughly investigate and implement the maximum amount of recycling. We also need a commitment of manpower and economic resources to recycling which is of the same order of magnitude as proposed for incineration. This will insure that we reduce (if not totally eliminate) the amount of health-threatening technology that must be implemented. Last year, the Assembly Energy and Natural Resources committee reported that, if a proper amount of recycling were implemented, we would need at most 4 incinerators, not 20.

In summary, I would say approval of this bill is a signal to the DEP and county governments that the Assembly considers it great to build threatening plants without regulations, controls or siting criteria. You will be telling the DEP and counties to try to put one of these monsters in every county, when in fact, far fewer - perhaps none at all - would suffice, if proper attention were given to recycling. Approval of this bill would also give a signal to everyone across this state that you consider it alright to pay only lip service to recycling. I recommend that this bill be held until legislation is passed which gives recycling the highest priority in this state and adequately funds it, and until legislation is passed which mandates issuance of siting regulations, construction regulations, design regulations, and state-of-the-art air emission regulations for garbage incinerators. In short, I would recommend that you say "We're sorry Governor Kean and we're sorry Commissioner Hushey, but we cannot give so much money to a house in such poor order. We cannot throw money at just one so-called solution that has so many health and safety questions," and hold this legislation until we first have maximum recycling, sound planning and comprehensive regulations.



# Highlights Of Environmental And Community Impacts-Essex County Energy Recovery Facility November, 1983



## INTRODUCTION

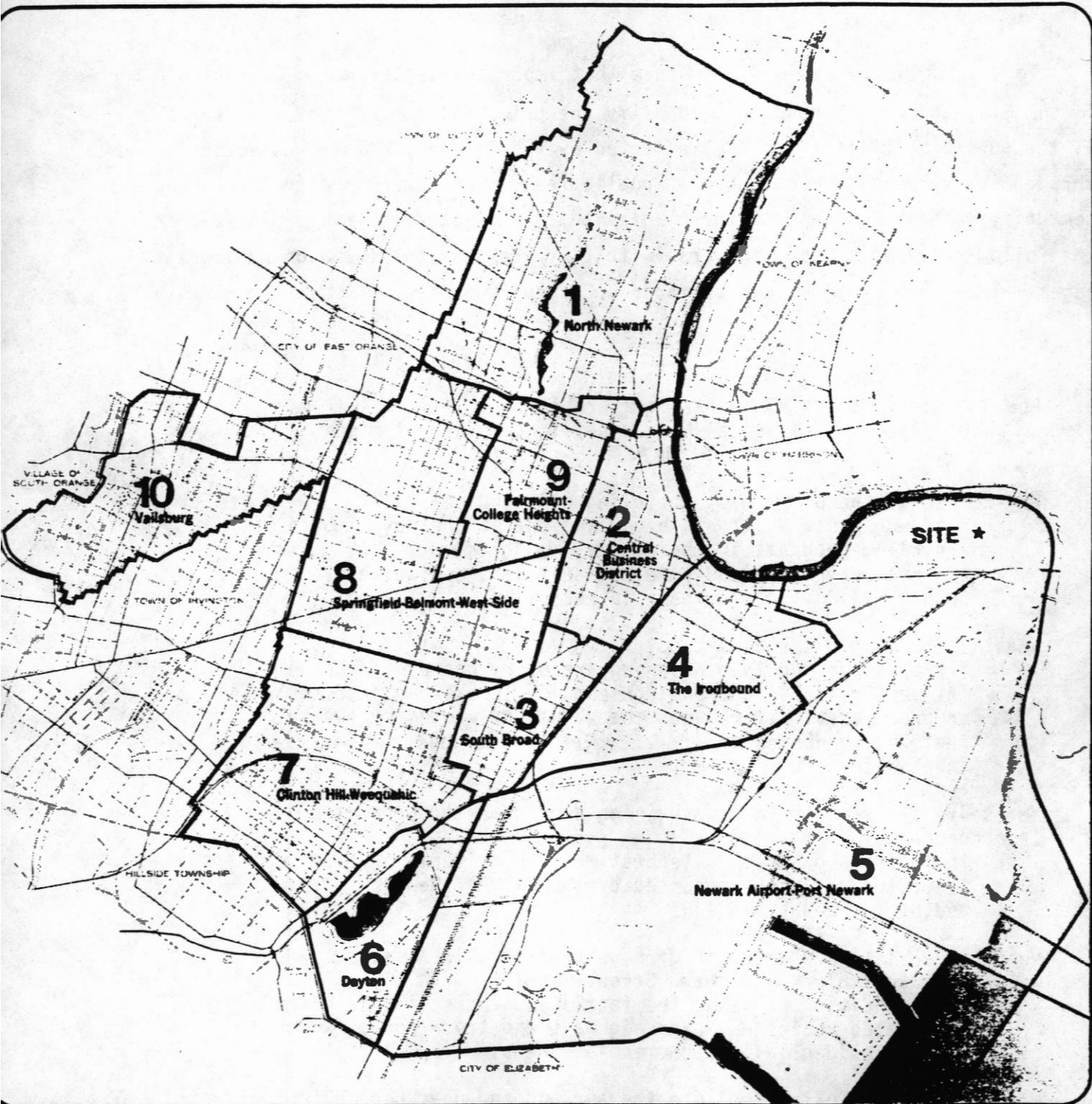
This document summarizes the major aspects of the Essex County Energy Recovery Facility including those contained in a 500 page draft Environmental Impact Statement (EIS) and four technical appendices. The EIS was jointly prepared by Essex County and the Port Authority of New York and New Jersey and submitted by Essex County to the New Jersey Department of Environmental Protection (DEP) for an energy recovery facility to be built at the eastern end of Newark. The facility, which can also be called a waste-to-energy plant or a resource recovery facility, is intended to convert up to 2,250 tons of refuse each day into steam, from which electricity will be generated.

Construction of the facility is the result of the New Jersey Solid Waste Management Act of 1975 which requires each county to develop and implement a plan for disposing of the wastes it generates, preferably through energy recovery and recycling. Essex County's Solid Waste Management Plan was developed over a three year period by County Staff in cooperation with the County Executive, the Board of Chosen Freeholders and the countywide Solid Waste Advisory Council, and was approved by the DEP in 1980.

The Essex County Plan has two major goals for 1987: 1) The ability to recycle at least 300 tons per day (tpd) of wastes, using a Materials Recovery Facility and urban buy-back centers, and 2) to burn an average of 1,800 tpd of waste in a water-wall furnace which will generate electrical energy for sale to Public Service Electric & Gas Company. The energy recovery facility being developed by the County and the Port Authority, is expected to cost \$260 million, and will be built and operated by a private company in conformance with all applicable City, County and State laws and regulations. The selected site, shown in Figure 1, is in the Newark Airport - Port Newark Planning Area between the New Jersey Turnpike and Blanchard Street along the Passaic River. Access will be from what is referred to as the PSE&G jughandle which connects Turnpike Exit 15E and Raymond Boulevard.

An EIS is required by the 1975 Solid Waste Management Act. Its essential elements are accurate, scientific analysis, expert agency comments, and public scrutiny. The EIS process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. The EIS was prepared by the staff of Essex County and the Port Authority (the co-developer of the project) and their technical consultants: Camp, Dresser & McKee, Woodward-Clyde, Konheim & Ketcham, and the RBA Group.

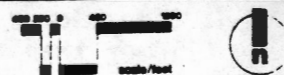




**Figure 1**  
**PLANNING AREA MAP**

# **Newark Master Plan 1978**

Mayer's Policy and Development Office



COOPERS & LYBRAND  
BARTON - ARCHMAN ASSOCIATES, INC.

To aid public review and to ensure that important issues would be included in the EIS, the County sought to identify the principal concerns of that segment of the public most likely to feel affected by the facility. This was accomplished through interviews and meetings with public leaders of Newark and the Ironbound, the community which is closest to the plant site. Their concerns are summarized in the following questions and answers, with full explanations found on subsequent pages. Those explanations can be found on pages indicated.

|  | Page |
|--|------|
| How serious is the garbage disposal problem?   | 5    |
| - No place will exist in New Jersey to dump all of Essex County's garbage after 1987.  |      |
| Why not solve the problem by recycling all garbage?  | 5    |
| - Although Essex County is beginning one of the most ambitious recycling programs in the country, all components of garbage are not recyclable and some residents and businesses in the County will not participate in recycling.  |      |
| What is the best disposal method?  | 6    |
| - The mass burning type of energy recovery has proven to be the most reliable and environmentally compatible process in an urban area. It reduces the volume of wastes by 90% so that only nonburnable, nonrecyclable materials and ash are landfilled.  |      |
| Why solve the problem in Newark in an area near the populated Ironbound area?  | 8    |
| - The Blanchard Street site best met the criteria of site selection analyses conducted by the City of Newark in 1975 and by the County in 1981.  |      |
| Won't a facility add a lot of garbage trucks to local streets?   | 14   |
| Will the trucks block Blanchard Street?  |      |
| - As a condition of using the facility, trucks will be given designated routes on major highways and truck routes which bypass residential and commercial areas.   |      |
| Won't the plant further pollute the air and endanger health?   | 19   |
| - The maximum increase in pollutants, including dioxin, is judged to be within levels which are established to protect the health of sensitive people. Due to prevailing wind direction and stack height, the area within a three mile radius of the facility least affected by stack emissions will be the Ironbound area, to the south and west of the Blanchard Street site. Compared to the two health based criteria for dioxin, the maximum ground level concentration of dioxin would be 12,000 times lower than the Netherlands standard and 30,000 times lower than the Ontario guideline and these concentrations will occur in uninhabited areas mostly east of the site. |      |

|   |      |
|---|------|
|   | Page |
| What kinds of waste will be disposed of? Will hazardous substances be in them?  | 30   |
| <ul style="list-style-type: none"> <li>- Only residential, commercial and nonhazardous industrial waste will be permitted. Measures will be enforced to discourage entry of illicit hazardous wastes. High temperatures in the furnace will destroy the small quantities which normally exist in refuse.</li> </ul> |      |
| How will the plant be operated? Who will see that it works properly?  | 32   |
| <ul style="list-style-type: none"> <li>- The facility will be operated by a private company under a contract to the Port Authority, with continued performance reviews by the County, the City and the State over the entire life of the facility.</li> </ul>   |      |
| Will the plant affect residential property values in the Ironbound?   | 32   |
| <ul style="list-style-type: none"> <li>- Energy recovery plants elsewhere in the United States and Europe have had no effect on the highly desirable residential communities adjacent to them.</li> </ul>   |      |
| Does the community benefit in any way?  | 33   |
| <ul style="list-style-type: none"> <li>- The "host community", the City of Newark, will receive substantial economic benefits. The allocation of these benefits will be further explored by local and county officials.</li> </ul>  |      |
| What happens next?  | 33   |
| <ul style="list-style-type: none"> <li>- The EIS will be the subject of public hearings conducted by the DEP who will ensure all concerns are considered. Needed mitigating measures will be taken.</li> </ul>  |      |

## HOW SERIOUS IS THE GARBAGE DISPOSAL PROBLEM?

Residents and businesses in Essex County generate approximately 2,250 tons of solid waste a day, the equivalent of 6 pounds per person. Each year this is enough to cover thirty acres to the height of a four story building. The density of development and the environmental sensitivity of much of the available land has left no suitable space within Essex County to landfill garbage. As a result, the County has been sending its refuse to landfills in Kearny in the Hackensack Meadowlands District.

The County, DEP and the Hackensack Meadowlands Development Commission (HMDC) are all parties to a consent judgment which requires the County to end the practice. Recently, the landfill west of the New Jersey Turnpike reached the same height as the elevated roadway, jeopardizing the Turnpike foundations and exceeding the ability of trucks to climb the increasingly steep slopes. The landfill was closed. A previously closed landfill east of the Turnpike has been opened temporarily to Essex County haulers until a permanent modern waste processing facility can be provided within the County. Court permission to use the Kearny landfill extends to July 31, 1987, and the HMDC has agreed to provide financial assistance to Essex County to speed the development of a waste processing facility in the County. Construction of the facility will take three years.

There are no disposal sites outside the County which will handle all of Essex County's garbage. Throughout New Jersey, existing landfills will soon be closed. Many are over groundwater deposits and have the potential to contaminate drinking water supplies. In addition, the decomposing refuse in landfills emits odors, noxious fumes, and dangerous gases. A study of a housing complex next to two landfills in Brooklyn, New York, found that residents who lived there the longest had the most illnesses associated with airborne contaminants. Smoke from underground fires can be seen continuously at an old landfill on the banks of the Hackensack River in Jersey City. Essex County's waste can be no longer be exported to be buried elsewhere.

## WHY NOT SOLVE THE PROBLEM BY RECYCLING ALL GARBAGE?

Essex County's recycling goals are among the most ambitious in the nation. At present, about 3% of the County's wastes are recycled. Based on a pioneering study, "The Integration of Energy and Material Recovery in the Essex County Solid Waste Management Program," (April, 1983), the County and the Port Authority reduced the original design of the energy recovery facility by 550 tons per day largely

in expectation of recycling 15% of materials which would otherwise have entered the general waste stream. To achieve the proposed 15% reduction, the County modified its Solid Waste Management Plan to increase recycling.

The Plan requires that newspaper, glass, tin, aluminum and bi-metal cans, corrugated cardboard, high-grade office paper, computer printouts and tab cards not be mixed with refuse which will be delivered to the energy recovery facility. Reliable nearby markets for these materials have been identified. A leaf composting facility is also planned. The savings to Essex County municipalities from a smaller energy recovery plant, lower collection and disposal charges and the revenues from the sale of recycled materials will offset the cost of building and operating twelve Countywide redemption centers, and a Materials Recovery Facility (MRF) to be located at the energy recovery site. The MRF will mechanically and manually sort clean recyclable materials from curbside recycling programs to make them suitable for new uses. Additional collection and public education costs to municipalities will be offset by state incentive grants under the New Jersey Recycling Act. Because recycling produces many benefits, the County will place no limit on its expansion. Practical limitations on the potential for the expansion of recycling are determined by the capacity of end-user markets and the percentage of the total residential and commercial population who will respond to local programs.

#### WHAT IS THE BEST DISPOSAL METHOD?

To determine the most reliable method of recovering energy from the remaining 85% of the County's municipal waste, the Port Authority systematically evaluated many solid waste to energy processes in a four stage analysis over nine years. The primary criteria were reliability, cost-effectiveness and environmental safety.

Based on its inspection of over fifty facilities in Europe and North America, actual plant operating records and in-depth analyses of technical, environmental and economic factors, six potential technologies were identified: mass burning, refuse-derived-fuel (RDF), full suspension firing, hydro-pulping, Eco-Fuel II, and codisposal with sludge. The four most promising technologies (mass burning, RDF, Eco-Fuel II, and codisposal with sludge) were examined by a consultant for feasibility. The two technologies found most feasible were mass burning and RDF. The following summarizes the findings of studies comparing the two processes.

##### Technical Reliability

Mass burning systems are a proven technology. Since the end of World War II, mass burning plants have operated reliably in over 400 cities around the



world including nine U.S. and Canadian cities. In many of these cities, they operate in close proximity to high rise apartment houses, expensive townhouses and schools and hospitals.

In the mass burning process, all municipal wastes are burned in a large furnace with a minimum temperature of 1800°F. During the burning, inclined grates agitate the waste and mix it with air to ensure complete combustion. Very hot combustion air heats water in tubes in the furnace walls and in a boiler, converting it to steam to be sold for heating buildings or industrial purposes or to be converted to electricity in a turbine generator. The volume of waste is reduced by 90% to an ash from which the ferrous metals are recovered and which is then landfilled or possibly used as a road paving material.

Refuse derived fuel (RDF) systems have been in a development stage since the early 1970s. Typically, the waste is reduced to a uniform size using a shredding device and the waste is separated mechanically into combustible and noncombustible components. Each piece of equipment is subject to great wear and tear and is highly vulnerable to breakdown. Since the failure of any one part can shut down the whole system, few RDF plants have operated reliably. The few which do so require heavy maintenance.

RDF systems are more difficult to design and operate than mass burning plants. Variations in the volume or composition of refuse can cause problems in RDF plants. In addition, the moving metal parts operate in a dust-laden atmosphere where combustible materials have caused fires and explosions. Mass burning plants are not subject to explosions because they have no shredders, are simpler, and are designed to burn waste. The one known explosion occurred because liquid hazardous waste was allowed to be sprayed into the pit and caught fire. The Essex County facility will not accept such wastes.

#### Cost Effectiveness

In general, it is more expensive to build mass burning plants than RDF plants, but less expensive to operate them due to the greater simplicity and dependability of the mass burning process.

#### Environmental Safety

Mass burning systems have some environmental advantages over RDF systems.

#### -Air

Both mass burning and RDF technologies burn the same combustible fuel elements in waste. Theoretically, the more uniform fuels of RDF systems should achieve more complete combustion. However, in practice, both systems achieve flame temperatures

well over 1800°F for at least two seconds which destroy virtually all organic compounds. The efficiency of the air pollution control system which removes these particles has a greater impact on the quantity of the emissions than whether or not the refuse is processed before burning. Since the type of air pollution control system is the same for either RDF or mass burning, no significant differences in air emissions are expected.

#### -Odor

The potential for odors is greater with RDF processing because of the length of time taken to process the raw garbage and the storage of the processed RDF. To supply the combustion air and to destroy odor causing compounds, all mass burning systems use powerful fans to suck air from the pit area into the furnace for combustion. Many RDF systems cannot guarantee this will occur because of interruptions during operation or because the fuel will be burned at a site other than the refuse processing site.

#### -Noise

The noise from RDF shredders and other moving equipment can exceed OSHA noise standards in RDF plants. Both systems use fans which create some noise.

#### -Waste Residue

The net amount of flyash residue will be the same, regardless of the technology used. However, more ash collects at the bottom of the furnace in mass burning plants than in the few RDF plants which remove glass prior to burning.

#### -Water Quantity

Since the water requirement is for the boiler which is common to both systems, there is no significant difference in water usage by the two systems - or in the water discharge, which is negligible.

Thus, on the basis of the three criteria, technical reliability, cost-effectiveness and environmental safety, mass burning is preferred over RDF.

### WHY SOLVE THE PROBLEM IN NEWARK IN AN AREA NEAR THE POPULATED IRONBOUND?

Of 45 potential sites, the Blanchard Street site best met the site selection criteria established by the County. The identification and evaluation of the potential sites were conducted in two phases. In the first phase, all potential sites in the County were identified and screened to determine whether each site met the minimum siting requirements necessary for an energy recovery facility. The identification process and the necessary site characteristics are explained below.

## Potential Site Identification Process

In a 1975 study by the Newark Department of Engineering, the City identified twelve potential sites for energy recovery within the Newark and East Orange area and rated the Blanchard Street site the highest. In 1980 the DEP, the HMDC and Essex County identified all vacant sites of thirty or more acres in the County outside Newark. Nineteen sites were identified, all in central or western portions of the County.

Discussions were conducted with municipal and County officials to obtain their recommendations on other potential sites, as well as to understand their municipal industrial development objectives. The Port Authority and several realty firms were also contacted for additional site suggestions.

The above sources yielded 45 potential sites to be screened by the Essex County Department of Planning and Economic Development. The sites are described in Table 1 and shown in Figure 2.

## Siting Requirements

In conducting the preliminary screening of the 45 sites, the following criteria were used:

### -Environmental acceptability

Certain site characteristics may result in unacceptable impacts on the environment. For example, nearby hills may block the dispersion of stack emissions.

### -Compatibility with adjacent land uses and zoning

The site should be in an area which is already industrial in character, and should not be adjacent to residential concentrations.

### -Major highway access

The site should be directly accessible from major highways so that most refuse trucks do not use local residential or commercial streets to reach the facility.

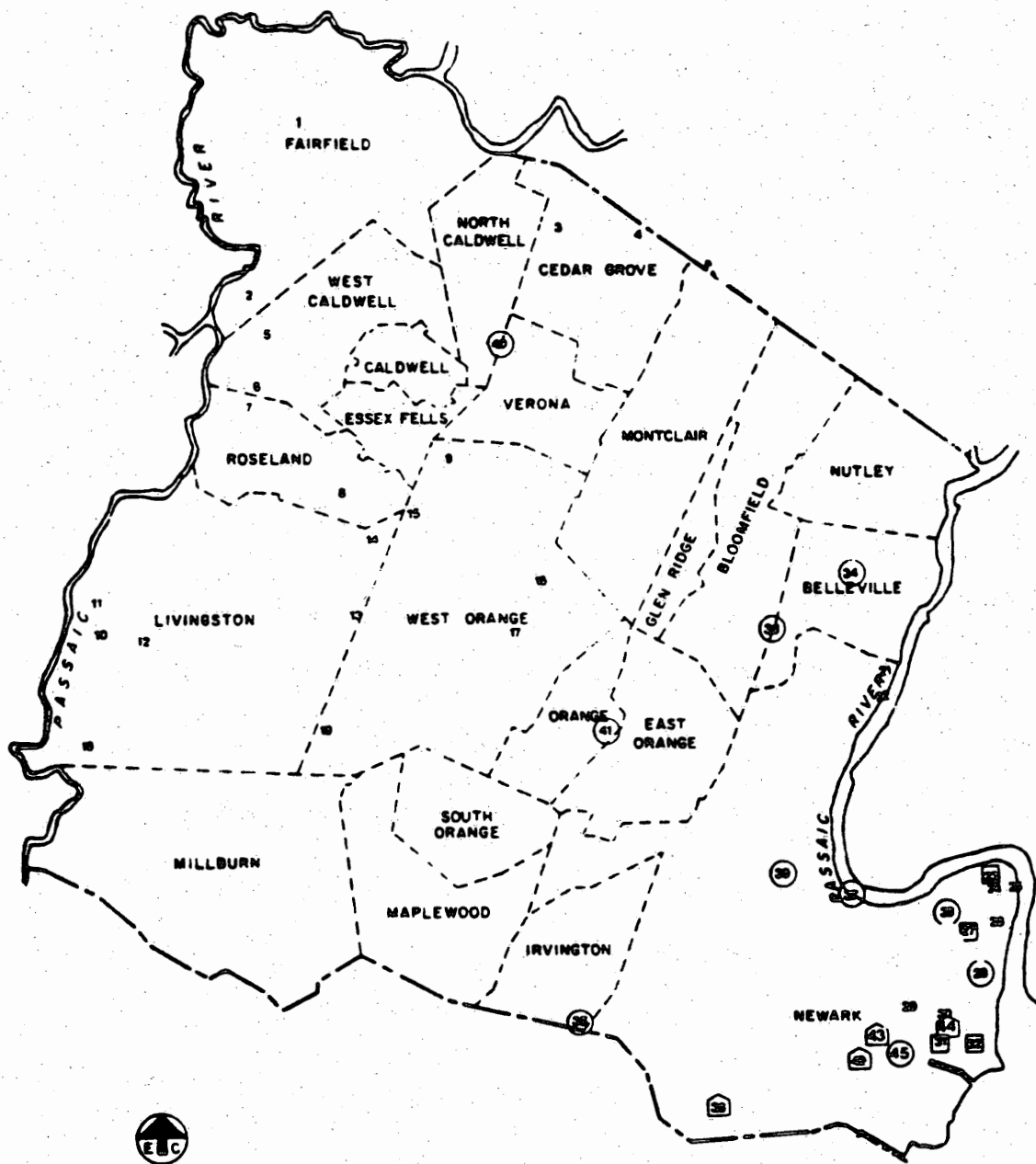
### -Proximity to areas of high waste generation

A site located near areas of the County where the most refuse is generated would minimize the cost of trucking the waste to the facility. The greatest amounts of waste are generated in the areas of high population density and where there are large numbers of office buildings and commercial establishments.

### -Proximity to energy customers

Electrical interconnection costs can be reduced if the facility is near an existing utility power generating plant or a transmission grid substation.





- ☐ FOUR FINAL CANDIDATES  
 TEN SEMI-FINAL " 428  
 EIGHTEEN "

**FIGURE 2**  
**Locations Of Sites Considered For**  
**Solid Waste Disposal Facilities**

TABLE 1

LIST OF 45 SITES CONSIDERED FOR SOLID WASTE DISPOSAL FACILITIES

| <u>SITE DESIGNATION*</u> | <u>LOCATION - DESCRIPTION</u>  |
|--------------------------|--|
| 1                        | Fairfield. North and West of Route 80.   |
| 2                        | Fairfield. Southeast of Route 80, North of Passaic River, West of Route 46. Considered by Joint Meeting No. 1, and City of Newark Survey.                            |
| 3                        | Cedar Grove - North Caldwell. West of Route 23.  |
| 4                        | Cedar Grove. Where railroad tracks loop into and out of town. On border with Passaic County.   |
| 5                        | West Caldwell. South of Bloomfield Avenue. East of Fairfield border.   |
| 6                        | West Caldwell. Southern section, just East of Parkland and PSE&G right of way.   |
| 7                        | Roseland. North and South of Route 280, West of Eisenhower Parkway, East of Parkland and PSE&G right of way.   |
| 8                        | Roseland. Northeast quadrant of Livingston Avenue - Route 280 intersection.  |
| 9                        | West Orange. Northwest corner of town.   |
| 10                       | Livingston. South of Route 10, East of Passaic River.  |
| 11                       | Livingston. North of Route 10, West of Eisenhower Parkway, East of Parkland.   |
| 12                       | Livingston. East and West of Eisenhower Parkway, South of Route 10.  |
| 13                       | Livingston-West Orange. South of Route 10 straddling municipal border. Portion of this site identified in City of Newark survey.                                     |
| 14                       | Livingston. Southwest and Southeast quadrants of Laurel Avenue - Route 280 intersection.   |
| 15                       | West Orange. Northeast quadrant of Route 280 - West Orange border intersection.  |
| 16                       | West Orange. Quarry, South of Eagle Rock Avenue, East of prospect.   |
| 17                       | West Orange. North and South of Route 280, East of Prospect. Southern portion of this site identified by City of Newark study. Has been developed with condominiums. |

SITE DESIGNATION\*LOCATION - DESCRIPTION

|           |   |
|-----------|---|
| 18        | Livingston. East of Passaic River, South of South Orange Avenue, down to Millburn border.                             |
| 19        | West Orange. East of Old Short Hills Road, across from St. Barnabas Hospital.   |
| 20        | Kearny. North of Route 7 and Fish House Road.   |
| 21 and 22 | Newark. West of McCarter Highway (Route 21) and East of Oraton Street.  |
| 23        | Newark. Blanchard Street, between railroad tracks and Passaic River.  |
| 24        | Newark. Blanchard Street, between railroad tracks and Raymond Boulevard.  |
| 25        | Newark. South of Pulaski Skyway, North of Route 1-9 (truck route) and adjacent to Passaic River.                      |
| 26        | Newark. Doremus Avenue and Roanoke Avenue, Northwest quadrant.  |
| 27        | Newark. Avenue Z, North of Wilson Avenue.   |
| 28        | Newark. Doremus Avenue, midway between Wilson Avenue and Foundry Street.  |
| 29        | Newark. South of Delancey Street and Avenue P (Oak Island Rail Yard).   |
| 30        | Newark. Oak Island Rail Yard, East of Turnpike, at the end of Curry and Rutherford Streets.                           |
| 31        | Newark. West of Doremus Avenue, North of Turnpike Extension, South of Conrail tracks, East of Turnpike (PVSC site).   |
| 32        | Newark. East of Doremus Avenue, North of Turnpike Extension; South of Conrail tracks, West of Newark Bay (FAPS site). |
| 33        | Bloomfield and Belleville. Area bounded by Franklin, Bloomfield, Wateessing and North Belmont Avenues.                |
| 34        | Belleville. Essex County Geriatrics Center.   |
| 35        | Irvington. Coit Street industrial area.   |
| 36        | Newark. Frelinghuysen Avenue and McClellan Avenue.  |
| 37        | Newark. McCarter Highway (Route 21), along the Passaic River at Clay Street, Gouverneur Street and Riverside Avenue.  |

**SITE DESIGNATION\*****LOCATION - DESCRIPTION**

|    |  |
|----|--|
| 38 | Newark. Ballantine Plant, Ferry Street and Christie Avenue.                  |
| 39 | Newark, Borden Plant, Nesbit Avenue and Orange Street.                       |
| 40 | Verona. Essex County Corrections Center and Hospital Center.                 |
| 41 | Orange. Rheingold Brewery.   |
| 42 | Newark. Route 1-9, U.S. Steel Plant.   |
| 43 | Newark. Route 1-9 at Frontage Road and Viaduct Street.                       |
| 44 | Newark. East of Doremus Avenue, North of conrail tracks, West of Newark Bay. |
| 45 | Newark. Route 1-9 at Viaduct Street.   |

### -Municipal need for economic development

It is the County's intent to direct new development projects to those municipalities in greatest need of economic stimulus, jobs and additional tax revenues.

### -Proximity to back-up landfill

The costs of hauling non-processible waste and ash residue can be minimized if the facility is close to a landfill.

Many of the sites did not meet several of the seven criteria and were eliminated. For example, many were in residential zones with poor access, low waste generation and little need for economic stimulus.

### Selected Sites

In the second phase, 18 selected sites were evaluated for energy recovery development by William F. Cosulich Associates, P.C., the County's technical consultant. The institutional evaluation was carried out by the County's staff in consultation with municipal officials.

It was determined that sites suitable for an energy recovery facility serving only a portion of the County would not be considered further due to insufficient energy markets and inappropriate adjacent land uses. This reduced the remaining sites to eight. The four sites with clear advantages over the other four were compared, using a weighted criteria to differentiate the relative importance of the siting considerations discussed earlier.

The EIS describes the detailed analysis at each phase of the site review process, arriving at a final scoring of the four sites: Avenue Z- 68%; Foreign Auto Preparation Services- 78%; Passaic Valley Sewerage Commission- 79%; and Blanchard Street- 92%.

Thus, of the 45 sites in Essex County which were considered over a six year period, the Blanchard Street site was rated best.

### WON'T A FACILITY ADD A LOT OF GARBAGE TRUCKS TO LOCAL STREETS?

### WILL THE TRUCKS BLOCK BLANCHARD STREET?

The maximum number of trucks delivering refuse to the facility is expected to be 455 per day, plus 30 trucks to remove residue to a landfill.

Truck routes from all parts of the County were determined by teams who drove alternate routes to the Blanchard Street site from all parts of the County to determine the shortest travel time, the major determinant in a driver's choice of routes. The shortest routes and the estimated numbers of trucks using each

are shown in Figure 3. Twenty percent of the trucks would travel on Interstate 78 and U.S. 1 & 9 from the southern part of the County, west of Newark. The 60% of the trucks which come from the central, north and western parts of the County would use Interstate 280 east to the New Jersey Turnpike Exit 15E. Some of these would travel south on Route 21 to I-280. The twenty percent of the trucks which originate in Newark (about 100 trucks) are analyzed in far greater detail below to determine how the Ironbound would be affected.

### Site Vicinity

A traffic pattern is being developed which would allow trucks to enter the site from the PSE&G jughandle between the Turnpike exit and Raymond Boulevard. This would eliminate the use of Blanchard street by all facility-related garbage trucks.

Employees, service vehicles and visitors totaling about 100 vehicles per day to the facility would gain access by a new east-west road from Blanchard Street, with an entrance just north of the railroad tracks. This would be available to Blanchard Street businesses as an alternate access road at the times when flooding makes Blanchard Street impassable. The construction of the project should help solve the flooding problem.

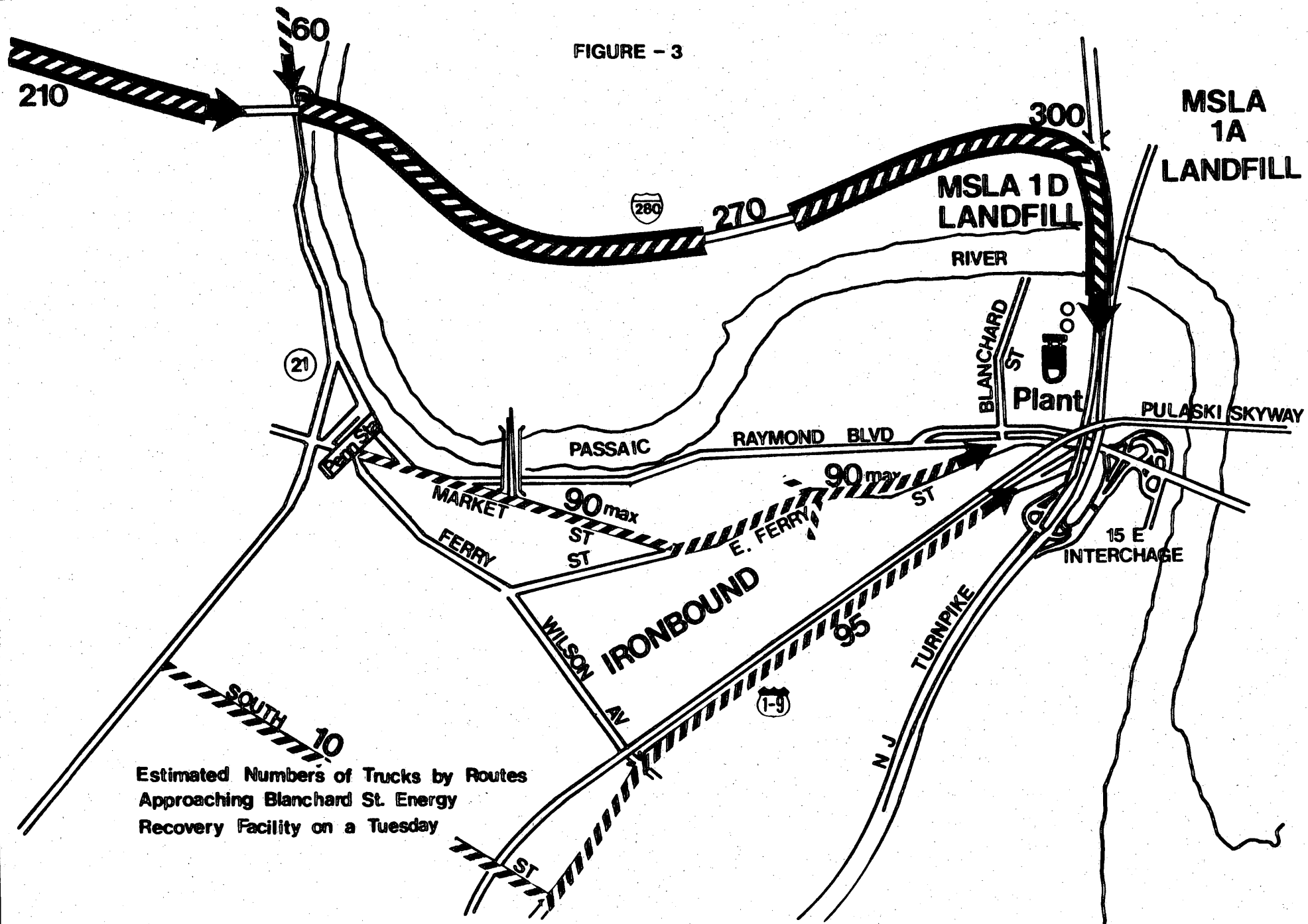
### Current Routes of Newark Trucks

In order to analyze the effect of approximately 100 refuse trucks originating in Newark, the travel schedule and disposal routes of private haulers and City owned trucks were plotted by day of the week in each of the six sanitation districts in Newark shown in Figure 4. The numbers of truck loads are for 1982. They are expected to be reduced by approximately 15% due to the recycling program being instituted by the County. Private haulers' trips are also expected to be reduced by 15% from the numbers counted at the landfill in 1980.

The routes used by trucks to reach the Blanchard Street site were predicted based on interviews with municipal and private haulers who serve Newark. They were surveyed in reference to their current travel routes to a landfill in Hudson County, which is in the same general direction as the Blanchard Street site, and the routes they predicted would be most efficient to Blanchard Street.

A full analysis is being prepared. Preliminary information indicates there will be an estimated 100 additional truck trips to the facility on truck routes along the perimeter of the Ironbound on two days of the week over a seven hour period. This will occur on Tuesday and Fridays when municipal collections take

FIGURE - 3



tg1183rev

82)

ONE

1

2

3

4

5

6

# COLLECTION DAYS

(Truck Loads)

M T W Th F S

18 17

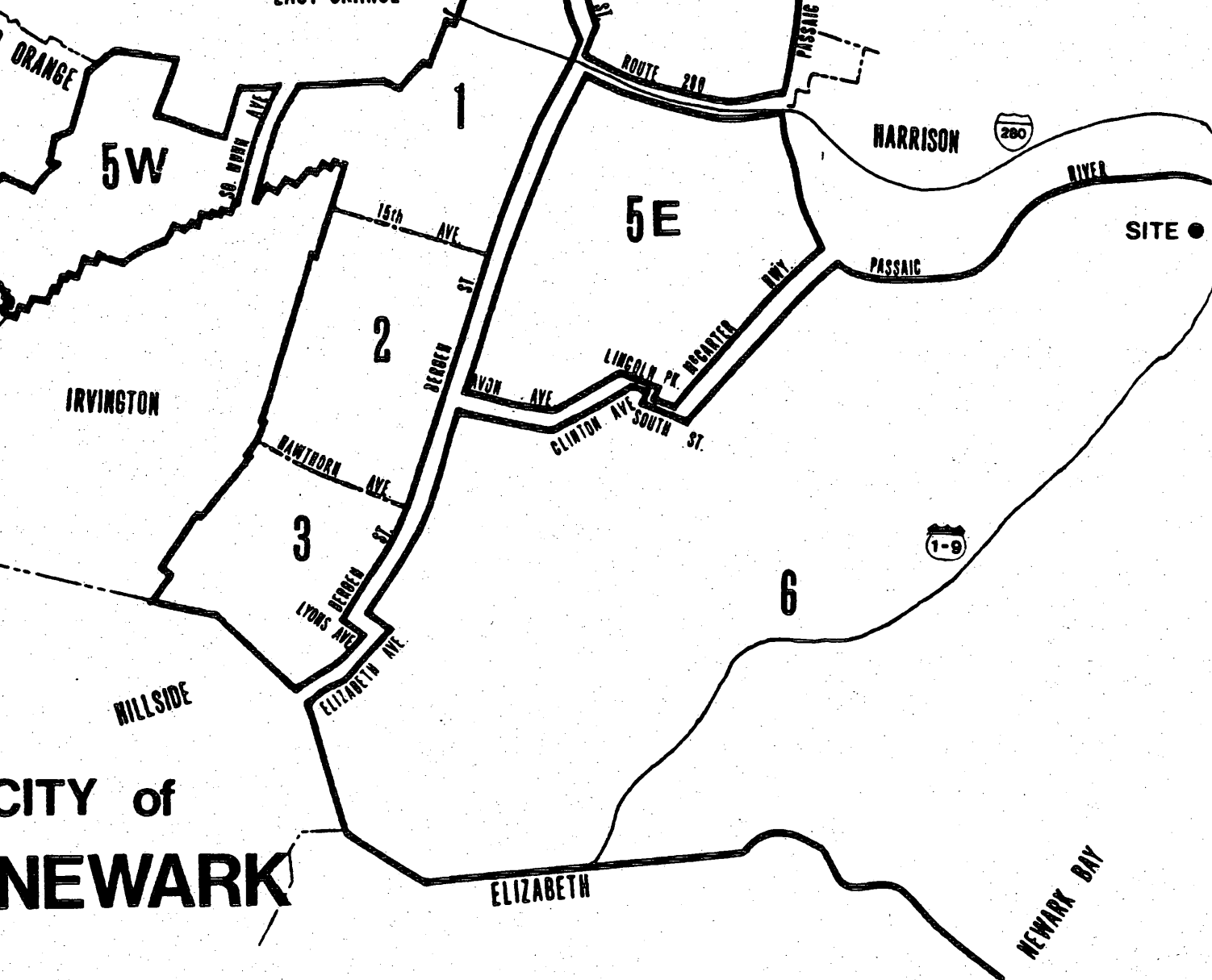
18 16

18 12

68 49

71 54

67 62



CITY of  
NEWARK

## GARBAGE COLLECTION DISTRICTS

38x  
(FIGURE-4)

SOURCE: CITY of NEWARK

-17-



place in Vailsburg, the Central Business District and part of the Central Ward, shown in Figure 4. On other days of the week, the number will be less because the trucks will originate from sanitation districts accessed by arterial highways. An estimated 25 private carter truck loads are included in the totals.

On the heaviest days (Tuesdays), ninety of the total 100 truck trips to the facility will occur on Market, East Ferry Street and Raymond Boulevard during the hours of 8:00 AM and 3:00 PM. This amounts to a fairly steady average of 13 trucks per hour during the hours of 8:00 AM and 3:00 PM. The total of 90 compares to the 580 trucks of all types per day on this route observed in 1982 between 8:00 AM and 3:00 PM. The 90 return trips will occur on Raymond Boulevard where a City study in 1980 counted 1460 trucks during the same seven hours. On Fridays, about 75 trucks will use the same route.

The other ten municipal and private trucks on Tuesdays and Fridays are expected to use the truck route on the southern perimeter of the Ironbound: South Street, Stockton Street to Route 1 & 9 or Rome, Berlin, Roanoke, Foundry and East Ferry Streets. Since the same route is expected for the return trip, there will be twenty truck trips on Tuesdays and Fridays. On Wednesdays and Saturdays, due to the shift of trip origins to South Newark, slightly more trucks will use this route, so that 35 to 40 total trips are predicted. This compares to 2,000 trucks which were counted at either end of South Street on the 1980 truck study.

The assignment of trucks to any route varies by the day of the week, according to the area from which refuse is collected. Trucks from the north Newark and the Vailsburg collection districts shown in Figure 4 will continue to use Interstate 280 to I-95. Trucks from southern Newark, south of Hawthorne Avenue (District 3) will use feeder roads like Bergan Street and Elizabeth Avenue to reach Route 78 which connects to Route 1 & 9. The trucks which originate in the Ironbound - Newark Airport - Port Newark area (District 6) and those from the two collection districts in central Newark (District 2 and southern part of 5E) are expected to use route on the perimeter of the Ironbound.

Both municipal and private carters have cited the priority they place on the shortest hauling time as the reason they seek to avoid circuitous or congested residential and commercial street except for collection of refuse. Their preferred streets are already major truck routes to which the addition of refuse trucks will contribute a minor increase. On the heaviest day on the heaviest local truck

route, Market and East Ferry Street, the additional 90 refuse trucks will represent a 13% increase over the existing number of trucks on the 8:00 PM to 3:00 PM period. This constitutes a 1% increase of overall traffic on Market Street in the same period.

Acceptable routes will be specified in the County Solid Waste Management Plan as the designated routes for access to the energy recovery facility. Thus, the designated routes will be an enforceable condition of contracts for continued use of the disposal facility. Haulers who violate the routes would be in violation of the Essex County Solid Waste Plan and, thus, could lose their State license since they must be in compliance with the County Plan in order to operate. Routes will be monitored by City and County police and by radio equipped supervisors of the Newark Department of Sanitation.

#### WON'T THE PROJECT FURTHER POLLUTE THE AIR AND ENDANGER HEALTH?

The predicted concentrations of all pollutants in the air, even in the maximum impact area, demonstrates that the contribution of the plant to pollutant levels is barely measurable and will not endanger health.

#### How is pollution controlled?

The projected composition of the stack gases is shown in Table 2. These numbers assume the use of two advanced emission control systems - a dry scrubber and an electrostatic precipitator (ESP). This combination of control systems was selected because it is capable of providing a very low level of emissions from the stack with the greatest reliability. The scrubber is intended to remove 90% of the hydrochloric acid emitted from the stack and also to meet the 0.32 pounds of sulfur dioxide per million BTU heat input set forth in DEP's proposed guidelines for energy recovery facilities. The scrubber is also expected to enhance the performance of the ESP by causing the coagulation of particles in the flue gas. The precipitator will reduce particulate emissions by over 99%. Particles are of special health significance because many of the undesirable metals and organic compounds which may result from burning refuse cling to their surface.

An ESP is a series of wires and plates that electrically charge virtually all particles in the flue gas exiting the scrubber and collect the particles on plates of an opposite charge. Scrubbers are devices in which stack gases, primarily sulfur dioxide and hydrochloric acid, are neutralized by an alkaline material.

#### How do the emissions affect the air people breathe?

Air pollution specialists use detailed computer models to predict ground level concentrations of pollutants by analyzing the combined effect of the direction, strength and turbulence of wind on air emissions released from the stack. A major factor is the stack emissions' temperature which causes them to rise higher than

TABLE 2

PREDICTED EMISSION FACTORS FOR THE ESSEX COUNTY  
ENERGY RECOVERY FACILITY

CONTROLLED EMISSION FACTOR  
(lbs/ton)

|                                    |                          |
|------------------------------------|--------------------------|
| Carbon Monoxide (CO)               | 4.0                      |
| Sulfur Dioxide (SO <sub>2</sub> )  | 1.75                     |
| Nitrogen Oxides (NO <sub>x</sub> ) | 3.0                      |
| Particulates (PM)                  | 0.744                    |
| Hydrocarbons (HC)                  | 0.20                     |
| Lead (Pb)                          | 0.0254                   |
| Beryllium (Be)                     | 0.0000111                |
| Mercury (Hg)                       | 0.00167                  |
| Cadmium (Cd)                       | 0.00135                  |
| Zinc (Zn)                          | 0.0632                   |
| Copper (Cu)                        | 0.000082                 |
| Nickel (Ni)                        | 0.00009                  |
| Chromium (Cr)                      | 0.00037                  |
| Selenium (Se)                      | 0.00005                  |
| Arsenic (As)                       | 0.00005                  |
| Antimony (Sb)                      | 0.00107                  |
| Hydrogen Chloride (HCl)            | 0.45                     |
| Hydrogen Fluoride (HF)             | 0.009                    |
| Sulfuric Acid                      | 0.126                    |
| Vinyl Chloride                     | ND = (No data available) |
| PBB's                              | ND                       |
| PCB's                              | 0.000326                 |
| PAH's                              | 0.0005                   |
| TCDD's (dioxin)*                   | 0.0000000542*            |
| Pesticides                         | ND                       |
| Benzidine                          | ND                       |
| Acetaldehyde                       | ND                       |
| Chlorophenol                       | ND                       |
| Formaldehyde                       | ND                       |

Toxic Volatile Organic Substances NJAC 7:27-17

|                           |    |
|---------------------------|----|
| Benzene (Benzol)          | ND |
| Carbon Tetrachloride      | ND |
| Chloroform                | ND |
| Dioxane                   | ND |
| Ethylenimine              | ND |
| Ethylene dibromide        | ND |
| Ethylene dichloride       | ND |
| 1,1,2,2-Tetrachloroethane | ND |
| Tetrachlorethylene        | ND |
| 1,1,2,2-Tetrachloroethane | ND |
| Trichloroethylene         | ND |

(Assumes control efficiency required to produce a 0.03 grains/DSCF release rate)  
\*Emission rates and factor not adjusted for addition of dry scrubber.

the stack and disperse before they reach the ground. The distribution of the stack gases at ground level for the worst year, are displayed on maps of the region (Figure 5 & 6).

The two maps illustrate distribution patterns and relative concentrations of any pollutants. The predicted ground level concentration for a specific pollutant is given by multiplying the specific emission concentrations shown in Table 2 by the values shown on the map. All numbers are stated in micrograms (millionths of a gram) per cubic meter of air. A gram is approximately 3.5% of an ounce and a cubic meter is a little larger than a cubic yard. The predictions are based on the worst meteorological factors recorded at Newark Airport over a five year period which would result in the highest concentration of any pollutant at ground level in the region.

Figures 5 and 6 show the regional and local impact over a typical year. The annual averages are shown because they are most descriptive of the long term exposure which is best related to a consideration of health effects.

In all cases the maximum impact areas are to the northeast and east of the Blanchard Street site, away from the Ironbound area. The affected areas are shown in a land use map in Figure 7. The two small areas of maximum concentration are primarily elevated parcels of land which intercept the stack plume at a higher concentration. One begins adjacent to the plant site and crosses the Passaic River in a northeast direction to a closed landfill in Hudson County. The second area is on Laurel Hill, the rock outcrop west of the New Jersey Turnpike, which is surrounded by open land. Neither area is populated. The second greatest effect would be the areas surrounding the two maximum points and at one elevated section in Union City. The least effect would occur to the west and southwest of the Blanchard Street site, which is the residential area of the Ironbound.

The predicted levels, even in the maximum impact areas, demonstrate that the contribution of the energy recovery plant to existing pollution levels is insignificant. The relationship of concentrations to standards is shown in Figure 8. When the contribution of the plant is added to measured background concentrations, the resulting maximum concentration for all regulated pollutants, except for ozone and carbon monoxide, is well below the Federal and State standards established to protect the health of the most sensitive people (children, elderly and those with respiratory ailments). Since the plant will not be a discernible contributor to ozone, the State is controlling other sources. Similarly, the current violation of the carbon monoxide standard is due primarily to existing vehicular emissions and is expected to be reduced by State strategies for cleaner vehicular exhaust,



**Regional Estimated Maximum Annual Concentrations\***  
**For The Essex County Facility (1971)**  
 \*(normalized ground-level values over a 5-year data base 1970-1974)

**LEGEND**

□ LESS THAN 4

■ 4 - 8

▤ 8 - 12

▥ 12 - 16

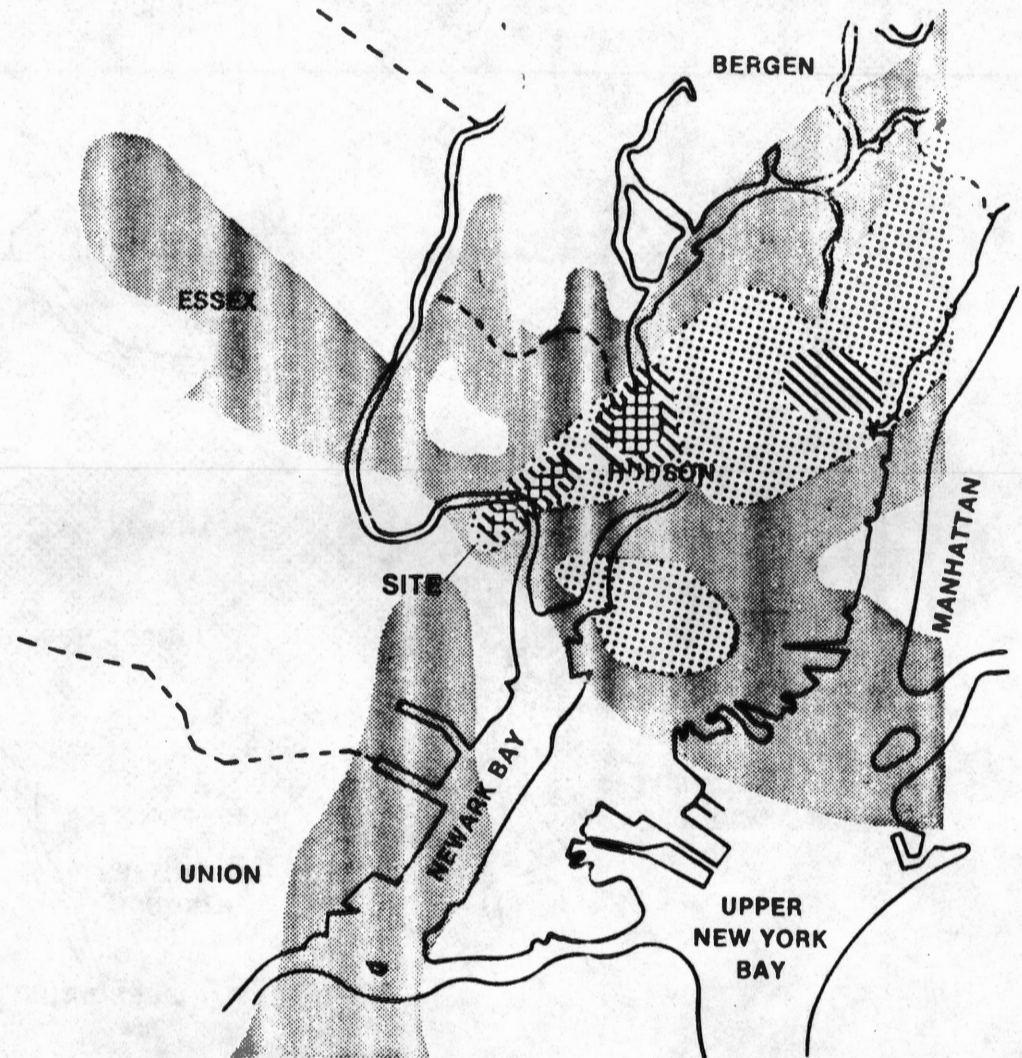
▧ OVER 16

VALUES =  $1 \times 10^{-9} \text{ g/m}^3$

The Port Authority of NY & NJ  
 Environmental Impact Statement  
 For The Proposed  
 Resource Recovery Program  
 At Essex County, New Jersey  
 Camp Dresser & Mc Kee

**SCALE**

2 1 0 5 KILOMETERS



# Local Estimated Maximum Annual Concentrations\*

For The Essex County Facility (1971)

\*(normalized ground-level values over a 5-year data base 1970-1974)

## LEGEND

□ LESS THAN 4

▤ 4 - 8

▥ 8 - 12

▧ 12 - 16

▨ OVER 16

VALUES =  $1 \times 10^{-9}$  g/m<sup>3</sup>

The Port Authority of NY & NJ  
Environmental Impact Statement  
For The Proposed  
Resource Recovery Program  
At Essex County, New Jersey  
Camp Dresser & McKee

## SCALE

1 .5 0 1 KILOMETER

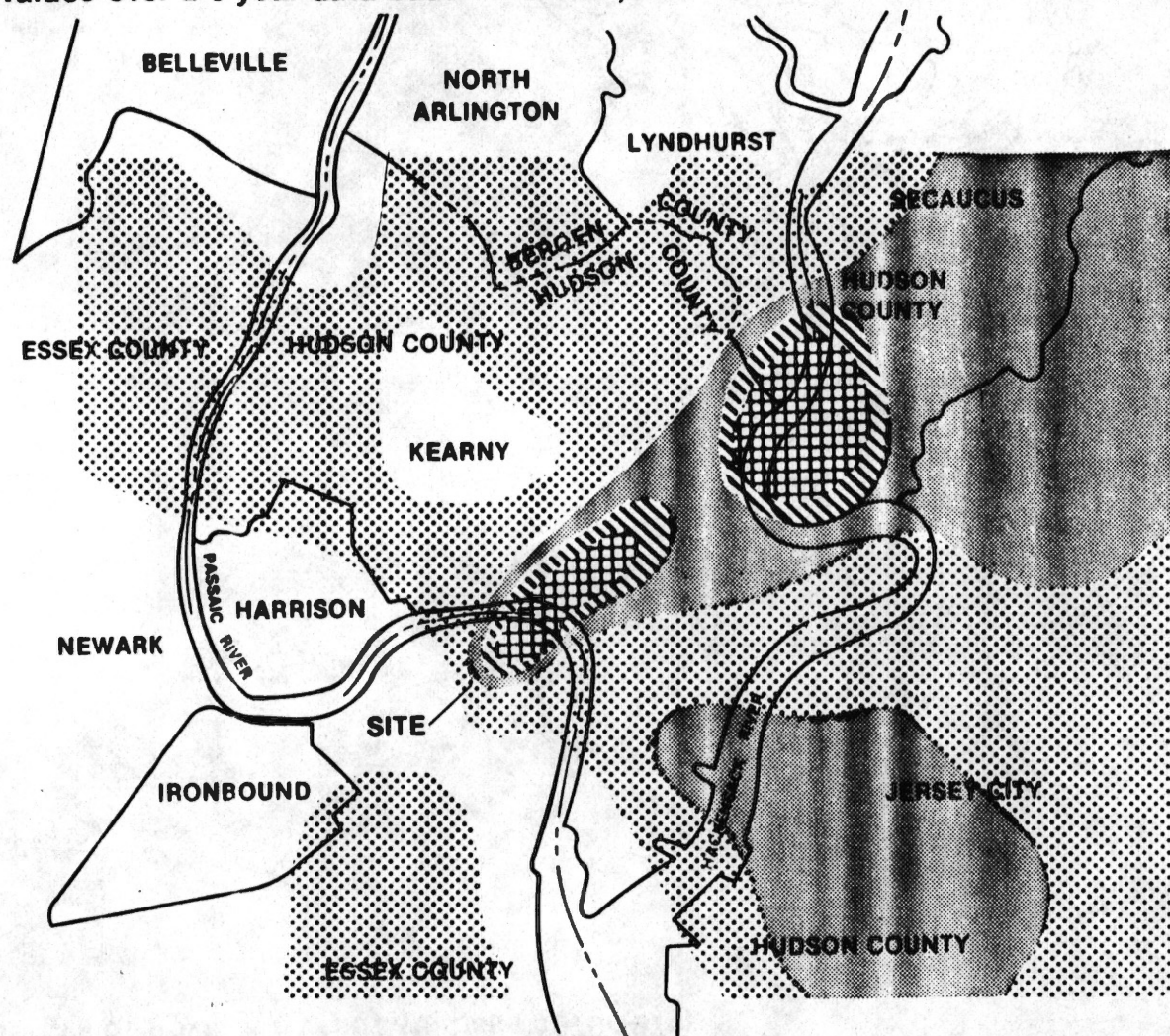


FIGURE-6

-23-



**Regional Land Use  
Surrounding  
The Proposed Facility**

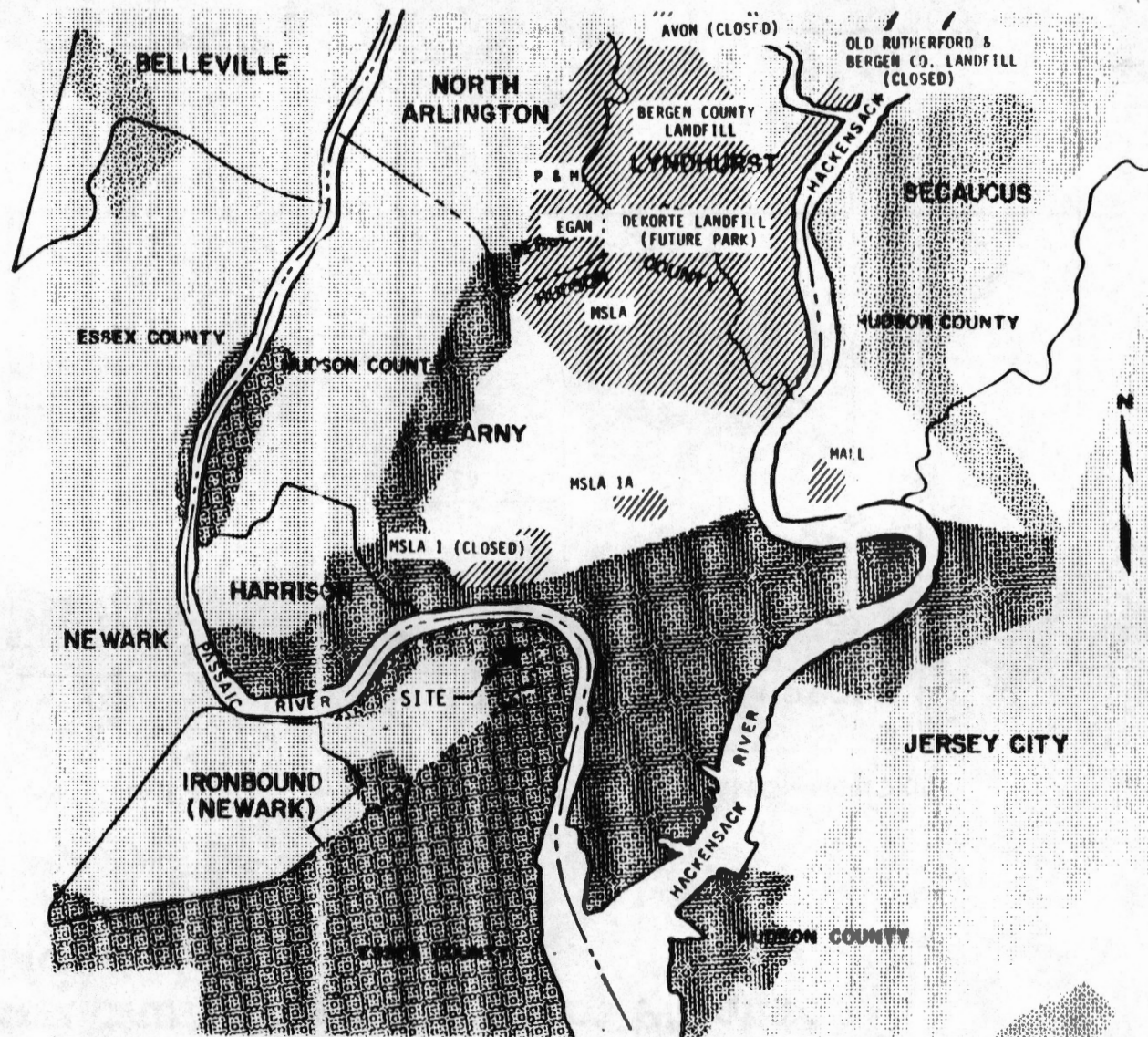
**LEGEND**

-  OPEN - UNDEVELOPED
-  RESIDENTIAL USAGE
-  LIGHT INDUSTRIAL USAGE
-  HEAVY INDUSTRIAL USAGE
-  LANDFILLS (IDENTIFIED BY STATE CODE)

The Port Authority of NY & NJ  
Environmental Impact Statement  
For The Proposed  
Resource Recovery Program  
At Essex County, New Jersey  
Camp Dresser & McKee

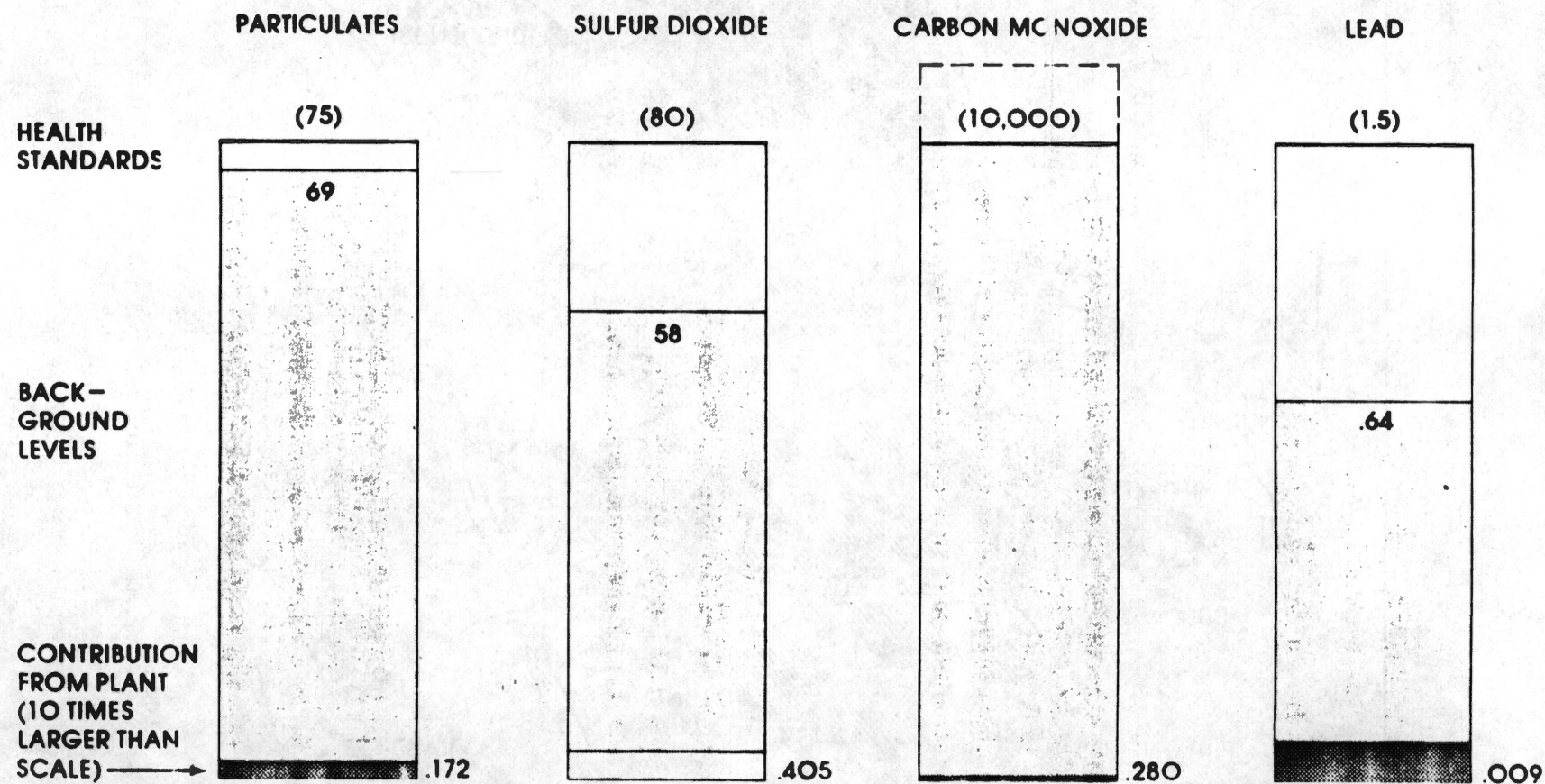
**SCALE**

1 5 0 1 KILOMETER



**FIGURE - 7**

**Fig. 8 Maximum Contribution of Plant to Air Quality Standards**  
(in micrograms per cubic meter)





less vehicle use and smoother traffic flow. A little more than one fifth of 1% of the total carbon monoxide will be attributable to the energy recovery emissions.

The energy recovery facility will add 0.3% to the smoke particles already in the air so that the total concentration of particulates will be 92% of the health standard. In the case of airborne lead, the plant will add, at most, 1.4% to the total concentration in the air, well under the air quality standard. Lead levels in the Newark area have been significantly reduced during the last few years due to the use of unleaded gasoline.

Another measure of impact is the contribution of the plant to "increments" allowed by the EPA in order to protect air quality over the foreseeable future. The plant would use up less than 3% of the allowable increment for particulates, under 2% of the increment for sulfur dioxide, under 3% of the nitrogen dioxide increment and just under 1% of the lead increment.

Thus, for the pollutants for which there are quantified air quality standards to protect public health, the contribution of the energy recovery plant will be inconsequential. In fact, there would be a minimal impact on the area even if several similar energy recovery facilities were operated at the same time.

Many processes such as diesel buses, wood burning stoves and dry cleaners generate substances for which there are no air quality standards, but which have been identified as capable of producing cancer in humans (carcinogens) or at certain thresholds, toxic, non-carcinogenic effects. For any of these substances which have also been found to be present in emissions from some energy recovery plants, the risk of the facility to public health was assessed. This assessment was carried out by comparing the maximum ground level concentrations from the energy recovery facility to guidelines of New York State, U.S. EPA, the American Council of Governmental Industrial Hygienists and the Occupational Safety & Health Administration. New York State guidelines use a level 300 times less than the threshold limits of workplace exposure for suspected carcinogens and 50 times lower for low toxicity contaminants. EPA's permissible concentrations are more stringent than New York State's acceptable levels.

Among the conservative assumptions used to estimate the maximum exposure, it is assumed that residents are exposed to the maximum annual average ground level concentration from the facility for 24 hours a day for a 70 year lifetime, even though this is unrealistic. Table 3 shows the percentage of the lowest of the two guidelines represented by the maximum contribution of the plant.

Thus, in almost all cases, the maximum potential ground level concentration is less than 1% of standards or extremely stringent guidelines on the amount of a

TABLE 3

PERCENTAGE OF GUIDELINES FOR MAXIMUM  
CONCENTRATIONS OF POTENTIALLY TOXIC OR  
CARCINOGENIC COMPOUNDS RESULTING FROM ENERGY RECOVERY FACILITY

| <u>SUBSTANCE</u>                 | <u>PERCENT OF LOWEST<br/>GUIDELINE</u> |
|----------------------------------|--|
| Arsenic                          | 0.2%                                   |
| Beryllium                        | 0.03%                                  |
| Cadmium                          | 0.3%                                   |
| Chromium                         | 0.07%                                  |
| Copper                           | 0.04%                                  |
| Mercury                          | 0.40%                                  |
| Nickel                           | 0.01%                                  |
| Antimony                         | 0.01%                                  |
| Selenium                         | 0.02%                                  |
| Zinc                             | 0.003%                                 |
| Hydrogen Chloride                | 0.07%                                  |
| Hydrogen Fluoride                | 0.02%                                  |
| Sulfuric Acid                    | 0.90%                                  |
| Polychlorinated Biphenyls        | 3.0%                                   |
| Polycyclic Aromatic Hydrocarbons | 0.02%                                  |

SOURCE: Essex County Resource Recovery Project Environmental Impact Statement

chemical to which a person may be safely exposed. For potential carcinogens, the risk is well below one case of cancer in a million. For comparison, a leading statistician reports that one death would occur from a million people each smoking 1.4 cigarettes over their entire lifetime, driving 30 miles by car, or living two days in New York City.

Will the plant create a danger from dioxin?

Since testing at mass burning and RDF facilities in Europe and the United States has demonstrated that many plants emit trace concentrations of dioxins and furans (compounds similar to dioxin), an extensive review and assessment of reported and ongoing research was conducted by the consulting firm of Camp, Dresser & McKee for the energy recovery facility. The full report is provided as Technical Appendix 21 in the EIS. Concern about any potential new source of dioxin intensified following the discovery, in June 1983, of high levels of dioxin in the soil near the Diamond Alkali plant in Newark.

The primary cause of dioxins and furans during the burning of refuse is believed to be the chemical reactions of lignin, a common material in the cells of plants (therefore found in the paper and wood components in refuse), with substances which contribute chlorine. One possible source of chlorine is polyvinyl chloride (PVC), a plastic found in such products as shower curtains and auto seat covers. PVC constitutes less than 5% of the plastics in solid waste. Other potential chlorine donors are the PVC found in some industrial wastes, transformer insulation and plastic pipe, as well as in wood and other materials treated with certain preservatives, herbicides or bactericides.

The dioxin study included two analyses: one to predict maximum ground level concentrations of dioxins and the other to assess the risk to the health of persons exposed to the maximum concentration. To be very conservative, both analyses assumed the worst case of several factors affecting the exposure and the risk.

In addition, the highest emission levels were used in the calculations. It appears that dioxins and furans are almost completely destroyed by sufficient exposure to a furnace temperature of 1800°F. The flame temperature of the Essex County facility will be 1800°F to 2200°F. Nevertheless, emissions data from lower temperature facilities in Europe were included in the analysis.

Any trace levels of dioxins which may survive the high temperatures will be controlled by the effective particulate controls. The effectiveness of particulate control is significant because gases containing traces of dioxin and furans become cooled as they leave the boiler, condense and bond onto the surfaces of the particles. Thus, a facility with more effective particulate controls, such as the scrubber - precipitator system of the Essex County plant, would be expected

to reduce the emission of dioxins and furans.

The American data used for the more realistic analysis is from a plant which has less effective particulate controls, and lower operating temperatures than is required for the Essex County plant.

The calculations of the maximum annual ground level impact of the emissions were made following the same dispersion pattern as for other pollutants. Both higher, but less likely, European emissions of dioxin and the more realistic American emission data were compared to the only health based exposure criteria a standard set by the Netherlands and a guideline established by the Province of Ontario, Canada.

The realistic maximum impact of dioxin would be 12,000 times less than the Virtually Safe Level established by the Netherlands and 30,000 times lower than the guideline of the Ontario Ministry of the Environment. The Ontario guideline for dioxin is 1/100th of the lowest level at which any physical effect from dioxin has been observed in humans or animals.

To assess the maximum possible risk to health from dioxin from the Essex County plant, the worst case of several factors affecting exposure was used in a risk assessment model recommended by the U.S. EPA. Among these factors, it was assumed that people would inhale the maximum concentration for twenty-four hours a day for seventy years. Using a statistical model which incorporates data from animal clinical tests and occupational exposure, it was predicted that if one million persons were exposed to these worst case conditions, the normal cancer rate would increase from 200,000 to 200,000.8. Thus, less than one additional person (0.8) in a million would get cancer.

In fact, no people live in the maximum impact areas of the Essex County facility. Among the people who live in the areas of lower concentrations, the risk of cancer would be very much less than 0.8 in a million.

#### What about odors?

No mass burning plants in Europe, Japan or the United States have had any reported problem with odors. Rapidly processed refuse does not generate strong odors. Further prevention is achieved by enclosing the area where raw refuse is deposited and drawing the air from that enclosure into the boilers to provide combustion air. Odors are caused by organic compounds in refuse which are easily broken down in high temperature boilers to non-odor causing molecules. These measures eliminate the possibility of odors migrating from the site into the neighborhood.

## WHAT KIND OF WASTES WILL BE PROCESSED? WILL HAZARDOUS SUBSTANCES BE IN THEM?

The only wastes that will be permitted into the energy recovery facility are those classified by the Department of Environmental Protection as: municipal (Type 10), vegetative (Type 13), and nonchemical industrial (Type 27). Commercial and industrial wastes contain more wood and corrugated paper than residential waste and are not permitted to contain hazardous substances.

The composition of the waste from each municipality and from private haulers in Essex County has been analyzed by examining the contents of randomly selected trucks at a landfill and is shown in Table 4. There has been some public concern about burning the plastics, which constitute about 6% of the waste stream. The Society for the Plastics Industry reports that 96% of discarded plastic is polyethylene or polypropylene and burns more easily and cleanly than natural gases. The four percent which is polyvinylchloride (PVC), such as in shower curtains or rigid plastic containers, is of concern because burning it releases chlorine that is suspected of forming hydrochloric acid and other chlorinated compounds. However, the plastic industry reports that the quantity of PVC, unlike the quantity of other plastics, is unlikely to increase. In the future, it is projected that overall waste composition will change slightly as recycling programs reduce the amount of metal, glass and paper.

Refuse haulers who do not conform to the restrictions on the type of waste permitted will lose their disposal privileges. Restrictions will be enforced by continuous visual monitoring of incoming waste as it is dumped. Suspicious looking wastes will be retrieved from the refuse pit and placed aside for testing. The facility operator will be required by the County to develop additional measures to prevent, detect and if necessary, remove hazardous wastes from being charged. The doors of the tipping bays will be closed at night and during early morning, and the fenced in area will be patrolled to ensure that no illicit dumping occurs. The contents of incoming trucks will be sampled periodically for hazardous constituents.

The transport and disposal of hazardous wastes are regulated by New Jersey law which is ten times more stringent in defining a hazardous waste generator than is Federal law. New Jersey law defines a hazardous waste generator as anyone producing more than one hundred kilograms a month, the equivalent of 37 one gallon paint cans. The U.S. EPA has found that, nationally, generators of less than 100 kilograms per month contribute only 0.23% of all hazardous wastes. When such small quantities of waste enter a mass burning furnace, the high temperatures, long residence time and air turbulence will be sufficient to virtually destroy them.

TABLE 4

ESTIMATED SOLID WASTE COMPOSITIONESSEX COUNTY

(percent)

| <u>COMMERCIAL-INDUSTRIAL</u> | <u>RESIDENTIAL</u> | <u>COMMERCIAL-INDUSTRIAL</u> |
|------------------------------|--------------------|------------------------------|
| Newspaper                    | 6.88               | 3.58                         |
| Wood                         | 1.30               | 10.48                        |
| Plastic                      | 6.44               | 4.52                         |
| Glass                        | 8.29               | 3.10                         |
| Ferrous Metal                | 5.28               | 5.08                         |
| Aluminum                     | 1.31               | 0.68                         |
| Corrugated                   | 13.98              | 25.66                        |
| Organics *                   | 39.08              | 35.12                        |
| Fines                        | 5.79               | 3.20                         |
| Miscellaneous                | 11.36              | 8.52                         |

\*Half of this is paper, other than newsprint, and half is yard trimmings, food wastes, leather, rubber, and textiles.

SOURCE: S.C.S. Engineers et al  
Study of Municipal Solid Waste Quantity, Composition and Fuel Characteristics, Summer 1980, Essex, Hudson and Union Counties, N.J.

#### HOW WILL THE PLANT BE OPERATED? WHO WILL SEE THAT IT WORKS PROPERLY?

The Essex County Energy Recovery Facility will be operated under a contract with the Port Authority subject to continual performance review. The contract will contain specific performance standards for such factors as hours of operation, emission levels, electrical generation, odor and noise control, and housekeeping. The operator will maintain financial guarantees that the highest standards of performance are achieved and Essex County will maintain continuous surveillance to assure the contractual and permit conditions are met. As part of the County's solid waste management authority, county police will enforce truck routes on county roads. Newark police will enforce routes on city roads. Both the City of Newark and the Department of Environmental Protection will monitor the facility.

There will be independent monitoring of emissions. Establishment of a citizen complaint procedure to ensure prompt and thorough investigations is under consideration.

#### HOW WILL THE PLANT AFFECT NEARBY RESIDENTIAL PROPERTY VALUES?

Residential properties in the Greater Ironbound District were last assessed in 1980, but the figures have not been released. However, it is well known among realtors that the Greater Ironbound District is viewed as an attractive urban residential area due to upgraded housing stock, the well kept treelined streets, the strong sense of neighborhood and good access to transportation and jobs.

Energy recovery facilities have been built in cities around the world in proximity to high quality housing without affecting their increasing value. In Berne, Switzerland, the balconies of luxury condominiums overlook the truck ramps to the oldest mass burning facility in the world, which is adjacent to a hospital and a school. In Nice, France, high rise luxury apartment houses surround the energy recovery facility. In Winterthur, Switzerland, the vegetable gardens of nearby homeowners abut the mass burning facility. In Hamburg, West Germany, an outdoor community swimming pool is a few feet from an energy recovery plant. In Saugus, Massachusetts, one quarter mile from an energy recovery plant, lots are selling for \$40,000, next to homes which command \$130,000 in the few instances when they come on the market. A 3,000 ton per day energy recovery plant in Miami, Florida, operates one quarter mile from the world famous Doral Golf Club, which continues to build more \$300,000 to \$400,000 homes on its grounds. A plant in Akron, Ohio processes and burns refuse derived fuel on a site adjacent to new townhouses. The Blanchard Street facility is over 1000 feet from the nearest residence and is 3/4 of a mile from the major residential areas.

## DOES THE COMMUNITY BENEFIT FROM THE PROJECT IN ANY WAY?

The City of Newark is the official host community of the energy recovery facility. A Memorandum of Understanding negotiated with City officials provides two major economic benefits to Newark. It will receive a grant of \$1.5 million for economic development projects and \$100,000 in technical services from the Port Authority, and an annual payment amounting to \$1.3 million in the first year which will escalate according to the rate of increase of disposal fees. The City of Newark will also receive a fair market payment for the sale of the Blanchard Street site. The City will also benefit from the shorter distance for hauling refuse and, therefore, lower cost than at present.

Allocation of these host municipality benefits will be explored further by local and county officials.

During the 36 month construction period, approximately 1400 short term jobs each year are expected to be generated throughout the region by construction spending for goods and services. Of these, there will be about 600 construction jobs each year. Programs for local hiring and the purchase of services and affirmative action are being developed. The operation of the facility is expected to result in 228 permanent new jobs in the region, of which about 106 are expected to be at the plant.

Since the facility will sell electricity to the existing power grid, it will reduce reliance on foreign sources of oil by 1,000,000 barrels a year. Steam may also become available to nearby industries.

## WHAT HAPPENS NEXT?

The EIS has been submitted to the DEP for a 90 day review beginning December 1, 1984 by its technical divisions and by other involved regulatory agencies including: the U.S. Environmental Protection Agency, the New Jersey Departments of Energy, Transportation, and Community Affairs, the U.S. Army Corps of Engineers, the Federal Aviation Administration, the District Soil Conservation Service, the City of Newark, and municipalities and counties within a one mile radius of the site. During this period, DEP welcomes comments from the public.

Once DEP has determined the EIS is complete, it will be the subject of a public hearing on the engineering design of the facility where any interested person may comment or raise questions about the EIS. All questions will be answered at the hearing or in writing. Prior to the hearing, community comments will be solicited at informational meetings held by Essex County at the convenience of local residents.



DEP will review the Solid Waste Permit application and the hearing record to judge whether all issues have been identified and sufficiently addressed. DEP will decide whether to issue a Solid Waste Permit, after all necessary environmental permits have been received. The present schedule anticipates permits needed for construction to be obtained in the spring of 1984, and construction to begin mid-1984. This would enable start up and acceptance testing to begin in early 1987 and commercial operation to start in mid-1987.

The plans for operating the facility will be continuously augmented by the Port Authority and Essex County during further planning with the private company which will build and operate the facility and with local officials. Programs to involve the community will also be developed in consultation with local leaders.

For further information on the project contact:

Theodore Pytlar  
Director, Division of Solid Waste Management  
Essex County Department of Planning and  
Economic Development  
235 Franklin Avenue  
Belleville, New Jersey 07109  
(201) 759-3400



National Solid Wastes Management Association

1733 RHODE ISLAND AVENUE, N.W., TENTH FLOOR, WASHINGTON, D.C. 20037  
TELEPHONE (202) 659-4513

EUGENE J. WINGERTER  
EXECUTIVE DIRECTOR

TESTIMONY OF  
OF  
JEFFREY D. ROSS  
BEFORE  
SENATE ENERGY AND ENVIRONMENT COMMITTEE  
ON  
A1778--RESOURCE RECOVERY IMPLEMENTATION LEGISLATION  
TRENTON, NEW JERSEY  
MONDAY, JULY 16, 1984

My name is Jeffrey D. Ross and I am here today on behalf of the New Jersey Chapter of the National Solid Wastes Management Association (NSWMA). The Association membership includes companies involved in all aspects of solid and hazardous waste collection and disposal, including two national companies--Browning Ferris Industries and Signal RESCO, Inc.--which are at the forefront of resource recovery development in the State.

NSWMA has consistently supported resource recovery as an integral part of planned, environmentally sound and economically efficient solid waste management. A1778 is designed to assist solid waste management districts implement resource recovery by offering a more flexible framework for rate regulation. It also institutes disposal taxes with a two-fold purpose: closing the gap between low landfill and high resource recovery disposal rates, and providing funds to subsidize resource recovery construction.

NSWMA presented detailed comments on A1778 before the Assembly County Government and Regional Authorities Committee on April 19 in Newark, New Jersey. I would like to briefly highlight the key points of the bill which we support for special reasons, as well as provisions with which we have questions. First the positive.

- Section 3. e. provides a temporary exemption from the new taxes for haulers under contract with federal installations. This is only fair, since the hauler otherwise would be required to pay

the tax out of his own pocket for the duration of the existing contract.

- Section 9 and 10 establish a mechanism enabling landfill operators and haulers to pass through the new taxes to their commercial and residential customers. This automatic pass through acknowledges the bureaucratic and economic nightmare that hauling and disposal companies face every time they seek a rate adjustment under the antiquated system of economic regulation imposed by the Board of Public Utilities.
- Section 15. c. (3) recognizes the indisputable fact that New Jersey's waste cannot be disposed of through resource recovery alone. This section of the bill permits counties to use the District Resource Recovery Investment Tax Fund to develop and operate sanitary landfills in conjunction with resource recovery facilities. DEP planners also wisely acknowledge in this provision that landfills may be necessary on a long-term basis in areas of the State where resource recovery is not feasible.
- X • We are pleased with the second half of the bill which helps remove a number of impediments to private sector financing of resource recovery facilities. This bill provides an alternative to the BPU's rate base/rate of return regulation through long-term contracts and designated franchise areas. We fully support these provisions.

There are a few concepts and provisions of the legislation with which we continue to have reservations. They include the following.

- Generally, we object to the concept of using solid waste haulers and landfill operators as state tax collectors. In recent years, the industry has been burdened with the collection and, in some cases, the escrowing and auditing of taxes for recycling, landfill closure and the cleanup of abandoned sites. Passing these new taxes through to waste customers sounds straightforward in bill form, but has caused many unanticipated accounting and billing problems for our members and hostility by our customers.
- We see little benefit to be derived from the proposed Solid Waste Services Tax. Half of this amount would constitute a dedicated fund underwriting DEP's solid waste budget. NSWMA has always believed that departmental spending should be subject to legislative review through the normal budget process. The other half of the Solid Waste Services Tax goes to the 21 counties and the Hackensack Meadowlands District to prepare, revise and implement solid waste management plans. It is our understanding that money needed for solid waste planning at the district level has already been spent. Are additional funds warranted for this purpose?

At this time, I would like to direct my comments to several provisions of A1778 which were approved by the Assembly County Government and Regional Authorities Committee.

We recommended to the Assembly committee that Section 15. c. (1)--uses of the District Resource Recovery Investment Tax Fund--be clarified to guarantee resource recovery tipping fee subsidies to all district users. The legislation provided that the district fund may be used "to provide gradual transition between resource recovery facility rates and sanitary landfill facility rates". This seems to indicate that the money should be used to everyone's benefit. Our concern is that districts might be tempted to use the fund only in the form of grants to municipalities that provide their own waste collection services. This of course, would be unfair to residences and businesses in towns without municipally financed waste collection service. These consumers would be subject to the new taxes but would receive no subsidy in return. The Assembly committee did not address this important concern and we urge this committee to address this potential inequity by including the following language in Section 15. c. (1):

To reduce the rates charged to all users of a resource recovery facility serving the district in order to provide gradual transition between resource recovery facility rates and sanitary landfill facility rates. Any reductions may be achieved through use of investment tax fund money; to pay construction costs and related facility start-up costs, or to pay directly part of the fees charged for disposal to all users of a resource recovery facility.

We also recommended to the Assembly committee that they establish the same 2% "cap" for administering the Solid Waste Services Tax as is imposed on the district's use of the Resource Recovery Investment Tax Fund in Section 15. c. (4). We were pleased that the committee agreed with our suggestion and limited the administration cost of the Solid Waste Services Tax to the same 2%. This provision holds the Department to an appropriate degree of accountability in administering the Solid Waste Services Tax.

The Assembly committee also adopted an amendment on page 8, Section 13, line 17 allowing use of the Solid Waste Services Tax Fund for implementation of the goals of the State Recycling Plan. We are supportive of recycling in the overall waste management scheme. Recycling preserves our natural resources and reduces the total amount of waste which ultimately must be disposed. However, to appropriate funds to promote the goals of the State Recycling Plan seems inconsistent with the immediate goals of this legislative proposal, which is to facilitate the construction and operation of resource recovery facilities as expeditiously as possible.

The role and form of recycling in New Jersey currently is being addressed in legislative proposals specifically limited to this aspect of solid waste management. In fact, several of these proposals are currently pending before this committee including S1531 by Senator Cowan and S1865 by Senator Contillo, both of which expand and extend the Recycling Act of 1981. Furthermore, the DEP is currently

preparing legislation to implement a mandatory recycling scheme and has created a Task Force to solicit our industry's expertise and views. In short, we suggest that A1778 should keep its focus on resource recovery and leave recycling to more deliberate and comprehensive treatment in other bills.

We also are concerned with an amendment adopted by the Assembly committee on Page 8, Section 13, Line 29 which would allow a district to appoint a citizens advisory committee. An appointed citizens advisory committee or an existing advisory solid waste committee may develop and implement "oversight" projects and conduct community awareness programs regarding resource recovery facilities. Citizens participation in environmental planning is an important and legitimate role which our industry recognizes. We are only concerned with the extent of the participation and how it will effectively fit into achieving the goals of A1778. Thus, we naturally are concerned with the word "oversight" which clearly seems to indicate that any citizens advisory group will have legal authority or powers separate from the district planning mechanism. It is important to clarify in this section that the citizens advisory group will not have independent legal remedies or powers to impede decisions made by the planning district. This also makes sense in view of the fact that monies from the investment fund will be used by the district to support these advisory groups.

We also have concerns with an amendment adopted by the Assembly committee on page 16, Section 32, Line 4 which reads:



The department shall adopt rules and regulations for the engineering design of resource recovery facilities, to include a requirement that state-of-the-art air emission technology be installed to control the emission of hydrocarbons, particulates, dioxins, nitrogen oxides, carbon monoxide, heavy metals, hydrochloric acid, sulfur oxides and other acid gases and pollutants from each resource recovery facility which is expected to emit these pollutants.

For waste-to-energy facilities, state-of-the-art could mean electrostatic precipitators that are capable of controlling pollution to the level acceptable by the U.S. Environmental Protection Agency. Our concern is that state-of-the-art air emission technology may not be applicable to resource recovery facilities. For example, state-of-the-art air emission technology for coal fired or oil fired facilities may not be applicable to resource recovery facilities. While that technology is still state-of-the-art for control of the listed pollutants in general, it might be unproven technology for waste-to-energy facilities for a variety of reasons. Full service contractors in this industry generally believe that they can successfully employ emission control systems under the Clean Air Act definition of best available control technology (BACT).

We are aware of public concern with respect to trace emissions of dioxin and other pollutants from waste-to-energy facilities. All indications point to the fact that such emissions from these

facilities may be routinely controlled using BACT to within normally acceptable limits. I wish to point out, however, that the technology to detect pollution has superseded the engineering data available on: (a) the causes of how such pollution is generated in a combustion facility; (b) the overall effect of such pollution on the environment; and, (c) the inter-relationship of over controlling one pollutant and the resulting emissions of other pollutants.

In other words, we have the ability to detect all kinds of trace pollutants, which this industry believes it can control within acceptable limits, but the industry cannot tell you at this point how to design these facilities to eliminate the problem. Today, the practical solution appears to lie somewhere in the trade off of whether or not you wish to bury solid waste or incinerate it and how much you want to pay to do either. In the future, when we have more information available to us, waste-to-energy facilities may be constructed differently. In both cases, the DEP and the permitting process already provides the flexibility to control air emissions.

We recommend that this amendment be carefully examined along with the air emission controls already mandated by the DEP. If the determination is made that this amendment is still needed we would recommend that it be revised to read:

The Department should adopt rules and regulations to include a requirement that the best available control technology be

employed to control the emission of hydrocarbons, particulates, dioxins, nitrogen oxide, carbon monoxide, heavy metals, hydrochloric acid, sulfur oxides, and other gases and pollutants from all facilities which are expected to emit these pollutants.

This concludes my comments. I appreciate the opportunity to present our views to the committee.

**GOLDSHORE & WOLF**

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(609) 394-1910

LEWIS GOLDSHORE\*  
MARSHA WOLF  
NIELSEN V. LEWIS  
ROBERT J. CASH

\*NJ AND NY BARS

July 16, 1984

HON. Daniel J. Dalton  
New Jersey Senate  
Energy and Environment Committee  
State House Annex  
Room 346  
Trenton, NJ 08625

RE: Resource Recovery

Dear Chairman Dalton and Committee Members:

I represent East Brunswick Township, Middlesex County, in connection with solid waste facility siting matters. The following comments are being submitted on behalf of the Township for consideration by the Committee in connection with its hearing on resource recovery. In particular, the Township's comments will be directed to the unresolved adverse environmental impacts associated with these facilities as well as deficiencies in the administrative process for reviewing proposals for such facilities.

East Brunswick Township has had extensive experience with these issues as a result of its opposition to the potential designation of a highly inappropriate site to be utilized for a mass-burning incinerator. In connection with this proposal, the municipality has conducted a thorough review of the procedures that are being utilized for the selection of sites, the administrative process for approving the designation of the site and the proposed waste disposal technologies.

The Township's position respecting these issues is summarized in the attached two documents. The first of these is a copy of the Statement that the Township presented to the Middlesex County Board of Chosen Freeholders on March 8, 1984. The second is a copy of the municipality's Statement of March 19, 1984 presented to the Clean Air Council and the Advisory Council on Solid Waste Management, advisory agencies with the Department of Environmental Protection (DEP).

The municipality's essential concern is that the current enthusiasm for the removal of purported legal and institutional impediments to the construction of incinerator facilities, in large measure, fueled by the equipment manufacturers, diverts attention from more important issues concerning these proposed facilities. These include whether the incinerators will be constructed and continually operated in a manner that does not adversely impact on the public health, safety, welfare and environment. In terms of the proper sequence for public policy decisions, the outstanding issues should be resolved before the Legislature gives a "green light" for these very costly proposals. In the event that measures such as Assembly, No. 1778 (Official Copy Reprint) are approved, the control of the legislative branch of government respecting these issues will be substantially diminished.

A number of issues should be addressed and resolved prior to the consideration of measures such as Assembly, No. 1778 (Official Copy Reprint). These include:

1. The DEP's failure to adopt and enforce specific administrative regulations applicable to resource recovery -- mass burning incinerator -- facilities. The department's insistence that "guidelines" would be sufficient raises serious questions. The direction to the Department set forth in section 32.a.(2) of Assembly, No. 1778 (OCR) that regulations "shall" be adopted provides "cold comfort" to those concerned with the performance of these facilities. An alternative suggestion would be for the Legislature, by separate enactment, to require that the DEP propose for legislative consideration the standards and protocols prior to the adoption of legislation that would remove the legal and institutional impediments to going forward with resource recovery. Hearings pertaining to the adequacy of such standards and protocols could be reviewed and debated prior to the commitment of substantial public resources. This type of legislative involvement could be achieved in a manner that was consistent with separation of powers and the Presentment

Clause of the New Jersey Constitution. See General Assembly of State of New Jersey v. Byrne, 90 N.J. 376, 395 (1982) ("Our holding here does not foreclose all legislative veto provisions.")

2. The absence of specific standards for the emission of dioxins and other hazardous contaminants, even in trace amounts. According to recent newspaper accounts, the owner of one of the few operating resource recovery plants in the United States is just now getting around to sampling and testing for dioxin (a highly toxic chemical) emissions from its facility. Before these results are obtained, verified and impartially analysed, the Legislature should take no further action pertaining to Assembly, No. 1778 or similar measures.

3. The DEP's has not adopted procedural rules for processing applications for resource recovery to provide for, among other things, a maximum amount of public participation and ready access to relevant documents on file with the agency. The public and the affected municipalities do not have complete information respecting the procedures or sequence that will be utilized for processing these applications. This situation should be specifically addressed by the Legislature as it has resulted in ad hoc and arbitrary action.

4. The State environmental agency should be directed to specify the manner in which local concerns will be integrated in the siting process.

5. The absence of a previously adopted enforcement protocol defining the circumstances for the imposition of monetary penalties and mandatory shutdowns of facilities operating in violation of standards. The need for performance

Letter to Hon. Daniel J. Dalton, et al.  
July 16, 1984  
Page Four

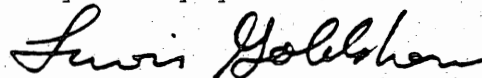
guarantees to assure compliance on a continuous basis.

6. The desirability of having one model facility constructed, operated and tested before other proposals go forward in the approval process. At present, several facilities are being advanced on a simultaneous basis and it is uncertain whether the technology will comply, on a continual basis, with the equipment manufacturer's claims.

\* \* \* \* \*

East Brunswick Township believes that it is in the public interest that the foregoing issues be addressed in binding legislation. Until these safeguards are in place it is untimely to adopt measures that are designed to expedite the construction of resource recovery facilities. As a result of this recommended approach, some very costly problems will be avoided.

Very truly yours,



LEWIS GOLDSHORE

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NIELSEN, V. LEWIS

ROBERT J. CASH

\_\_\_\_\_  
\*NJ AND NY BARS

STATEMENT ON BEHALF OF EAST BRUNSWICK TOWNSHIP

CONCERNING PROPOSED AMENDMENTS TO

MIDDLESEX COUNTY DISTRICT SOLID WASTE MANAGEMENT PLAN

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MARCH 8, 1984



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LEWIS GOLDSHORE\*  
MARSHA WOLF  
NIELSEN V. LEWIS  
ROBERT J. CASH

March 8, 1984

\*NJ AND NY BARS

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
County Administration Building  
New Brunswick, NJ 08903

RE: Amendments to District Solid  
Waste Management Plan

Dear Director Capestro and Members  
of the Board of Chosen Freeholders:

I serve as Special Counsel to East Brunswick Township in connection with solid waste matters.

The Township has reviewed the proposed amendments to the Middlesex County Solid Waste Management Plan. In particular, the following comments in opposition to the proposed amendments are directed to "Amendment #2 - 1984, Signal-RESCO". This amendment would include within the County Plan a proposal by Signal-RESCO, Inc., to construct a 1,200 ton per day mass-burning incinerator in East Brunswick Township. Such action would constitute, and be construed as, the County's approval and endorsement of a proposed facility that is fraught with the potential for serious environmental deficiencies, substantial disruptions to established residential communities and staggering economic/fiscal implications. Until these issues are resolved,

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Two

it is the Township's position that the County cannot and should not approve the proposed amendment. Such action would not be based on fact or on law and would constitute an arbitrary and capricious decision.

A review of chronology of relevant events that occurred during 1982 and 1983, support the conclusion that Amendment #2 should not be approved. In March of 1982, Wheelabrator-Frye, predecessor of Signal-RESCO, submitted its proposal to the State Department of Environmental Protection (DEP) to construct a mass-burning incinerator in East Brunswick Township. Copies of the applicable documents were thereafter distributed to various review agencies for comment. These review agencies included Middlesex County as well as East Brunswick Township.

A County level agency designated as the Middlesex County Resource Recovery Committee reviewed the proposal and determined that there were substantial deficiencies. In particular, the Committee observed:

The Committee feels that the material submitted by Wheelabrator-Frye is generally lacking in supportive data. Statements are made relative to emissions levels or environmental impacts without the evidence to substantiate the claims. The reports also contain many instances of conflicting statements (see part II of this review). (emphasis added).

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Three

The County Review Committee also raised serious specific issues and made note of very significant inconsistencies in the information provided by the equipment manufacturer. The areas of deficiencies included ones involving major environmental concerns: water impacts, air impacts, and land impacts. Similar comments to the Wheelabrator-Frye proposal were submitted on behalf of East Brunswick Township. It is also noteworthy that the review agencies within the DEP also expressed major reservations and objections to the proposal.

A meeting was held on May 28, 1982 at the offices of the DEP to review the deficiencies. In attendance at that meeting were representatives of the State, county and local governments, as well as Wheelabrator. The negative comments were discussed and assurances were provided by the Company that the deficiencies would be addressed in the near future. To date, no attempt has ever been made to address these concerns. In fact, the meeting on May 28, 1982 marked the end of the Company's discussions with the State environmental agency. No applications and no documents for review have been provided to the DEP by Wheelabrator-Frye/Signal-RESCO for almost two years.

The Middlesex County Board of Chosen Freeholders held a public hearing on August 9, 1982 to consider this matter. At that time, a written statement was submitted on behalf of East

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Four

Brunswick Township. In that submission, the Township took the position that the County Solid Waste Management Plan should not be amended to include the incinerator proposal because of the absence of essential information. The reasoning set forth in that position statement is even more compelling at the present time:

If this proposal is so lacking in supportive data; if the company has made claims (sic) concerning health and environmental impacts without the evidence to prove its claims; if its reports contain conflicting statements --- Is it appropriate to approve the siting of this facility in the County Plan? If the control apparatus to limit emissions from the proposed facility has not been specified; if the impacts of the emissions on the citizens of the County are unknown; if the standards against which to assess this facility have yet to be written; if the proposed access to the site is already seriously overburdened --- Should the County endorse this proposal? It is East Brunswick Township's position that the protection of the public health, safety and welfare requires that these questions be answered in the negative.

Under these circumstances, until such time as the deficiencies are corrected and the technical and other questions are answered, it is premature and undesirable to include the Wheelabrator-Frye incinerator proposal in the County's Solid Waste Management Plan.

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Five

Following the August 1982. hearing, the Board on September 16, 1982, adopted an approach that reflected a measure of caution and concern regarding these issues which impact so directly on the public health, safety and general welfare. The Board indicated that the site was consistent with the County Plan, but specifically refused to endorse or approve the project. Middlesex County District Solid Waste Management Plan 1982, p. 34. While East Brunswick Township believed that a total rejection of the proposal would have been more appropriate under the circumstances, the DEP apparently took exception to the language of the Amendment that concerned the incinerator. In its review of the September 16, 1982 Plan Amendments, the State agency commented on March 8, 1983 that the Board's action did "not constitute inclusion in the District Solid Waste Plan." Certification of Approval with Modifications of 9/16/82 Amendments to the Middlesex County District Solid Waste Management Plan, p. 8. It is significant to note that the State agency did not specify a time period or direct the sequence in which the incinerator proposal had to be included in the County's Plan.

It appears that Amendment #2-1984 was formulated by the County's solid waste staff in response to the DEP's action of March 8, 1983. The question that must now be posed is whether good and sufficient reasons have been presented to require that

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Six

this action be taken at this time. A review of the record indicates that the serious deficiencies noted in the Company's presentation have never been resolved, that the DEP has received public comment concerning the need for enforceable regulations applicable to this type of facility but never acted on these recommendations, that the economic impacts of the proposal have not been addressed, and that this facility is overwhelmingly unacceptable to the residents of East Brunswick Township and surrounding communities.

In the closing days of 1982, Wheelabrator made available a revised report concerning its proposed facility to the County and East Brunswick Township. For unexplained reasons, the report has never been submitted, even informally, to the DEP for comment. One can only speculate concerning the reasons why the Company has refused to share technical information regarding this matter.

A preliminary review of these documents was commenced at the County level. On January 26, 1983, the County Solid Waste Advisory Council Facility Review Committee met and reviewed numerous problems and deficiencies associated with the proposal. These included serious issues respecting air quality impacts, water supply impacts, water quality impacts, residue disposal and geographic location impacts. A copy of a comprehensive

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Seven

memorandum discussing these matters that was distributed at that meeting is attached hereto as Exhibit "A". Similar concerns and unresolved questions were reflected in a summary of the meeting of the County's Edgeboro/RESCO Review Committee held on January 26, 1983. A copy of that summary is attached hereto as Exhibit "B".

From these two review documents prepared by the County level staff, it appears that the environmental concerns that the County, the Township and interested citizens raised during the first round of reviews persisted and were unresolved in the Company's second series of submissions. Also relevant to this discussion are comments relating to the renewed incinerator proposal prepared by Paul N. Cheremisinoff, P.E., an expert retained by East Brunswick Township to assist in the review of the Company's proposal. Mr. Cheremisinoff's comments, dated March 8, 1983, addressed air pollution, odors, residue disposal and noise related impacts. A copy of this review is attached hereto as Exhibit "C". While these serious issues were identified once again early in 1983, the Company has decided to follow a policy of "official silence" -- no further response or attempt to resolve the deficiencies has been subsequently made.

Based on this experience, Mayor William F. Fox of East Brunswick Township wrote to the Company on April 21, 1983 and

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Eight

recommended that the proposal be abandoned. A copy of the Mayor's letter is attached as Exhibit "D". In that letter, the Mayor noted:

At this point, it is readily apparent that too many issues of importance to East Brunswick Township have been left unresolved. It is not the obligation of the proposed situs municipality to redesign a deficient application. This is the burden of the applicant.

It is clear that Wheelabrator-Frye has not addressed the concerns of a residential community that would be substantially affected by the proposed incinerator. Under these circumstances, it is the Township's position that the proposal should not proceed and a more suitable location further removed from populated areas should be identified by the Company.

Apparently, Signal-RESCO has determined to neither address the deficiencies in the proposal or abandon the proposal. In response to this patently unacceptable situation, the voters of East Brunswick Township expressed their view of the proposal at a referendum held in November of 1983. Of the 9,393 voters who expressed their position on this issue, some 7,463, approximately 80%, voted against the proposal. Certainly, such a response should provide a clear message to all governmental officials concerning the public acceptability of this proposal.



Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Nine

Another consideration that justifies the disapproval of the Amendment is the unknown and undefined costs involved. In the event that the Amendment was approved, the County's powers to require information and response respecting fiscal/economic issues would be substantially diminished. Thus, it is imperative for the Board to have a complete understanding of the costs prior to committing the County to what is likely to be a very expensive proposal.

Furthermore, there has never been an analysis of suitable alternative sites. Before the County makes a lasting and irreversible decision concerning solid waste facilities, it is essential that an impartial site suitability study be completed.

A review of the Solid Waste Management Act also indicates that Amendment #2-1984 is procedurally and substantively inconsistent with law and not based on substantial evidence. See N.J.S.A. 13:1E-20 et seq. For example, the statute requires that a map, plan and report be prepared in support of a proposed county plan amendment. N.J.S.A. 13:1E-23.d. From the information that has been available, it appears that the required supportive documentation has not been prepared by the County. In addition, the necessary documents were not available for inspection "at the offices of every municipality within the county". Nor did the notices of the

Freeholder Director Stephen Capestro  
and Members of the Board of Chosen Freeholders  
March 8, 1984  
Page Ten

hearing provide this statutorily required information. The failure to adhere to the mandates of the statutory requirements would result in the invalidation of any action taken at the proceedings. See Wolf v. Shrewsbury, 182 N.J.Super. 289, 295 (App. Div. 1981), certif. den. 89 N.J. 440 (1982); In re Application of County of Monmouth, 156 N.J.Super. 188 (App. Div. 1978), certif. den. 77 N.J. 473 (1978) (content of notice was inadequate and action taken at the meeting was set aside). The foregoing is not intended as an exhaustive discussion of East Brunswick's Township's legal objections and the municipality expressly reserves its rights to raise such other objections as may be relevant.

For the foregoing reasons, it appears unnecessary and untimely for the County to approve Amendment #2-1984, since answers to critical environmental, public health and economic issues have not been provided. It is East Brunswick Township's position based on the past two year's experience that the proposal be rejected. In the alternative, action on the Amendment should be deferred until the issues that have been raised by all interested parties have been satisfactorily addressed and resolved.

Very truly yours,



LEWIS GOLDSHORE

LG:dmb

## MEMORANDUM

TO: Robert McCarthy  
SWAC Facility Review Committee

FROM: Environmental Division  
Middlesex County Planning Board

RE: Wheelabrator-Frye, Inc./Edgeboro RESCO  
Project Application and EIA

DATE: January 26, 1983

The Environmental Division staff has reviewed the three volume report for the above noted project. The following staff comments represent our preliminary comments.

### A. Air Quality Impacts

#### 1. Monitoring of Emissions on the Facility

A specific continuous monitoring operation on the facility is not identified for this project. Emissions from the Edgeboro RESCO facility may meet emission standards during normal operations but may far exceed the standards if a malfunction occurs. Although the Wheelabrator-Frye report details normal and emergency maintenance and repair operations, it does not address the monitoring equipment essential to determine a problem.

According to the Industrial Guide for Air Pollution Control, USEPA, June 1978, the application of continuous monitoring techniques to the measurement of pollutants is vital. The selection and design of the monitoring system and its application and maintenance are crucial to the efficiency of the air pollution control system.

The Middlesex County Health Department's air quality personnel should be trained by Wheelabrator-Frye to check the monitoring equipment. It is essential that data regarding malfunctions such as frequency of occurrence, duration, and effects on emission rate be documented for use by East Brunswick Township, the Middlesex County Health Department and NJDEP.

#### 2. Air Pollution Control Equipment

The report reviews four alternate air pollution control strategies. Option II, a spray dryer absorber followed by a fabric filter (SDA/FF), was selected as being the most effective. There are some potential problems with the SDA/FF which should be noted.



- a) In the report, the SDA/FF method was termed a dry scrubbing technique. Although a dry waste is produced as opposed to wet sludge as in wet scrubbing, water does enter the SDA/FF process. Water does not enter into the all-dry system.

Since water is used in the SDA/FF process, a visual moisture -laden plume results.

- b) According to the Electric Power Research Institute Journal's article on "Scrubbers - The Technology Nobody Wanted", October 1982, the primary application for spray drying techniques at the present time is on low-sulfur coals. This technique is limited by the "industry's scant experience with it in commercial application and technical questions regarding such aspects as reagent preparation, absorber residence time, saturation control, and operation of downstream particulate control equipment".

In view of the aesthetic impacts and the limited experience of the SDA/FF process, was the all dry scrubbing technique considered by Wheelabrator-Frye?

3. Hazardous Pollutants

Concurrence with State and County air and health officials should be achieved in regard to incorporation of appropriate toxic and hazardous pollutants in the monitoring program. Wheelabrator-Frye should monitor for such potential pollutants that are proposed for regulation by DEP and the County.

4. Hydrocarbons

There appears to be inadequate reference to hydrocarbon emissions. Past discussions with NJDEP indicated that they would be skeptical of a report indicating that few hydrocarbon emissions were present.

If over 50 tons (controlled) of hydrocarbons are emitted by the facility, it would be subject to New Jersey's Emission Offset Rule.

This pollutant bears further review.

5. Carbon Monoxide

The report states that new techniques result in projecting carbon monoxide emission levels from the plant to be "well below literature levels". These new techniques are not adequately explained and this pollutant may require further close analysis.

6. Lead

The impact of lead emissions should be more carefully reviewed.

NJDEP has recently designated New Brunswick, at the site of the Delco-Remy Plant (Jersey Avenue and Route 1), to be in non-attainment of federal lead emission standards. The effect of lead emissions from Edgeboro/RESCO on ambient air quality must be examined in light of high levels in the New Brunswick area.

7. Fine Particulates

The report should include an analysis of fine particulates.

8. Recommendations to the County and State

- a) Particulate emissions bear careful monitoring as they impact the northeastern portion of the County which is close to federal secondary or welfare standards. This information will come forth in the Prevention of Significant Deterioration review process.
- b) The State is cutting back its monitoring program because of severe funding problems. This area must lobby for maintenance of the existing monitors in order to insure that air quality is not deteriorating, especially as new large scale facilities begin operation.
- c) In view of its magnitude and potential areawide impact and in view of reduced State resources for continuous monitoring of priority pollutants, including particulates, carbon monoxide, SO<sub>2</sub> and hydrocarbons (and oxides related to ozone (smog) production), Wheelabrator-Frye should be required to provide for ambient air quality monitoring at selected downwind locations. In the event of detection of any problems (violations), there should be a State and County approved response plan in place.

9. Potential Future Concerns

- a) Should the State mandate that additional garbage be delivered to the Edgeboro facility, the increase in truck traffic would severely burden the intersection of Edgeboro and Route 18. Since this intersection is a suspected "hot spot" for carbon monoxide at current traffic levels, such a State mandate would certainly cause severe carbon monoxide (CO) problems. Under the N.J. State Implementation Plan, design changes would need to be made in order to be in attainment of the CO standard.
- b) Should the waste content change in the future, the air pollution controls on the Edgeboro/RESCO facility would need to be reviewed. Emphasis here would be on control of hazardous pollutants.

**B. Water Supply Impacts**

1. Approximately 250,000 gallons per day is identified as the process water requirement, drawn from groundwater wells. An analysis of groundwater quality and the influence of this withdrawal on area wells should be completed and the impacts evaluated. The impacts on surface or subsurface leachate flows at the neighboring landfill should be identified and the impact evaluated.
2. Potable supply appears to come from wells rather than the municipal system. Again, water quality and the influence on groundwater movement should be determined prior to use of this water. The current diversion permit does not allow diversion for potable purposes, only non-potable uses. There is no information present in the RESCO application which indicates this water meets the parameters established by the Safe Drinking Water Act of 1974. This on-site well may contain leachate derived pollutants which would be hazardous to the health of those using it for sanitary or potable purposes. Connection to a municipal system for potable and sanitary supply might be appropriate.
3. Cooling Water (38 MGD) will be taken from the Raritan River. Will minimum fresh water flows and quality parameters be maintained if this diversion is allowed?

Major omissions are:

- an analysis regarding heat dissipation in the Raritan River, isotherm determinations, and impacts on marine life.
- identification of effluent impact on the Raritan estuary and marine life (especially considering the JCP&L discharge and the potential for interaction between thermal discharges due to tidal flows).
- identification of required diversion approvals for surface water from the State Water Authority and DEP.

**C. Water Quality Impacts**

1. The report does not address non-point water quality impacts. The report should identify a storm drainage control plan for the site incorporating quality considerations.

In view of oil leakage from garbage trucks and hydraulic systems, runoff treatment (oil separation) should be required.

2. On-site chemical storage must include appropriate spill prevention and control mechanisms:

- diking and runoff control
- leak detection and overfill control
- tank construction (double walled)

D. Residue Disposal

1. The quality of the ash with spray dryer residues should be analyzed as a priority. Specific State review of the ash quality should be completed in the initial operation period and periodically thereafter, and appropriate disposal mechanisms identified based on the initial and follow-up analyses. There may be an adverse air quality impact from the combustion residue (fugitive dust) if not disposed of properly.
2. All waste liquid from residue handling or holding locations should go to the sanitary sewer with the full knowledge and monitoring by the Middlesex County Utilities Authority.
3. The buffering quality of combustion residue and the justification for mixing bottom and fly ash (except for dilution) are not adequately explained. There appears to be a significant long-term threat of heavy metals leaching from the residue, especially lead and zinc.

E. Geographic Location Impacts

1. The site should be specifically identified on the wetlands mapping recently completed by the NJDEP, Division of Coastal Resources. This mapping is available at DEP and will be subject to public hearing in March or April. A copy of the DEP mapping for the WBF site is attached, and shows most of the facility to be within the wetlands.
2. It appears from the report that filling of areas below the 13 foot elevation will be required. These areas appear to be wetlands and we believe they are within the floodway. The plan should indicate whether or not this filling will effect flood flows and whether a U.S. Army Corps of Engineers permit is required. Flood damage protection measures should be shown. Are there riparian land considerations involved at this site?



NEW JERSEY UPPER WETLANDS BOUNDARY  
(PROPOSED FOR ADOPTION)

MB-F SITE BOUNDARY  
(FROM VOLUME II, FOLLOWING FIGURE 1-1)

RARITAN



EDGEBORO/RESCO REVIEW COMMITTEE

MEETING SUMMARY

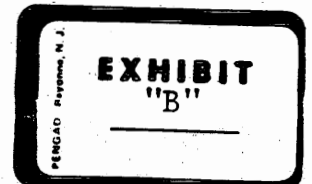
JANUARY 26, 1983

Topic: Air Pollution Control

1. Why was the 230 foot stack chosen over other stack heights?
2. What are the estimated emissions from the 230 ft. stack?
3. Do the computer models used to predict dispersion accurately reflect actual conditions? What are the deficiencies in the models?
4. Will there be any effect on the non-attainment areas for TSP northeast of the site as a result of landfilling of the ash at Edgeboro?
5. The stack monitoring system is not detailed. Which pollutants will be monitored at the stack? What equipment will be used for continuous monitoring and how will the data be recorded? How often and by what method will the monitoring equipment be calibrated? What will be the system whereby the monitors are checked and the recorded data is analyzed to assess compliance? What action will be taken if the equipment does not function according to the plant's permit?
6. Will any equipment be installed in the areas of maximum ground level effects to monitor ambient air quality?
7. What is the performance record of the spray dryer/fabric filter combination which has been proposed? How is cloth failure in a fabric filter to be monitored? Can a fabric filter unit be repaired while adjacent units are still in operation? Why has a time monitor system been used on the fabric filters rather than a pressure monitor system? What is the effectiveness of the fabric filters in removing respirable, sub-5 micron, particles?
8. Is there an emergency bypass of the air pollution control system?
9. How is soot-blowing to be managed? What will be the effect of soot-blowing on the fabric filters?

Topic: Waste Quantities

1. What changes were made from the earlier proposal to allow the increase from 1200 tpd to 1500 tpd?
2. How will the waste supply be secured?



#### Topic: Water

1. More data is needed to substantiate the heat dissipation calculations covering condenser water return to the Raritan River?
2. Will the necessary quantity of water be available from the Raritan River under conditions of low flow?
3. Has Wheelabrator-Frye considered using the MCUA's effluent as a source of cooling water?
4. The plant location appears to be in an area designated as Wetlands by NJDEP. Why has this been done?
5. The use of well water as potable water supply may not be allowed by the conditions of the well permit.
6. Has a State Water Authority Diversion Permit been applied for?
7. What will be the impact of well water withdrawal on groundwater flow?
8. What will be the impact on groundwater of runoff from the road and parking area surfaces? Given the flow of heavy trucks on the plant's roads, will oil or hydraulic fluid leaks present a groundwater threat?

#### Topic: Residues

1. The data to support the conclusions presented in the Rigo and Rigo study are not supplied. How would the residue at Edgeboro/RESCO, given the proposal of a scrubber, be different from the residues studied by Rigo and Rigo?
2. What is the difference in chemical analysis between the bottom ash and the fly ash?
3. Does the ash generation rate which is shown assume that ferrous metals have been removed for sale?
4. Which plants can grow directly on incinerator residue as claimed?

#### Topic: Weather

1. How does the weather data for 1960 compare with other years? Why wasn't 1964, the most recent year of hourly data, used? Why wasn't an average of several years used?

2. Are there any extremes of weather which could effect the operation of the plant? (e.g. drought, extreme cold, high humidity).

Topic: Traffic

1. Did the traffic analysis include the possible impact of other landfill closures?

2. Did the traffic analysis consider the general growth and development of the Rte. 18 corridor?

3. Did the overall EIS consider the contribution of RESCO-associated vehicles to the "CO hotspot" at the Rte. 18 jug handle?

Topic: Boilers

1. The proposed boiler operator licensing standards may not comply with New Jersey's requirements.

2. More details are needed on the boiler design. Where are the economizer and the super-heater located? Is there an "empty compartment"?

3. What are the details of boiler start-up prior to introduction of waste?

Topic: Dust and Odor Control

1. How will dust and odor be controlled during periods when both boilers are shut down?

Topic: Fire Control

1. Is fire control provided at the charging chute?

2. Is there a backflow preventer?

3. Is the pit fire control system an air monitoring system?

Topic: Site Development

1. If there will be a fuel gas line, what will be its location? Will it be placed on previously filled land?

2. What will be the alignment of power lines and their effect on the project's aesthetics?

3. A realignment of the access road could preserve some existing vegetation. Have alternative alignments been considered?

Topic: Operations

1. Is there a reliable supply of soda ash?

# PAUL N. CHEREMISINOFF, P.E.

ENGINEERS & CONSULTANTS

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ENVIRONMENTAL ENGINEERING  
CHEMICAL ENGINEERING  
PROCESS TECHNOLOGY

PHONE (201) 288-2783

## COMMENTS RELATING TO EDGEBORO RESCO PROPOSAL FOR RESOURCE RECOVERY PLANT

for the

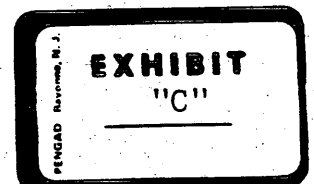
RESOURCE RECOVERY STEERING COMMITTEE  
EAST BRUNSWICK TOWNSHIP, NJ

by

PAUL N. CHEREMISINOFF

March 8, 1983

*Paul N. Cheremisinoff*  
Paul N. Cheremisinoff, P.E.  
3/8/83



## ABSTRACT

This report presents comments relating to the proposed Wheelabrator-Frye refuse-to-energy plant for East Brunswick Township and impacts potentially associated with this project. The report is in response to the charge delegated by the Resource Recovery Steering Committee of East Brunswick to evaluate the Wheelabrator-Frye proposal in three of the areas of concern: air pollution; solid wastes disposal; noise.

## INTRODUCTION

Wheelabrator-Frye Inc., Energy Systems Division, has submitted a revised application for a 1,200 ton-per-day refuse-to-electric energy plant to the N.J. Dept. of Environmental Protection (dated Dec. 20, 1982). The first application for such a plant, to be located in East Brunswick Township, N.J., was submitted in the Spring of 1982. The reply from the Division of Waste Management of the N.J. DEP required Wheelabrator-Frye to conduct additional studies in order to answer NJDEP questions on their first application. This resubmission will be reviewed for acceptance/rejection or request for additional information by state and local governmental agencies.

This report is submitted on the basis of a preliminary review of potential areas that may be of likely concern with this proposed facility. East Brunswick Township being chosen as the host location is most directly impacted and its residents are extremely concerned with the potential environmental and health hazards that may be associated with such a project.

This initial review of the Wheelabrator-Frye application has been charged by the Resource Recovery Steering Committee of East Brunswick Township to identify areas associated with the proposal that may have adverse impacts or cause undue concerns. Specifically addressed are comments relating to:

- . air pollution
- . residue disposal
- . noise

SUMMARY OF BACKGROUND ON  
WHEELABRATOR-FRYE EXPERIENCE

Wheelabrator-Frye is active in the refuse-to-energy market in various parts of the U.S. They have operated a 1,200 ton-per-day plant in Saugus, MA since 1975 and a 2,250 ton-per-day refuse fired plant is under construction in Westchester County, NY, from which electricity will be sold to Consolidated Edison Co. of N.Y. New England Electric System subsidiaries and Wheelabrator-Frye have signed an agreement for construction of a major solid waste disposal facility in Plainville, MA. This latter plant will handle 1,200 tons-per-day and is expected to begin operation in 1986.

Wheelabrator-Frye is also contemplating addition of a third boiler at its Saugus facility, increasing the facility's capacity rate to 2,250 tons-per-day. The Saugus facility supplies steam to a General Electric turbine manufacturing facility. The City of Baltimore (Baltimore County, MD) and Northeast Maryland Waste Disposal Authority announced last November they had signed contracts with Wheelabrator-Frye to design, construct, own and operate a \$190-million refuse disposal-to-electricity facility, having a capacity of 1,600 tons-per-day of garbage.

## AIR POLLUTION

Background considerations, applicability of air pollution regulations, criteria pollutants and permitting requirements are discussed in "Vol. 1 - Engineering Design and Management," of Wheelabrator-Frye's Edgeboro Resco Resource Recovery for Middlesex County.

It is interesting to note that in the Cooperative Extension Service SOLID WASTE MANAGEMENT newsletter published by Rutgers University in January 1983, there is an item reporting NJDEP Officials Answer Air Pollution Questions: William O'Sullivan, Chief of the Bureau of Major Project Review of Environmental Quality, N.J. Department of Environmental Protection, and Gary Pierce, a Principle Environmental Engineer, in the Bureau, recently answered a series of questions about the air pollution potential of refuse-burning-for-energy recovery plants for the Middlesex County Newsletter Editor, Diane Forgrieve. Staff members of the NJDEP's Division of Environmental Quality are responsible for setting standards for air pollution control in N.J. In comparing total emissions from similarly sized energy generating boilers O'Sullivan and Pierce stated that air polluting emissions are expected to be less from a garbage burning plant with proper controls than from a coal-fired boiler, but more than those from an oil-fired boiler using low sulfur oil. They report that the emissions, in tons/year, from these three sources each producing 833 million Btu's/hr. would be as follows:

|  | Particulate<br>Matter | SO <sub>2</sub> | HCl | NO <sub>x</sub> | Lead | CO   | VOS <sup>4</sup> |
|--|-----------------------|-----------------|-----|-----------------|------|------|------------------|
| 2,000 ton/day<br>Resource Recovery<br>Facility with<br>Scrubber <sup>1</sup> | 288                   | 1050            | 365 | 1095            | 36   | 1460 | 40               |
| Existing Oil-Fired<br>Boiler <sup>2</sup>                                    | 146                   | 1168            | 2.4 | 1837            | 0.6  | 122  | 25               |
| New Coal-Fired<br>Boiler <sup>3</sup>  | 110                   | 2190            | 29  | 2600            | 0.7  | 146  | 44               |

1 - assumes 70% SO<sub>2</sub> control, 90% HCl control

2 - assumes 0.3% sulfur oil, no 94x



- 3 - assumes compliance with New Source Performance Standards
  - 4 - Volatile Organic Substances
- 

Additional questions discussed by O'Sullivan and Pierce in this December, 1982 newsletter include the destruction of PCB's, Dioxins, use of scrubbers to remove particulates and acid gases, N.J. operating standards for incinerators, and the monitoring of operating refuse-to-energy plants.

Single copies of this December, 1982 Middlesex County "Solid Waste News" may be obtained without charge from Robert McCarthy, Director, Middlesex County Solid Waste Program, 134 New Street, New Brunswick, NJ 08901, (201) 745-4170.

I have requested copies of this for distribution to the committee.

It is noted from the above documentation that the proposed facility will yield greater quantities of the following pollutants than conventional electricity generating units:- particulate matter; HCl (hydrogen chloride); lead; CO (carbon monoxide); VOS (volatile organic substances).

#### Air Pollution Control

Four air pollution control configurations were examined for the Edgeboro RESCO facility:

- (1) An electrostatic precipitator operating alone. This is the control option Wheelabrator-Frye uses at their Saugus, MA plant.
- (2) A spray dryer/absorber fabric filter combination.
- (3) A spray dryer/absorber electrostatic preimpitator combination.
- (4) An electrostatic precipitator/wet scrubber combination.

Option (2), a spray dryer/fabric filter combination was chosen for gaseous pollutant control by Wheelabrator-Frye. The choice of a spray dryer for separation of gaseous pollutants (in this case  $\text{SO}_x$  and  $\text{HCl}$  at 70% and 90% removal efficiencies) is questioned. The spray drying technique of aqueous sodium carbonate solution and subsequent absorption (chemisorption) on solid sodium carbonate has been discussed in the literature extensively - but is not a proven technology. I know of no major commercial installation in practice. Additionally, this technique based on available data indicates large excesses of sodium carbonate (soda ash) over stoichiometric quantities required for removal of  $\text{SO}_x$  and  $\text{HCl}$  due to the fact that this is a gas-solid reaction. This latter point will potentially add to the solid waste disposal (residue from spray dryer and fabric filter) from the proposed plant as well as employ a speculative technology of dubious removal capabilities.

The reviewed report on this latter subject discusses "calculations of constituents emitted, an engineering determination of the Best Available Control Technology for particulate and acid gas removal." Modeling techniques and paper studies are insufficient and speculations on removal capabilities of such a process.

#### Stack Design

The waste exhaust gas from this facility is to be handled by a concrete stack containing two independent flues, one each per boiler unit, "to a height where sufficient dispersion can take place." The stack elevation will be 230 feet above finished grade and each flue exit will be approximately 7 ft. in diameter.

Drawing No. 05-49-001 shows an exit gas velocity of 3200 fpm (53.3 fps at 180°F). As a rule of thumb, gas injection velocities should be greater than 60 fps so that the stack gases will escape the turbulent wake of the stack. In many cases, it is desirable to have the gas exit velocity on the order of 90 to 100 fps if possible. There is a critical wind velocity for every stack exit velocity. Above this critical velocity the wind shears off the gas as it leaves the chimney and there is no corresponding rise of the waste gas due to the exit velocity. Then gas temperatures and flow rate no longer affect the ground level concentration for which the exit velocity was initially designed.

The stack should be 2.5 times the height of surrounding buildings or surrounding countryside so that significant turbulence is not introduced by these factors.

When stack gases are subject to atmospheric diffusion and building turbulence is not a factor, ground level concentrations on the order of 0.001 to 1 percent of the stack concentration are possible for a properly designed stack. This is a wide range and gives fair testimony to the degree of science involved in design of stacks. Ground concentrations can be reduced by use of higher stacks. The ground concentration varies inversely as the square of the effective stack height.

#### Plume From Plant Stack

Under Chapter VII Unavoidable Adverse Impacts of Vol. II Environmental Impact Statement - Edgeboro Resco Resource Recovery for Middlesex County by Wheelabrator-Frye Inc., a principal unavoidable adverse impact is the visual impact of the stack plume.

"The utilization of acid gas removal technology, namely, spray dryer absorbers, results in the creation of a visual moisture-laden plume. This phenomenon is a direct result of the introduction of water spray to the stack gases in an effort to reduce hydrogen chloride emissions."

The exit stack gas temperature is 180°F (above the dew point), however, when this plume begins to condense (below the dew point), over the surrounding areas the result will be condensation and nucleation of acid rain droplets (Sulfuric acid from SO<sub>2</sub> and Hydrochloric acid from HCl, since these are only partially removed in the proposed control process). While dispersion models have been presented with ground level concentrations mathematically modeled from the point of source emissions - condensation of acid droplets and agglomeration of plume condensation and resulting acid-fall-out should be thoroughly considered and may have a tremendously undesirable effect over a densely populated area.

#### Ground Level Concentrations

Extensive data and calculations have been presented in the Wheelabrator-Frye documents predicting ground level concentrations of estimated point source (stack) emissions. These have not been reviewed in any great detail to date.

It should be pointed out, however, such factors as the effect of adjacent terrain and buildings on stack operation is one which is very difficult to predict. It is common to use mathematical models and studies to help determine possible stack effects. Inversion layers which occur in particular locations at certain times of the day io year should be carefully

considered. Otherwise, contaminants emanating from the stack will be dispersed along the bottom of the inversion layer and dropped to earth at higher than permissible concentrations. In all cases, ground level concentrations calculations should be based on the worst possible situation, especially where toxic elements or compounds are concerned.

In crowded industrial areas, multiple stacks within a short distance from one another can cause a myriad of problems in ground concentration of various contaminants. For example, two stacks emitting sulfur dioxide, located one-mile apart, will undoubtedly create ground concentrations of sulfur dioxide at some point which will be higher than either stack would have created by itself. Much of this information is empirical in nature.

### Odor

"A common concern about resource recovery facilities is the potential of fugitive dust and odors escaping from the facility. In addition, it is also necessary to destroy any bacteria, organic compounds, and carriers of diseases (vectors) that could pose a health problem to the community. Edgeboro RESCO will be designed and operated to eliminate these nuisance and health related concerns."

The above is a direct quote from the RESCO proposal. It should nevertheless be pointed out that odors have been historically one of the biggest community/nuisance problems associated with any type of waste handling facility whether it be storage/landfill/incineration/etc.

Air pollution by odorous effluents from various industrial and waste handling operations tends to be one of the most frequent sources of pollution complaints. Questions on how to deal with community odor problems

has been a subject of much concern. In recent years the number of complaints about disagreeable odors has approached the total of all other air pollution complaints. Odors can cause both social and economic effects and both differ in that the former cannot be measured directly in monetary terms. Social effects of odors include interference with everyday activities, as well as feelings of annoyance on the part of persons exposed.

## SOLID WASTE IMPACTS (ASH)

The total input into this plant will be 1500 tons-per-day of garbage. Residues resulting from the combustion, ash handling, fly ash and other residues are on the order of 600 tons-per-day, which is approximately a 60% reduction in weight of solid wastes eventually going to landfill. This is a relatively low figure when compared to straight incineration of municipal solid wastes. The figure contains added components from the process (water for quenching ash and 15 tons-per-day of soda ash and its reaction products). The overall long-term potential impact on the landfill is probably the same as or greater than if the refuse were directly disposed of in the land if one assumes that most of the garbage combusted would have eventually been biologically decomposed by aerobic/anaerobic digestion and converted to biogas. Ash residue from the Edgeboro RESCO facility will be disposed of in the Edgeboro landfill.

### Residue Characteristics and Disposal

The ash residue disposed of at Edgeboro Landfill has the potential for producing leachate. It is claimed that ash residue fills may contain significantly less contaminants (salts and metals) than produced from typical municipal solid wastes landfill. It is implied that any leachate control system designed and handle leachate from municipal solid wastes will be more than adequate for the leachate produced from resource recovery ash residue. "The actual constituents that will be contained in the Edgeboro RESCO residue will have to be confirmed once the facility is in operation."

A principal component of the ash residue will be fly ash. Fly ash presents a greater pollution potential than bottom ash because many volatile metals and salts are concentrated in the fly ash.

The proposed technology for acid gas control ( $\text{SO}_x$ ,  $\text{HCl}$ ,  $\text{HF}$ ) is a dry scrubbing system. Atomized soda ash solution ( $\text{Na}_2\text{CO}_3$ ) will be used to reduce  $\text{SO}_2$  and  $\text{HCl}$  in the flue gas. The reaction products with soda ash are sodium sulfite; sodium sulfate; the  $\text{HCl}$  and  $\text{HF}$  also present in the flue gas reacts with soda ash to give sodium chloride and sodium fluoride. The acid gas control method will also have to employ large excesses of soda ash. All of these products will be constituents of the fly ash and when combined for landfill with combustion ash; are all water soluble (which will contribute to the leachate problem). Additionally, excess soda ash has a high pH and should give the residue a pH of 9-11. This may not have the mitigating effect as claimed. This ash due to the nature of the proposed air pollution control system is different than the ash residue from RESCO's Saugus facility.

### Recovery Markets

The most significant market for Edgeboro RESCO will be the sale of electric power generated by the facility and sale will be made either to Public Service Electric & Gas Co. and/or Jersey Central Power & Light Co.

Markets for ferrous scrap recovered by the facility projected are claimed to be available in New Jersey. Such markets are not as simple or dependable as the sale of electricity. Sale of ferrous scrap is highly dependent upon such factors as:- general economic conditions (availability of markets; and freight differentials between virgin and scrap materials - freight rates preferentially favorable to virgin materials). If adequate markets for this portion of the residues are not available this is another component which may either have to be accumulated at the site or disposed of via landfill. This amounts to 420 tons-per-week.



Aggregate residue generated by the proposed facility has no defined market. The proposed application states its market depends "on its classification by state regulatory agencies. In Massachusetts, RESCO aggregate is acceptable for use as a bituminous supplement and road material." However, the market acceptability is unproven (even in Massachusetts where RESCO has been operating since 1975), as only demonstration programs are underway. It is not clear if the Edgeboro material would be satisfactory even if markets were available because of the high pH contamination of sodium bicarbonate (should this be the case) having a solubilizing effect. This aspect of residue disposal is extremely speculative and is an additional burden for the landfill from this plant.

## NOISE

Any facility such as the one proposed by its very nature will generate noise. The proposed noise controls appear general and rely primarily upon noise level specifications of equipment/vendor engineering and supply and enclosures. It is generally felt insufficient attention is paid to this aspect of the proposal and the subject should be more thoroughly addressed.

WILLIAM F. FOX, Mayor

April 21, 1983

Mr. Joseph Ferrante, Jr.  
Wheelabrator-Frye, Inc.  
75 Paterson Street  
New Brunswick, New Jersey 08903

Dear Joe:

Re: Wheelabrator-Frye  
Edgeboro-East Brunswick  
Mass Burning Incinerator Proposal

East Brunswick Township has devoted substantial energy to a review of the three documents (Volume I - Engineering Design and Management, Volume II - Environmental Impact Statement, Volume III - Appendices), that were provided by your company some time ago.

As you know, in April of last year the Township provided extensive comments to the State Department of Environmental Protection (DEP) concerning the proposal. It is our position that many of these issues have never been adequately addressed by your company. Furthermore, the revised proposal raises a series of new and equally troubling issues. It is not the purpose of this letter to provide an in-depth review of the material that has been submitted. Rather, we will highlight the Township's fundamental concerns.

Initially, the air pollution aspects of the project are not sufficiently addressed. The Township is concerned with the emission of trace and exotic contaminants, as well as with discussion of in-stack and ambient air quality monitoring is inadequate. The control of upsets or episodes it not fully explored.

Furthermore, questions have been raised respecting the public health implications of this facility. No assurances are provided concerning the impact of long-term exposure to comparatively low level contamination. There is absence of sufficient information to address these public concerns.

Nor are suitable performance guarantees provided to the Township that the facility will function as designed. It is unclear under what circumstances the facility will be closed down because of failure to meet defined levels of operation.

EXHIBIT  
"D"



105x

1 Jean Walling Civic Center, East Brunswick, New Jersey 08816



The impacts associated with the disposal of substantial quantities of ash and residue remains unanswered. The effects of this waste on the local landfill and environment raises substantial issues.

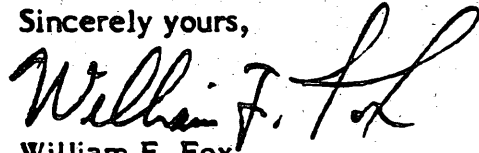
Odors and noises are two additional issues that receive only passing and inadequate discussion. Similarly, the traffic impacts and the proposed solutions are equally unanswered. The fiscal impacts of the facility have been generally ignored in the Company's presentation.

At this point, it is readily apparent that too many issues of importance to East Brunswick Township have been left unresolved. It is not the obligation of the proposed situs municipality to redesign a deficient application. This is the burden of the applicant.

It is clear that Wheelabrator-Frye has not addressed the concerns of a residential community that would be substantially affected by the proposed incinerator. Under these circumstances, it is the Township's position that the proposal should not proceed and a more suitable location further removed from populated areas should be identified by the Company.

We trust that you will respect our sincere concerns and stated objections to the facility, and as a result abandon the Edgeboro proposal.

Sincerely yours,



William F. Fox  
Mayor

WFF:kk

cc: John H. Runyon, Administrator  
Carl Hintz, Director, Planning and Community Development  
William Tanner, Township Engineer  
Bertram Busch, Township Attorney  
Township Council  
David Dannin  
Lewis Goldshore, Esq.

GOLDSHORE & WOLF

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407 WEST STATE STREET  
TRENTON, NEW JERSEY 08616

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LEWIS GOLDSHORE  
MARSHA WOLF  
NIELSEN V LEWIS  
ROBERT J CASH

\*NJ AND NY BARS

March 19, 1984

N.J. Clean Air Council  
N.J. Advisory Council on Solid Waste Management  
Department of Environmental Protection  
Labor & Industry Building  
John Fitch Plaza  
Trenton, NJ 08625

RE: PUBLIC HEARING - RESOURCE RECOVERY

Dear Councilmembers:

I serve as Special Counsel to East Brunswick Township in connection with solid waste management matters.

Attached is a copy of a statement on behalf of the Township for consideration in connection with the resource recovery public hearing.

East Brunswick hopes that the statement will be of assistance to you in connection with your deliberations concerning this matter of substantial public concern.

Very truly yours,



LEWIS GOLDSHORE

STATEMENT ON BEHALF OF EAST BRUNSWICK  
TOWNSHIP BEFORE THE NEW JERSEY CLEAN AIR  
COUNCIL AND NEW JERSEY ADVISORY COUNCIL ON  
SOLID WASTE MANAGEMENT PUBLIC HEARING ON  
RESOURCE RECOVERY

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MARCH 19, 1984

This statement is being submitted on behalf of East Brunswick Township. It addresses the issues that have been raised as to the impacts associated with resource recovery. While some of the Township's comments involve the technological concerns, the focus is directed to the State's review process for evaluating resource recovery proposals.

As you may be aware, East Brunswick has been identified as the location for a proposed mass-burning incinerator. As a result, it has the opportunity to consider many of the issues that are the subject of this public hearing.

The Adequacy of the State's Approval and Control  
Process for Resource Recovery Facilities

Initially, serious questions can be raised concerning the manner in which the solid waste management planning process specified in the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., has been implemented. As many informed observers knew, following the enactment of the 1976 amendments to the Act (L.1975, c.326), the State Department of Environmental Protection (DEP) adopted a rather passive role respecting state-wide solid waste planning. In fact, this situation led the State Supreme Court in 1982 to direct the DEP to forthwith "reduce the statewide plan to an identifiable and manageable document \* \* \*", so that "the districts should not have to engage in a guessing game in order to ascertain which documents constitute the plan." A. A. Mastrangelo, Inc. v. Environmental Protec. Dep't., 90 N.J. 666, 680 (1982). It was in this context that the county level plans were formulated.

In the absence of clear and precise instructions, as well as assistance from the State agency, the product of the county planning process has been substantially less than optimal. As a result of the State agency's failure to adopt a strong leadership role, difficult planning decisions were frequently made for reasons that were unrelated to sound or objective criteria. The one area where this is most apparent is the siting process. See N.J.S.A. 13:1E-21.b.(3)

The lack of specific siting criteria, contributed to the identification of a highly unacceptable site for the location of a mass-burning incinerator in Middlesex County. The site would result in substantial adverse impacts to established

residential communities, impose serious traffic burdens and interfere with the attainment of local land use objectives. Moreover, substantial questions related to the air quality and public health impacts of the facility remain unaddressed.

This situation has been exacerbated by the DEP's failure to adopt detailed rules and regulations to control the operations and emissions from proposed resource recovery facilities. The Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., authorizes the adoption and enforcement of administrative rules designed to control and limit activities that would result in the emission of air pollution. Although the department has this authority, more than a year ago, it proposed to adopt air pollution guidelines for resource recovery facilities and incinerators. At that time, the Township submitted procedural and substantive comments objecting to the proposal. Mayor William F. Fox recommended the adoption of enforceable regulations pertaining to these facilities. Attached as Exhibit "A" is a copy of the Mayor's statement. While a substantial period of time has passed, it does not appear that the department has taken any official action pertaining to this matter by adopting either the guidelines or regulations. Rather, it seems that the agency will be considering each incinerator proposal on an ad hoc basis and relying on the "advances in the art" language in the air pollution control statute. N.J.S.A. 26:2C-9.2.(c). It is the Township's position that this administrative decision is inappropriate in this situation.

The department is not vested with unlimited discretion in requiring the inclusion of the "advances in the art" of pollution control methodology for a proposed facility. The control technology that may be required pursuant to this provision must "have acquired some degree of current use and \* \* \* not (be) unreasonably costly \* \* \* ." Campbell Foundry Co. v. Sullivan, 119 N.J. Super. 51, 54 (App. Div. 1972). Thus, the more prudent course of action would be for the agency to adopt regulations that would establish required equipment and performance standards.

The public is particularly concerned with the issue of dioxins and other hazardous contaminants being discharged by mass-burning incinerators. This matter needs to be resolved before there is further processing of applications for such facilities. It is not enough that stringent emission standards are adopted. The public must be assured that hazardous waste and their precursors cannot enter the waste stream. If such assurances cannot be provided, the risks of such a proposal outweigh any potential benefits. These issues should be addressed only after rigorous analysis and a thorough rule-making process.

The absence of the necessary regulations is likely to result in arbitrary decisionmaking. Resource recovery facilities are being planned in several locations in the State; it is therefore imperative that the DEP adopt clear and understandable

standards and procedures prior to the official receipt of any applications. These regulations should be adopted only after thoughtful study and conducting public hearings to elicit the necessary public comment and suggestion. Only in this way will the various views concerning this important matter of public interest be fully integrated in the porcess.

In particular, the DEP should adopt procedural rules for processing applications for resource recovery facilities. These facilities constitute complex sources of potential pollution and several permits, approvals and clearances are required. At this point in time, it appears that the solid waste agency in the DEP has taken a lead responsibility in the permitting and approval process. This procedure may be appropriate but it should only be followed in accordance with published administrative rules that define the procedure in advance.

Another issue that needs to be addressed concerns the sequence of permits and other approvals. It should be the obligation of the applicant to define with specificity the permits that are required by the proposal, as well as the sequence of the necessary applications.

It would be advisable for the DEP to review proposals for resource recovery facilities and specify a sequence of review that maximizes accountability and opportunityies for public participation. At the present time, it appears that the agency views the public and the proposed situs municipality more as impediments, rather than participants. This approach needs to change, if the public interest is to be adequately protected. Further consideration also needs to be devoted to the sequence for obtaining any necessary federal permits. There are many other federal, state and local approvals that may be required by a proposal. Therefore, at the outset it is important for the DEP to establish a sequence of permit approvals and set forth such information in administrative rules.

Accordingly, comprehensive regulations should be adopted applicable to resource recovery facilities. Through the regulatory mechanism the DEP should clearly define the process by which it will integrate zoning and other municipal concerns in the process of siting resource recovery facilities. Of particular importance are issues concerning on site and off tract site improvements, taxation, noise abatement and control, site plan approval, construction approval and benefits to the host municipality. These questions need to be resolved before the applications to locate such facilities are reviewed.

Furthermore, there is substantial public concern regarding the enforcement of pollution control standards. The agency should establish and publish an enforcement protocol that will make it clear that the standards must be met on a continuous basis and that vigorous enforcement action will be instituted if this is not the case. In addition, the municipalities in the



area should be advised as to the inspection and enforcement procedures that will be followed by the DEP.

The posting of a performance bond or other suitable security is also of paramount importance and should be mandated. A substantial financial commitment to assure that any facility that is constructed operates within established standards at all times is a necessary requirement. The amount of the security should be certain, and the State and local governmental entities, as well as interested citizens, should be able to proceed against such security.

A detailed risk assessment should also be required prior to the approval of a mass-burning incinerator. In this way, interested members of the public and local government will be advised of the risks associated with such a facility. Furthermore, the measures to be taken to avoid any adverse impacts on the community should be discussed in detail.

At the request of East Brunswick Township, an expert on combustion issues, Paul N. Cheremisinoff, P.E., had additionally commented upon the absence of certain parameters that should be monitored but were not in the Guidelines proposed by the DEP. Attached as Exhibit "B" is a copy of these comments.

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STATEMENT OF MAYOR WILLIAM F. FOX

TOWNSHIP OF EAST BRUNSWICK

PROPOSED RESOURCE RECOVERY GUIDELINES



The Township of East Brunswick appreciates this opportunity to present its views concerning Guidelines for Air Pollution Control for Resource Recovery Facilities and Incinerators.

As you know, the Township of East Brunswick has been identified as the location for a proposed mass-burning incinerator to be constructed by Wheelabrator-Frye, Inc. This decision was made although the municipality has already accepted more than its fair share of the region's solid waste disposal obligation and despite the fact that the proposed facility would adversely impact on the residential character of the community.

More than a year ago, the Township of East Brunswick advised the Department of Environmental Protection concerning its serious reservations respecting the construction of a mass-burning incinerator in the municipality. Copies of those detailed comments were circulated to the interested parties. Thereafter, the application by Wheelabrator-Frye was revised and reviewed by the municipality and its consultants. Based on that review, it was apparent that the proposal was unacceptable. As a result, on April 21, 1983, I advised the company that:

\*\*\*Wheelabrator-Frye has not addressed the concerns of a residential community that would be substantially affected by the proposed incinerator. Under these circumstances, it is the Township's position that the proposal should not proceed and a more suitable location further removed from populated areas should be identified by the Company.

We have reviewed the proposed Guidelines in light of our experience concerning the Wheelabrator-Frye proposal. This review substantiates the conclusion that such a facility should not be proposed for construction in a community like East Brunswick and that a more remote site be considered as an alternative.

Regulations/Guidelines

In April of 1982 we advised the DEP that there was a serious absence of specific regulations addressed to mass-burning incinerators. In particular, the lack of controls regarding dioxins and other trace hazardous contaminants was identified. An examination of the Guidelines document indicates that this deficiency still needs to be addressed.

One issue concerns the nature of the Guidelines themselves. We believe that a preferable course of action would be to adopt administrative regulations pursuant to NJSA 26:2C-8, rather than proposed Guidelines to control environmental problems resulting from the disposal of solid waste. Experience indicates that a firm monitoring and enforcement policy will be necessary to insure continued compliance with standards. The remedies available to the DEP and local agencies where there has been a violation of an administrative rule are clear (NJSA 26:2C-19), however, serious enforcement problems might result where a Guideline is violated. For this reason, we believe that the regulatory, rather than the Guidance approach, is appropriate in the instant situation.

## The Guidelines

East Brunswick will provide DEP with written comments concerning the technical aspects of the Guidelines on or before May 27, 1983. I will highlight some of our major concerns respecting this document.

The text of the Guidelines are silent concerning the standards for dioxins and other trace amounts of highly toxic organic contaminants. It is incumbent on the agency of government charged with the protection of environment to formulate these standards prior to a receipt of an application. This is the issue that has most concerned the public because of the possible impact on public health and welfare. Therefore, we recommend that there be no further processing of any proposal until this pressing issue is resolved to the satisfaction of the public.

Another issue of concern is the precise lead emission standard. The Guideline refers to the ambient quality standard rather than establishing an emission standard. The preferable course of action would be for the public and the applicant to be advised in advance what levels of emissions would be allowable. In particular cases, the state of the art might require more stringent requirements, however, the generally applicable requirement should be defined in advance. This lack of specificity heightens the public's concern regarding these facilities.

We believe that the total particulates standard may be too high. It appears that the allowable grain loading should be more restrictive. In any event, we recommend that the DEP provide its rationale for the proposed standard.

It appears that applicants will be required to evaluate the predicted ambient concentrations of listed heavy metals, other than lead. The more preferable regulatory approach in this case would be to establish emission standards that could be made more restrictive to address particular local needs.

The question of monitoring requires more detailed discussion. There is no explanation as to why continuous monitoring is limited to oxygen and carbon monoxide. A more comprehensive in-stack, on site, and community monitoring program should be specified at the outset. Requests by the situs municipality for additional monitoring to assure compliance with all standards should be permitted in the regulatory document. Additionally, the results of any monitoring by a mass-burning incinerator facility should routinely be provided to the interested municipality.

The Guidelines document should deal with the issues of compliance and enforcement. The applicant should know with a reasonable degree of certainty what sanctions will be imposed when the plant malfunctions. Moreover, the municipalities in the area should be advised as to the inspection and enforcement procedures that will be followed by the DEP.

Another subject that should be addressed in the Guidelines is the posting of a performance guarantee. A substantial financial commitment to assure that any facility that is constructed operates within established standards at all times is a necessary requirement. The amount should be substantial, the terms for its forfeiture should be certain, and the State and local officials, as well as interested citizens, should be able to proceed against such performance guarantees.

A detailed risk assessment should also be mandatory prior to the approval of a mass-burning incinerator. In this way, interested members of the public and local government will be advised of the risks associated with such a facility. Furthermore, the measures to be taken to avoid any adverse impacts on the community should be discussed in detail.

One other issue that is not addressed in the Guidelines is siting policy. It appears that the DEP intends to proceed with respect to siting on a case-by-case basis. It is the position of East Brunswick that such a policy is mistaken and that specific provisions concerning acceptable sites should be adopted. This policy should be designed to prevent the siting of a facility in the area when it could impact adversely on residential properties. We believe that such a policy would eliminate consideration of the Wheelabrator-Frye proposal in East Brunswick.

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I hope that the foregoing will be of assistance to you. We look forward to the publication of more detailed Guidelines and regulations prior to the further consideration of a proposal that would have such a substantial impact on the residents of this State.

# PAUL N. CHEREMISINOFF, P.E.

ENGINEERS & CONSULTANTS

407 TERRACE AVENUE, HARBROUCK HEIGHTS, NEW JERSEY 07804, U.S.A.

EXHIBIT  
"B"

ENVIRONMENTAL ENGINEERING  
CHEMICAL ENGINEERING  
PROCESS TECHNOLOGY

PHONE (201) 288-2783

May 25, 1983

Mr. Herbert Wotrech  
Ass't. Director of Environmental Quality  
N. J. Dept. of Environmental Protection  
John Fitch Plaza  
Trenton, NJ 08625

Re: East Brunswick Proposed  
Resource Recovery Guidelines

Gentlemen:

On the May 19, 1983 hearing a statement of Mayor William F. Fox, Township of East Brunswick on Proposed Resource Recovery Guidelines pertaining to air pollution, was presented.


One of the concerns voiced was the absence of some parameters that should be monitored that were not addressed in your Air Pollution Control Guidelines for Resource Recovery Facilities. It is felt that a full range of air pollutant parameters be monitored/regulated as follows (and not limited to):-

1.  $SO_x$  (sulfur oxides) at the stack.
2. HCl (hydrogen chloride) at the stack.
3. Stack gas velocity.
4. Particulates - from a gross weight/grain loading standpoint  
- respirable particulate (by size - 0.5 to 5 microns).
5. Metals - particularly lead.
6. Organic compounds in the exhaust gas emissions. In particular, such compounds as PCB's and Dioxins which are of community concern.
7. Adequacy of operation of fabric filters (as opposed to electrostatic precipitators) be assured by pressure drop measurements across the equipment to detect broken bags.

8. Require one or more ambient air monitoring stations at points of expected maximum ground level concentrations or potential environmental impacts and for assurance of adequate stack gas dispersion. Parameters to be monitored should include but not be limited by items 1, 2, 4, 5, 6.
9. Instrumentation and monitoring should employ recording instruments to assure permanent records of conditions are retained and available to inspection by regulatory, enforcement officials and other interested parties as required.
10. Are resource recovery facilities such as those discussed in the guidelines in the State/County Emissions Banking program and will they bank excess pollution control credits or buy previously banked credits?
11. Another follow up concern is testing of unknown materials in the incoming waste stream and provisions for questionable wastes to be segregated and held aside not to be incinerated but possibly treated or disposed of by some other means.

It is hoped these comments will be of assistance to you. Thanks for your attention.

Sincerely,

  
Paul N. Cheremisinoff, P.E.

PNC/lc

cc: L. Goldshore ✓  
W. Tanner  
C. Hintz

407 WEST STATE STREET, TRENTON, N. J. 08618

:: (609) 695-3481

JOHN E. TRAFFORD, Executive Director

WILLIAM G. DRESSEL, JR., Asst. Executive Director

July 9, 1984

Honorable Daniel J. Dalton, Chairman  
Senate Committee on Energy and Environment  
P.O. Box 70  
Blackwood, NJ 08012

Assembly 1778

Dear Senator Dalton:

The League Legislative Committee opposes Assembly 1778, an act proposing new solid waste disposal fees and providing for the further development of waste resource recovery facilities in New Jersey.

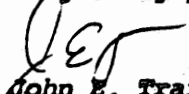
The committee believes that the current solid waste management act, if embraced and properly utilized by solid waste management district officials, is sufficient to plan, site, build, and bring on-line waste to energy plants.

Governmental officials on state, county, and municipal levels are fully cognizant of the environmental, technical, and political problems affecting the process of how we dispose of the huge volumes of solid waste we generate. The committee further believes that the new statewide fees called for in Assembly 1778, which will help fund widespread development of waste to energy plants in the State, are not absolutely necessary or appropriate at this time.

The major reason why the committee feels this way is because solid waste disposal fees are near, if they are not already at, a crisis level for most municipalities. Adding more expense to the cost of disposing of solid waste by creating new taxes, regardless of the purpose for which these taxes are earmarked, is, therefore, not acceptable at this time to local officials.

The League has had an ongoing dialogue with this measure's sponsor and the Department of Environmental Protection regarding how the enactment of Assembly 1778 would affect New Jersey's municipalities. I would like to make it clear, though, that the League stands ready to provide views from the municipal sector on the provisions of A-1778, and that we will continue to participate in the public debate on A-1778.

Very truly yours,

  
John E. Trafford  
Executive Director

July 12, 1984

STATEMENT TO SENATE COMMITTEE ON ENERGY AND ENVIRONMENT - HEARING ON  
A1778

This is a fervent appeal to the Committee to amend A1778 so that an appropriate portion of the money collected in the Resource Recovery Investment Tax Fund (Sections 14 and 15 of the bill) be available for waste reduction and materials recovery programs.

The long-term and varied benefits of waste reduction and recycling are glaringly obvious: (1) Practical cost-control of waste management; (2) Variety of jobs; (3) Energy and natural resource conservation; (4) Source of reusable materials; (5) Reduction of pollution; (6) Necessary recognition and practice of the conservation ethic, of critical importance with every passing year.

This is in sharp contrast to the staggering expenditures required for resource recovery facilities' construction, operation and maintenance. There are serious questions about their safety and their efficacy. The tendency to regard them as a quick and easy answer to our awesome waste problems is very dangerous and costly - costly in terms not only of their economic cost but also their environmental cost. They must have a guaranteed volume of waste for "efficient" operation. This, therefore, encourages indolence on the part of those being serviced not to reduce waste; rather, they throw out valuable, reusable materials which then must be processed at high cost.

I agree with the experts who spoke at a joint hearing <sup>March 10</sup> of the Clean Air Council and the Advisory Council on Solid Waste that one model resource recovery plant should be built and its operation monitored before any others are built in the state.

However, a main focus of every branch of state, county and local government must be the reduction of waste materials and the strengthening of recycling and composting in New Jersey - by the use of recycled and composted materials, the building-up of markets for them and expansion of programs in every possible way. This has to begin today.

The present tenuous situation with regard to trash collection in 20 towns underscores the need for immediate action on waste reduction and materials recovery programs.

Thank you for the opportunity to express these opinions.

*MEO*  
Mary H. Owen (Mrs. Robert J.  
266 Wall Street  
W. Long Branch, NJ 07764

I am a concerned citizen, conservationist and long-time worker for recycling.



9319

## KINSLEY WASTE FLOW BY SOURCE

July 1, 1983 to December 31, 1983

| Sending District     | Cubic Yards | % Cubic Yards | Total Trucks | % Trucks |
|----------------------|-------------|---------------|--------------|----------|
| Gloucester           | 316,007     | 12.3%         | 14,716       | 17.3%    |
| Camden               | 496,684     | 19.3%         | 21,388       | 25.1%    |
| Salem                | 11,956      | .5%           | 532          | .6%      |
| Philly<br>(City)     | 905,874     | 35.1%         | 21,345       | 25.1%    |
| Philly<br>(Non-City) | 499,064     | 19.3%         | 17,357       | 20.7%    |
| Other Pa.            | 150,445     | 5.8%          | 5,333        | 6.3%     |
| N.J. Other           | 168,536     | 6.5%          | 3,191        | 3.8%     |
| Delaware (State)     | 22,370      | .9%           | 547          | .6%      |
| Unknown              | 7,991       | .3%           | 385          | .5%      |
| Total                | 2,578,972   | 100.0%        | 84,796       | 100.0%   |

## GLOUCESTER COUNTY WASTE FLOWS TO KINSLEY

July 1, 1983 to December 31, 1983

| Municipality  | Yards   | Tons (1) | Tons Per Day (2) | Pounds Per Capita (3) | Total Trucks | Tons Per Day |
|---------------|---------|----------|------------------|-----------------------|--------------|--------------|
| Clayton       | 6,471   | 1,849    | 10               | 3.3                   | 304          | 2            |
| Deptford      | 47,880  | 13,680   | 74               | 6.2                   | 2,457        | 16           |
| E. Greenwich  | 4,230   | 1,209    | 7                | 3.3                   | 180          | 1            |
| Elk (5)       | 1,211   | 346      | 2                | 1.2                   | 65           | 1            |
| Franklin      | 9,645   | 2,756    | 15               | 2.3                   | 375          | 3            |
| Glassboro     | 25,343  | 7,241    | 39               | 5.3                   | 889          | 6            |
| Greenwich (6) | 1,116   | 319      | 2                | 0.7                   | 42           | --           |
| Harrison      | 4,677   | 1,366    | 7                | 3.8                   | 223          | 1            |
| Logan         | 3,643   | 1,041    | 6                | 3.6                   | 141          | 1            |
| Mantua        | 19,429  | 5,551    | 30               | 6.5                   | 786          | 5            |
| Monroe        | 18,894  | 5,398    | 29               | 2.6                   | 922          | 6            |
| National Park | 1,486   | 425      | 2                | 1.1                   | 65           | 1            |
| Newfield (7)  | 91      | 26       | --               | --                    | 3            | --           |
| Paulsboro     | 15,847  |          |                  |                       |              |              |
| Pitman        | 19,347  | 5,528    | 30               | 6.2                   | 771          | 5            |
| S. Harrison   | 1,874   | 535      | 3                | 3.9                   | 91           | 1            |
| Swedesboro    | 5,557   | 1,588    | 9                | 8.9                   | 192          | 1            |
| Washington    | 24,566  | 7,019    | 38               | 2.8                   | 1,116        | 7            |
| Wenonah       | 2,192   | 626      | 3                | 2.6                   | 147          | 1            |
| W. Deptford   | 50,079  | 14,308   | 78               | 8.6                   | 2,666        | 18           |
| Westville     | 10,936  | 3,125    | 17               | 7.2                   | 565          | 4            |
| Woodbury      | 19,872  | 5,678    | 31               | 5.8                   | 1,101        | 7            |
| Woodbury Hts. | 6,095   | 1,741    | 9                | 5.2                   | 275          | 2            |
| Woolwich      | 1,416   | 405      | 2                | 3.5                   | 63           | 1            |
| Misc County   | 14,110  | 4,031    | 22               | --                    | 678          | 5            |
| Total         | 316,007 | 90,289   | 491              | 4.7                   | 14,716       | 98           |

(1) Tons based on 3.5 cubic yards per ton factor.

(2) Based on 184 day generation period.

(3) Based on H.J. 1982 population estimates where County population is 204,333.

(4) Based on number of landfill operational days (150).

(5) Elk Township operates its own municipal landfill.

(6) Greenwich Township operates its own municipal landfill.

(7) Newfield Boro is directed to the City of Vineland Landfill.

## GLOUCESTER COUNTY MUNICIPAL (Type 10) WASTE

## Flows To Kinsley

July 1, 1983 to December 31, 1983

| Municipality  | Cubic Yards | Tons (1) | Tons Per Day (2) | Pounds Per Capita (3) |
|---------------|-------------|----------|------------------|-----------------------|
| Clayton       | 6,280       | 1,792    | 10               | 3.3                   |
| Deptford      | 42,237      | 12,068   | 66               | 5.6                   |
| E. Greenwich  | 4,085       | 1,167    | 4                | 1.9                   |
| Elk (4)       | 1,142       | 326      | 2                | .9                    |
| Franklin      | 9,212       | 2,632    | 14               | 2.1                   |
| Glassboro     | 22,420      | 6,406    | 35               | 4.7                   |
| Greenwich (5) | 1,007       | 288      | 2                | .7                    |
| Harrison      | 4,342       | 1,241    | 7                | 3.8                   |
| Logan         | 2,850       | 814      | 4                | 2.4                   |
| Mantua        | 18,961      | 5,417    | 29               | 6.3                   |
| Monroe        | 18,348      | 5,242    | 28               | 2.5                   |
| National Park | 1,357       | 388      | 2                | 1.1                   |
| Newfield (6)  | 71          | 20       | --               | --                    |
| Paulsboro     | 13,407      | 3,831    | 21               | 6.0                   |
| Pitman        | 17,917      | 5,119    | 28               | 5.8                   |
| S. Harrison   | 1,812       | 518      | 3                | 3.8                   |
| Swedesboro    | 5,137       | 1,468    | 8                | 7.9                   |
| Washington    | 22,387      | 6,396    | 35               | 2.4                   |
| Wenonah       | 1,906       | 545      | 3                | 2.6                   |
| W. Deptford   | 24,427      | 6,979    | 38               | 4.2                   |
| Westville     | 7,022       | 2,006    | 11               | 4.6                   |
| Woodbury      | 17,245      | 4,927    | 27               | 5.0                   |
| Woodbury Hts. | 5,502       | 1,572    | 9                | 5.2                   |
| Woolwich      | 1,375       | 393      | 2                | 3.5                   |
| Misc. County  | 13,623      | 3,892    | 21               | --                    |
| Total         | 264,072     | 75,448   | 410              | 4.0                   |

(1) Tons based on 3.5 cubic yards per ton factor.

(2) Based on 184 day generation period.

(3) Based on N.J. 1982 population estimates where County population is 204,333.

(4) Elk Township operates its own municipal landfill.

(5) Greenwich Township operates its own municipal landfill.

(6) Newfield Boro is directed to the City of Vineland landfill.

**GLOUCESTER COUNTY SOLID WASTE ORIGIN PROG  
AT THE KINSLEY LANDFILL**

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN NO. | ORIGINATING LOCALE   | WASTE TYPE | CUBIC YARDS | GALLONS | NO. OF TRUCKS |
|------------|----------------------|------------|-------------|---------|---------------|
| 300        | BURLINGTON CO MISC   | 10         | 11144       | 0       | 189           |
| 300        | BURLINGTON CO MISC   | 13         | 85          | 0       | 8             |
|            | SUB-TOTAL            |            | 11229       | 0       | 197           |
|            | REGIONAL SUB-TOTAL   |            | 11229       | 0       | 197           |
| 400        | CAMDEN COUNTY MISC   | 10         | 3902        | 0       | 152           |
| 400        | CAMDEN COUNTY MISC   | 12         | 96          | 0       | 6             |
| 400        | CAMDEN COUNTY MISC   | 13         | 236         | 0       | 10            |
|            | SUB-TOTAL            |            | 4234        | 0       | 168           |
| 401        | AUDUBEN BOROUGH      | 10         | 92          | 0       | 5             |
| 401        | AUDUBEN BOROUGH      | 13         | 91          | 0       | 13            |
| 401        | AUDUBEN BOROUGH      | 23         | 20          | 0       | 2             |
|            | SUB-TOTAL            |            | 203         | 0       | 20            |
| 402        | AUDUBEN PARK BOROUGH | 27         | 20          | 0       | 1             |
|            | SUB-TOTAL            |            | 20          | 0       | 1             |
| 403        | BARRINGTON BOROUGH   | 10         | 661         | 0       | 28            |
| 403        | BARRINGTON BOROUGH   | 13         | 70          | 0       | 5             |
| 403        | BARRINGTON BOROUGH   | 27         | 1215        | 0       | 34            |
|            | SUB-TOTAL            |            | 1946        | 0       | 67            |
| 404        | BELLMAR BOROUGH      | 10         | 1133        | 0       | 43            |
| 404        | BELLMAR BOROUGH      | 13         | 131         | 0       | 8             |
| 404        | BELLMAR BOROUGH      | 25         | 7           | 0       | 1             |
| 404        | BELLMAR BOROUGH      | 27         | 10          | 0       | 1             |
|            | SUB-TOTAL            |            | 1281        | 0       | 53            |
| 405        | BERLIN BOROUGH       | 10         | 370         | 0       | 17            |
| 405        | BERLIN BOROUGH       | 12         | 37          | 0       | 2             |
| 405        | BERLIN BOROUGH       | 13         | 28          | 0       | 2             |
| 405        | BERLIN BOROUGH       | 27         | 25          | 0       | 1             |
|            | SUB-TOTAL            |            | 460         | 0       | 22            |
| 406        | BERLIN TOWNSHIP      | 10         | 234         | 0       | 13            |

GLOUCESTER COUNTY SOLID WASTE ORIGIN PROGRAM  
AT THE KINSLEY LANDFILL

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN<br>NO. | ORIGINATING<br>LOCALITY | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS | NO. OF<br>TRUCKS |
|---------------|-------------------------|---------------|----------------|---------|------------------|
| 06            | BERLIN TOWNSHIP         | 13            | 70             | 0       | 3                |
| 06            | BERLIN TOWNSHIP         | 27            | 20             | 0       | 1                |
|               | SUB-TOTAL               |               | 374            | 0       | 17               |
| 07            | BROOKLAWN BOROUGH       | 13            | 17             | 0       | 2                |
|               | SUB-TOTAL               |               | 17             | 0       | 2                |
| 08            | CAMDEN CITY             | 10            | 12142          | 0       | 458              |
| 08            | CAMDEN CITY             | 12            | 60             | 0       | 5                |
| 08            | CAMDEN CITY             | 13            | 1719           | 0       | 99               |
| 08            | CAMDEN CITY             | 25            | 80             | 0       | 3                |
| 08            | CAMDEN CITY             | 27            | 3698           | 0       | 95               |
|               | SUB-TOTAL               |               | 17699          | 0       | 660              |
| 09            | CHERRY HILL TOWNSHIP    | 10            | 2496           | 0       | 97               |
| 09            | CHERRY HILL TOWNSHIP    | 12            | 10             | 0       | 1                |
| 09            | CHERRY HILL TOWNSHIP    | 13            | 392            | 0       | 21               |
|               | SUB-TOTAL               |               | 2898           | 0       | 119              |
| 11            | CLEMENTON BOROUGH       | 10            | 244            | 0       | 9                |
| 11            | CLEMENTON BOROUGH       | 13            | 52             | 0       | 3                |
|               | SUB-TOTAL               |               | 296            | 0       | 12               |
| 12            | COLLINGSWOOD BOROUGH    | 10            | 632            | 0       | 25               |
| 12            | COLLINGSWOOD BOROUGH    | 12            | 78             | 0       | 19               |
| 12            | COLLINGSWOOD BOROUGH    | 13            | 16             | 0       | 2                |
|               | SUB-TOTAL               |               | 726            | 0       | 46               |
| 13            | GIBBSBORO BOROUGH       | 10            | 100            | 0       | 4                |
|               | SUB-TOTAL               |               | 100            | 0       | 4                |
| 14            | GLOUCESTER TOWNSHIP     | 10            | 2578           | 0       | 94               |
| 14            | GLOUCESTER TOWNSHIP     | 12            | 5              | 0       | 1                |
| 14            | GLOUCESTER TOWNSHIP     | 13            | 197            | 0       | 12               |
|               | SUB-TOTAL               |               | 2730           | 0       | 107              |
| 15            | GLOUCESTER CITY         | 10            | 1746           | 0       | 65               |

**GLOUCESTER COUNTY SOLID WASTE ORIGIN PROGRAM  
AT THE KINSLEY LANDFILL**

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN<br>NO. | ORIGINATING<br>LOCALE  | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS  | NO. OF<br>TRUCKS |
|---------------|------------------------|---------------|----------------|----------|------------------|
| 415           | GLOUCESTER CITY        | 13            | 623            | 0        | 24               |
| 415           | GLOUCESTER CITY        | 23            | 12             | 0        | 1                |
|               | SUB-TOTAL              |               | <u>2381</u>    | <u>0</u> | <u>90</u>        |
| 416           | HADDEN TOWNSHIP        | 10            | 80             | 0        | 4                |
| 416           | HADDEN TOWNSHIP        | 12            | 50             | 0        | 10               |
| 416           | HADDEN TOWNSHIP        | 13            | 5              | 0        | 1                |
|               | SUB-TOTAL              |               | <u>135</u>     | <u>0</u> | <u>15</u>        |
| 417           | HADDENFIELD BOROUGH    | 10            | 190            | 0        | 8                |
| 417           | HADDENFIELD BOROUGH    | 12            | 20             | 0        | 1                |
| 417           | HADDENFIELD BOROUGH    | 13            | 51             | 0        | 5                |
|               | SUB-TOTAL              |               | <u>261</u>     | <u>0</u> | <u>14</u>        |
| 418           | HADDEN HEIGHTS BOROUGH | 10            | 206            | 0        | 8                |
| 418           | HADDEN HEIGHTS BOROUGH | 12            | 4              | 0        | 1                |
| 418           | HADDEN HEIGHTS BOROUGH | 13            | 12             | 0        | 2                |
|               | SUB-TOTAL              |               | <u>222</u>     | <u>0</u> | <u>11</u>        |
| 420           | LAUREL SPRINGS BOROUGH | 10            | 81             | 0        | 3                |
| 420           | LAUREL SPRINGS BOROUGH | 13            | 5              | 0        | 1                |
|               | SUB-TOTAL              |               | <u>86</u>      | <u>0</u> | <u>4</u>         |
| 421           | LINDENWOLD BOROUGH     | 10            | 263            | 0        | 12               |
| 421           | LINDENWOLD BOROUGH     | 13            | 105            | 0        | 10               |
|               | SUB-TOTAL              |               | <u>368</u>     | <u>0</u> | <u>22</u>        |
| 422           | MAGNOLIA BOROUGH       | 10            | 374            | 0        | 20               |
| 422           | MAGNOLIA BOROUGH       | 13            | 119            | 0        | 14               |
| 422           | MAGNOLIA BOROUGH       | 23            | 14             | 0        | 2                |
|               | SUB-TOTAL              |               | <u>507</u>     | <u>0</u> | <u>36</u>        |
| 423           | MERCHANTVILLE BOROUGH  | 10            | 40             | 0        | 1                |
|               | SUB-TOTAL              |               | <u>40</u>      | <u>0</u> | <u>1</u>         |
| 425           | CARLYN BOROUGH         | 10            | 209            | 0        | 8                |

**GLOUCESTER COUNTY SOLID WASTE ORIGIN PROGRAM  
AT THE KINSLEY LANDFILL**

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN<br>NO. | ORIGINATING<br>LOCALE | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS  | NO. OF<br>TRUCKS |
|---------------|-----------------------|---------------|----------------|----------|------------------|
|               |                       | SUB-TOTAL     | <u>209</u>     | <u>0</u> | <u>8</u>         |
| 26            | PENNSUAKEN TOWNSHIP   | 10            | 22             | 0        | 2                |
| 26            | PENNSUAKEN TOWNSHIP   | 12            | 92             | 0        | 5                |
| 26            | PENNSUAKEN TOWNSHIP   | 13            | 18             | 0        | 1                |
| 26            | PENNSUAKEN TOWNSHIP   | 27            | 20             | 0        | 1                |
|               |                       | SUB-TOTAL     | <u>152</u>     | <u>0</u> | <u>9</u>         |
| 27            | PINE HILL BOROUGH     | 10            | 435            | 0        | 17               |
| 27            | PINE HILL BOROUGH     | 13            | 48             | 0        | 4                |
|               |                       | SUB-TOTAL     | <u>483</u>     | <u>0</u> | <u>21</u>        |
| 29            | RUNNEMEDE             | 10            | 319            | 0        | 13               |
| 29            | RUNNEMEDE             | 13            | 70             | 0        | 9                |
|               |                       | SUB-TOTAL     | <u>389</u>     | <u>0</u> | <u>22</u>        |
| 30            | SOMERDALE             | 10            | 320            | 0        | 16               |
| 30            | SOMERDALE             | 13            | 3              | 0        | 1                |
|               |                       | SUB-TOTAL     | <u>323</u>     | <u>0</u> | <u>17</u>        |
| 31            | STRATFORD             | 10            | 108            | 0        | 4                |
| 31            | STRATFORD             | 13            | 24             | 0        | 2                |
|               |                       | SUB-TOTAL     | <u>132</u>     | <u>0</u> | <u>6</u>         |
| 33            | VOORHEES              | 10            | 525            | 0        | 17               |
| 33            | VOORHEES              | 12            | 14             | 0        | 3                |
| 33            | VOORHEES              | 13            | 100            | 0        | 3                |
|               |                       | SUB-TOTAL     | <u>639</u>     | <u>0</u> | <u>23</u>        |
| 5             | WINSLOW TOWNSHIP      | 13            | 45             | 0        | 2                |
| 5             | WINSLOW TOWNSHIP      | 25            | 9              | 0        | 2                |
|               |                       | SUB-TOTAL     | <u>54</u>      | <u>0</u> | <u>4</u>         |
| 6             | WOODLYNNE BOROUGH     | 13            | 12             | 0        | 2                |
|               |                       | SUB-TOTAL     | <u>12</u>      | <u>0</u> | <u>2</u>         |
| 7             | LAWN SIDE BOROUGH     | 10            | 116            | 0        | 4                |

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGINATING<br>LOCALE     | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS | NO. OF<br>TRUCKS |
|---------------------------|---------------|----------------|---------|------------------|
| SUB-TOTAL                 |               | 116            | 0       | 4                |
| REGIONAL SUB-TOTAL        |               | 39543          | 0       | 1607             |
| 800 CUMBERLAND COUNTY MI  | 10            | 370            | 0       | 11               |
| 800 CUMBERLAND COUNTY MI  | 12            | 60             | 0       | 2                |
| 800 CUMBERLAND COUNTY MI  | 13            | 5              | 0       | 1                |
| SUB-TOTAL                 |               | 435            | 0       | 14               |
| REGIONAL SUB-TOTAL        |               | 435            | 0       | 14               |
| 800 GLOUCESTER COUNTY MI  | 10            | 1550           | 0       | 66               |
| 800 GLOUCESTER COUNTY MI  | 13            | 24             | 0       | 2                |
| SUB-TOTAL                 |               | 1574           | 0       | 68               |
| 801 CLAYTON BOROUGH       | 10            | 674            | 0       | 28               |
| SUB-TOTAL                 |               | 674            | 0       | 28               |
| 802 DEPTFORD TOWNSHIP     | 10            | 3609           | 0       | 154              |
| 802 DEPTFORD TOWNSHIP     | 13            | 1099           | 0       | 62               |
| 802 DEPTFORD TOWNSHIP     | 23            | 50             | 0       | 4                |
| 802 DEPTFORD TOWNSHIP     | 25            | 195            | 0       | 23               |
| SUB-TOTAL                 |               | 4953           | 0       | 243              |
| 803 E. GREENWICH TOWNSHIP | 10            | 236            | 0       | 9                |
| 803 E. GREENWICH TOWNSHIP | 13            | 28             | 0       | 2                |
| SUB-TOTAL                 |               | 264            | 0       | 11               |
| 805 FRANKLIN TOWNSHIP     | 10            | 620            | 4000    | 14               |
| 805 FRANKLIN TOWNSHIP     | 12            | 35             | 0       | 1                |
| 805 FRANKLIN TOWNSHIP     | 25            | 0              | 44000   | 11               |
| SUB-TOTAL                 |               | 655            | 48000   | 26               |
| 806 GLASSBORO BOROUGH     | 10            | 2150           | 0       | 67               |
| 806 GLASSBORO BOROUGH     | 13            | 105            | 0       | 4                |



FOR THE PERIOD

03-16-84 TO 03-31-84

| IGIN<br>O. | ORIGINATING<br>LOCALE | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS | NO. OF<br>TRUCKS |
|------------|-----------------------|---------------|----------------|---------|------------------|
| 06         | GLASSBORO BOROUGH     | 27            | 20             | 0       | 1                |
|            |                       | SUB-TOTAL     | 2275           | 0       | 72               |
| 07         | GREENWICH TOWNSHIP    | 10            | 20             | 0       | 1                |
| 07         | GREENWICH TOWNSHIP    | 27            | 20             | 0       | 1                |
|            |                       | SUB-TOTAL     | 40             | 0       | 2                |
| 08         | HARRISON TOWNSHIP     | 10            | 376            | 0       | 18               |
| 08         | HARRISON TOWNSHIP     | 13            | 30             | 0       | 1                |
|            |                       | SUB-TOTAL     | 406            | 0       | 19               |
| 09         | LOGAN TOWNSHIP        | 10            | 165            | 0       | 6                |
| 09         | LOGAN TOWNSHIP        | 12            | 68             | 0       | 5                |
| 09         | LOGAN TOWNSHIP        | 13            | 45             | 0       | 2                |
|            |                       | SUB-TOTAL     | 278            | 0       | 13               |
| 10         | MANTUA TOWNSHIP       | 10            | 2193           | 0       | 82               |
| 10         | MANTUA TOWNSHIP       | 13            | 20             | 0       | 1                |
|            |                       | SUB-TOTAL     | 2213           | 0       | 83               |
| 11         | MUNRCE TOWNSHIP       | 10            | 1244           | 0       | 52               |
| 11         | MUNRCE TOWNSHIP       | 13            | 37             | 0       | 2                |
|            |                       | SUB-TOTAL     | 1281           | 0       | 54               |
| 12         | NATIONAL PARK BOROUGH | 10            | 105            | 0       | 4                |
|            |                       | SUB-TOTAL     | 105            | 0       | 4                |
| 14         | PAULSBORO BOROUGH     | 10            | 1312           | 0       | 43               |
| 14         | PAULSBORO BOROUGH     | 13            | 144            | 0       | 5                |
| 14         | PAULSBORO BOROUGH     | 27            | 20             | 0       | 1                |
|            |                       | SUB-TOTAL     | 1476           | 0       | 49               |
| 15         | PITMAN BOROUGH        | 10            | 1519           | 0       | 50               |
| 15         | PITMAN BOROUGH        | 13            | 42             | 0       | 3                |
| 15         | PITMAN BOROUGH        | 27            | 60             | 0       | 3                |
|            |                       | SUB-TOTAL     | 1621           | 0       | 56               |
| 16         | SO. HARRISON TOWNSHIP | 10            | 92             | 0       | 5                |

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN<br>NO. | ORIGINATING<br>LOCALE | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS | NO. CF<br>TRUCKS |
|---------------|-----------------------|---------------|----------------|---------|------------------|
|               |                       | SUB-TOTAL     | 92             | 0       | 5                |
| 817           | SWEDSBORC BOROUGH     | 10            | 341            | 0       | 13               |
| 817           | SWEDSBORC BOROUGH     | 13            | 30             | 0       | 1                |
|               |                       | SUB-TOTAL     | 371            | 0       | 14               |
| 818           | WASHINGTON TOWNSHIP   | 10            | 1639           | 0       | 61               |
| 818           | WASHINGTON TOWNSHIP   | 13            | 69             | 0       | 10               |
| 818           | WASHINGTON TOWNSHIP   | 23            | 24             | 0       | 4                |
| 818           | WASHINGTON TOWNSHIP   | 25            | 85             | 0       | 5                |
| 818           | WASHINGTON TOWNSHIP   | 27            | 20             | 0       | 1                |
|               |                       | SUB-TOTAL     | 1837           | 0       | 81               |
| 819           | WENONAH BOROUGH       | 10            | 192            | 0       | 11               |
| 819           | WENONAH BOROUGH       | 13            | 3              | 0       | 1                |
|               |                       | SUB-TOTAL     | 195            | 0       | 12               |
| 820           | WEST DEPTFORD TOWNSH  | 10            | 2041           | 0       | 86               |
| 820           | WEST DEPTFORD TOWNSH  | 12            | 1902           | 0       | 120              |
| 820           | WEST DEPTFORD TOWNSH  | 13            | 144            | 0       | 11               |
|               |                       | SUB-TOTAL     | 4087           | 0       | 217              |
| 821           | WESTVILLE BOROUGH     | 10            | 442            | 0       | 22               |
| 821           | WESTVILLE BOROUGH     | 13            | 48             | 0       | 3                |
| 821           | WESTVILLE BOROUGH     | 27            | 20             | 0       | 1                |
|               |                       | SUB-TOTAL     | 510            | 0       | 26               |
| 822           | WOODBURY CITY         | 10            | 1577           | 0       | 71               |
| 822           | WOODBURY CITY         | 13            | 271            | 0       | 20               |
|               |                       | SUB-TOTAL     | 1848           | 0       | 91               |
| 823           | WOODBURY HEIGHTS BOR  | 10            | 157            | 0       | 6                |
|               |                       | SUB-TOTAL     | 157            | 0       | 6                |
| 824           | WOOLWICH TOWNSHIP     | 10            | 20             | 0       | 1                |
|               |                       | SUB-TOTAL     | 20             | 0       | 1                |
|               | REGIONAL SUB-TOTAL    |               | 26932          | 48000   | 1181             |
| 800           | HUDSON COUNTY MISC    | 10            | 30             | 0       | 1                |

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN NO. | ORIGINATING LOCALE   | WASTE TYPE | CUBIC YARDS | GALLONS  | NO. OF TRUCKS |
|------------|----------------------|------------|-------------|----------|---------------|
| 900        | HUDSON COUNTY MISC   | 12         | 1078        | 0        | 34            |
| 900        | HUDSON COUNTY MISC   | 27         | 20          | 0        | 1             |
|            | SUB-TOTAL            |            | <u>1128</u> | <u>0</u> | <u>36</u>     |
|            | REGIONAL SUB-TOTAL   |            | <u>1128</u> | <u>0</u> | <u>36</u>     |
| 100        | MERCER COUNTY MISC   |            | 20          | 0        | 1             |
| 100        | MERCER COUNTY MISC   | 13         | 3           | 0        | 1             |
|            | SUB-TOTAL            |            | <u>23</u>   | <u>0</u> | <u>2</u>      |
|            | REGIONAL SUB-TOTAL   |            | <u>23</u>   | <u>0</u> | <u>2</u>      |
| 00         | MORRIS COUNTY MISC   | 12         | 607         | 0        | 18            |
| 00         | MORRIS COUNTY MISC   | 25         | 20          | 0        | 1             |
|            | SUB-TOTAL            |            | <u>627</u>  | <u>0</u> | <u>19</u>     |
|            | REGIONAL SUB-TOTAL   |            | <u>627</u>  | <u>0</u> | <u>19</u>     |
| 02         | CARNEYS POINT TOWNSH | 10         | 341         | 0        | 13            |
| 02         | CARNEYS POINT TOWNSH | 13         | 65          | 0        | 3             |
| 02         | CARNEYS POINT TOWNSH | 27         | 30          | 0        | 1             |
|            | SUB-TOTAL            |            | <u>436</u>  | <u>0</u> | <u>17</u>     |
| 08         | PENNS GROVE BOROUGH  | 10         | 190         | 0        | 11            |
|            | SUB-TOTAL            |            | <u>190</u>  | <u>0</u> | <u>11</u>     |
|            | REGIONAL SUB-TOTAL   |            | <u>626</u>  | <u>0</u> | <u>28</u>     |
| 00         | WARREN COUNTY MISC   | 12         | 75          | 0        | 3             |
|            | SUB-TOTAL            |            | <u>75</u>   | <u>0</u> | <u>3</u>      |
|            | REGIONAL SUB-TOTAL   |            | <u>75</u>   | <u>0</u> | <u>3</u>      |
| 01         | PHILA (NCA-CITY)     | 10         | 49577       | 0        | 1584          |

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN<br>NO.      | ORIGINATING<br>LOCALITY | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS | NO. OF<br>TRUCKS |
|--------------------|-------------------------|---------------|----------------|---------|------------------|
| 4201               | PHILA (NON-CITY)        | 12            | 65             | 0       | 3                |
| 4201               | PHILA (NON-CITY)        | 13            | 11633          | 0       | 383              |
| 4201               | PHILA (NON-CITY)        | 23            | 25             | 0       | 1                |
| 4201               | PHILA (NON-CITY)        | 25            | 15             | 0       | 1                |
| 4201               | PHILA (NON-CITY)        | 27            | 605            | 0       | 26               |
| SUB-TOTAL          |                         |               | 61920          | 0       | 1998             |
| 4202               | OTHER PA. HAULERS       | 10            | 23486          | 0       | 731              |
| 4202               | OTHER PA. HAULERS       | 12            | 535            | 0       | 21               |
| 4202               | OTHER PA. HAULERS       | 13            | 230            | 0       | 8                |
| 4202               | OTHER PA. HAULERS       | 25            | 20             | 0       | 1                |
| 4202               | OTHER PA. HAULERS       | 27            | 1974           | 0       | 92               |
| 4202               | OTHER PA. HAULERS       | 29            | 40             | 0       | 2                |
| SUB-TOTAL          |                         |               | 26285          | 0       | 855              |
| 4203               | PHILA (CITY ONLY)       | 10            | 50910          | 0       | 785              |
| SUB-TOTAL          |                         |               | 50910          | 0       | 785              |
| REGIONAL SUB-TOTAL |                         |               | 139115         | 0       | 3638             |
| 4400               | STATE OF DELAWARE       | 10            | 3686           | 0       | 70               |
| 4400               | STATE OF DELAWARE       | 13            | 20             | 0       | 1                |
| 4400               | STATE OF DELAWARE       | 27            | 20             | 0       | 1                |
| SUB-TOTAL          |                         |               | 3726           | 0       | 72               |
| REGIONAL SUB-TOTAL |                         |               | 3726           | 0       | 72               |
| 9999               | UNKNOWN ORIGIN          | *             | *              | *       | 2                |
| 9999               | UNKNOWN ORIGIN          | 10            | 65             | 0       | 4                |
| 9999               | UNKNOWN ORIGIN          | 12            | 30             | 0       | 1                |
| 9999               | UNKNOWN ORIGIN          | 13            | 30             | 0       | 1                |
| SUB-TOTAL          |                         |               | 125            | 0       | 8                |

FOR THE PERIOD

03-16-84 TO 03-31-84

| ORIGIN<br>NO. | ORIGINATING<br>LOCALE             | WASTE<br>TYPE | CUBIC<br>YARDS | GALLONS      | NO. OF<br>TRUCKS |
|---------------|-----------------------------------|---------------|----------------|--------------|------------------|
|               | REGIONAL SUB-TOTAL                |               | <u>125</u>     | <u>0</u>     | <u>8</u>         |
|               | GRAND TOTAL FOR THE REPORT PERIOD |               | <u>223534</u>  | <u>48000</u> | <u>6805</u>      |

= NOT AVAILABLE

REPORT PREPARED: 06/11/84

# S. Phila. trash proposal is dead, city official says

by William W. Sutton Jr.

Managing Director Leo A. Brooks said yesterday that the controversial trash-to-steam project proposed for South Philadelphia — a keystone of the city's waste-disposal plans — would not be built and that another alternative would be sought.

He said that one of those alternatives might be a few smaller resource-recovery plants in various city neighborhoods.

Brooks said that it became clear that the project, as proposed, was dead when the City Council passed a resolution last week calling for an investigation into alternatives to the resource-recovery plant proposed for 26th Street and Pearson Avenue near the Naval Shipyard. That resolution allows paying a consultant up to \$50,000 to research alternatives.

In effect, Brooks said, the council's action amounted to "a no-confidence vote" on the project.

Council leaders and Councilwoman Anna C. Verna, sponsor of the resolution, last week voiced strong opposition to the \$147 million project. Verna, when informed of Brooks' comment yesterday, said, "I'm happy to hear that."

"The people have felt very, very strongly that they have enough and they just didn't want it."

Residents have complained that the plant would increase pollution and cause heavy truck traffic.

The city first proposed a new disposal plant about a decade ago to reduce reliance on area landfills. The plant proposed for South Philadelphia would reduce that reliance by 90 percent, officials have said.

During a question-and-answer session with reporters, Brooks said the administration was aware that the council's action came after many residents expressed outrage with the possibility of the plant in their neighborhood.

However, he warned that "it may mean that we have three, four or five smaller ones that would be spread throughout the city."

"If the people in my district are complaining," added Verna, "I'm sure people in other districts will complain, depending on the kind of facility."

Brooks said the city needs a trash facility "in the not too distant future."



Leo A. Brooks  
Cites "no-confidence vote"

On another matter, the managing director said that he and the Police Department had begun an investigation into the police K-9 unit.

He said that he had charged Police Commissioner Gregore Sambor with the responsibility of reviewing "the shortcomings, if they exist, in procedure," training and operation. Brooks said that Sambor would be expected to come to him with suggestions for corrective action, if needed.

The Inquirer reported last week that a three-month investigation found that a small number of the city's 125 K-9 officers had failed to control their dogs or had ordered them to attack and maul unarmed men and women. Last week, the FBI and the U.S. attorney's office in Philadelphia announced a criminal investigation of the allegations, which were based on court testimony, medical records, photographs and eyewitness accounts.

Also yesterday, Brooks said that Mayor Goode's announcement last week that a new police unit would be formed had been misinterpreted. Goode has said that the unit might include representatives from the city Law Department and the district attorney's office.

Brooks said the belief that it would be a review panel was unfounded because administration officials still were discussing what form the unit would take and what role it would play. Goode said last week that the unit would investigate corruption and police abuse.

## Trash crisis on horizon, DER warns

By Mark Jaffe  
Inquirer Staff Writer

Seven of the 10 major landfills used by Philadelphia and its suburbs will be filled to capacity and could be closed within four to 24 months, according to a survey by the state Department of Environmental Resources.

Each day, about 9,000 tons of trash from Philadelphia and four suburban counties are dumped in a string of landfills stretching from New Jersey to Berks County. In the next two years, DER officials say, the region will face a trash crisis.

"The bottom line is, you are facing a crisis in Southeastern Pennsylvania," DER Secretary Nicholas DeBenedictis said in a recent interview. "Somebody has to do something and do it quickly."

"I think we will have to site some additional landfills. It will be difficult, but we will try."

The landfill capacity estimates are part of a study being done by the DER and the Delaware River Basin Commission. DeBenedictis said the DER had found no other region in (See LANDFILLS on 6A)

Continued on  
next page

# Trash crisis on the horizon for city and suburbs, DER survey finds

**LANDFILLS**, from 1-A  
Pennsylvania is hard pressed for landfill space as the Southeast — where 35 percent of the state's population resides.

Local and county officials throughout the region agree that shutting seven of the 10 landfills would create a rash of problems. But they say that any time a solution is offered, such as expanding a landfill, establishing a new dump or seeking an alternate solution such as a trash-to-steam incinerator, there is a public outcry.

Two of the landfills nearing closure — the Geological Reclamation Operations and Waste System Inc. (GROWS) in Falls Township, Bucks County, and the Chrin Landfill in Williams Township, Northampton County — have applied for expansions but have encountered local opposition.

Chrin is seeking additional capacity for eight to 10 years, and GROWS has proposed adding 77 acres of land to its 70-acre site to provide 14 more years of storage.

DER issues operating permits and periodically inspects all landfills in the state. But the facilities also must meet local zoning and health ordinances.

"Local people and municipalities have to realize that they are part of the problem and they have to be part of the solution," said Carol Rubly, Chester County solid-waste coordinator.

"We face a short-term dilemma,"

said Ducks County Planning Director Kenneth D. Kugel, "and unless we take some action, we will face a long-term problem."

Delaware County Councilman Nicholas Catania agreed: "We are entering a critical period. We are going to have to find other locations for landfills, other solutions for our trash problems."

With the exception of a few hundred tons burned each day in Philadelphia's two incinerators, all the region's trash ends up in landfills. The seven dumps that the area depends upon, but which the DER says will soon be filled, are:

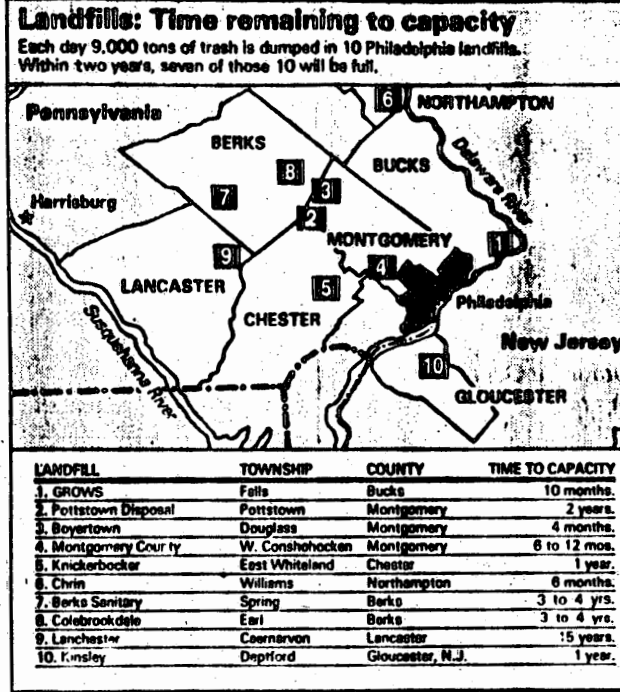
- The Kinsley Landfill, in West Deptford, N.J. It receives more than 3,000 tons of Philadelphia trash each day and about 360 tons daily from Bucks and Delaware Counties and other Pennsylvania suburban areas. Kinsley has about a year's capacity left.

- The GROWS Landfill. It is the principal depository for Bucks County trash, storing 1,500 to 2,000 tons a day, and it has about 10 months of capacity.

- The Chrin Landfill. It receives a few hundred tons of Upper Bucks County waste each day. Chrin has six months of capacity remaining.

- The Pottstown Disposal Landfill, Montgomery County. It receives about 300 tons of trash daily, primarily from Delaware and Chester Counties. It has two years of capacity left.

- The Montgomery County Land-



Source: Penna. Dept. of Environmental Resources

The Philadelphia Inquirer/ROGER HASLER

fill, in West Conshohocken. It receives 1,500 tons of trash each day from Montgomery County communities, and its remaining capacity is six months to a year.

- The Boyertown Landfill, Doug-

lass Township, Montgomery County. It receives about 300 tons of Montgomery County solid waste each day and has barely four months of operating capacity left.

- The Knickerbocker Landfill,

East Whiteland Township, Chester County. It receives about 250 tons of Chester County trash daily and has less than a year's capacity.

Only the landfills in outlying Lancaster and Berks Counties have long-term capacity for trash. The Lancaster Landfill in Caernarvon Township, Lancaster County, receives an estimated 2,200 tons of trash daily, from Philadelphia, Chester County and other areas, and has an estimated 15 years of capacity.

In Berks County, the Colebrookdale Landfill in Earl Township, which receives trash from Philadelphia and Bucks County, has five years of capacity, and the Berks Sanitary Landfill, Spring Township, has three to four years of storage space.

Faced with the dwindling space and the specter of a growing trash problem, city and county governments are taking a variety of steps.

A bill before the Philadelphia City Council proposes a three-year contract for guaranteed space in the Lancaster Landfill.

"This buys us a little breathing room," said City Councilman David Cohen, "but the price isn't cheap."

Under the proposed contract, the dumping fee per ton would rise from \$8 to \$20, and bonus fees would be tacked on for weekend and evening dumping.

Local officials say that rising costs are going to become common.

"As landfill space becomes scarcer, the costs are going to become dispro-

portionately higher," said Delaware County Councilman Catania.

Abraham Martin, Montgomery County public works director, predicted, "If our landfills close and we have to go out to bid... and haul our trash there, we will be paying two to three times as much to dispose of it."

One alternative being examined is incinerators that turn trash into steam for either heating or the production of electricity. Delaware County has awarded a contract to American Resource Recovery of Pennsylvania Inc. to construct and operate a 100-ton-per-day incinerator at Fair Acres, the county geriatric and health facility.

Chester County has a \$17,000 state grant to develop a plan for a 180-ton-per-day incinerator, and Bucks County has hired a consultant to plan a similar facility for Neshaminy Manor Center, site of the county nursing home and social service center.

Montgomery County has proposed a large county incinerator but, according to Martin, "the only feedback we've gotten so far has been negative."

Philadelphia also has put its plans on hold for a giant, 2,250-ton-per-day trash-to-steam incinerator, after strong opposition from the South Philadelphia community where the plant was to be built.

"It seems," said Councilman Cohen, that waste disposal "is just among those problems that don't get solved until the crisis point."



## State of New Jersey

### DEPARTMENT OF THE PUBLIC ADVOCATE

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PUBLIC ADVOCATE

TEL. 609-292-7087

July 16, 1984

Senate Energy and Environment Committee  
State House Annex  
Trenton, New Jersey 08625

Dear Committee Members:

Enclosed is a position paper of the Department of the Public Advocate on the environmental aspects of resource recovery facilities. Our Department submits this paper so it can be included in the A-1778 OCR and S-1762 record.

The Department of the Public Advocate recognizes that the State of New Jersey faces a solid waste disposal crisis and that we must seek alternatives to landfill disposal. Resource recovery facilities are an alternative which will reduce our waste stream and convert our solid waste into valuable energy. These facilities should, therefore, be a part of a comprehensive approach to solid waste disposal in New Jersey.

However, as our position paper explains, the State of New Jersey should adopt a comprehensive and rigorous set of environmental standards to reduce the emissions of harmful pollutants from resource recovery facilities and address the hazardous nature of the residue.

In addition, the State should encourage and provide incentives for other waste control methods such as mandatory recycling and source separation programs.

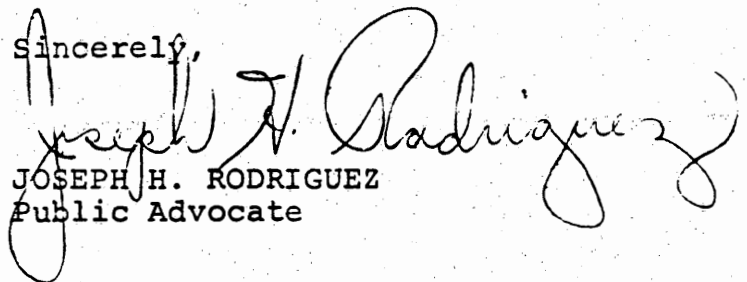
On behalf of our Department, I want to express our gratitude to the Committee for seeking solutions to the solid waste problem in New Jersey. I hope the Committee will feel



July 16, 1984

free to call on me or my staff for any further assistance we  
can provide on an issue of such significance to the public  
interest of the State's citizens.

Sincerely,



JOSEPH H. RODRIGUEZ  
Public Advocate

JHR/ap  
Enclosure

