THE ESSEX COUNTY DISTRICT

SOLID WASTE MANAGEMENT PLAN

1987 BASE PLAN

AS AMENDED THROUGH 1993
THE ESSEX COUNTY DISTRICT

SOLID WASTE MANAGEMENT PLAN

1987 Base Plan
And
Subsequent Amendments
Table of Contents

- Summary of Plan Amendments And Certifications
- Inventory of Plan Amendments And Certifications
  - 1987 Base Plan and Subsequent Amendment
SUMMARY
<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/8/79</td>
<td>1/3/80</td>
<td>Original solid waste management plan Certification required modification.</td>
</tr>
<tr>
<td>7/16/80</td>
<td>8/13/80</td>
<td>Plan inclusion of modification required by the Certification of 5/13/80.</td>
</tr>
<tr>
<td>7/1/81</td>
<td>12/31/81</td>
<td>Plan inclusion of site designation of the County RRF in Newark; land, directing of County waste to the MSLA 1-D landfill.</td>
</tr>
<tr>
<td>2/9/83</td>
<td>6/29/83</td>
<td>Plan inclusion of recycling program.</td>
</tr>
<tr>
<td>4/25/84</td>
<td>1/22/85</td>
<td>Plan inclusion of East Orange General Hospital incinerator; Maplewood Township compactor/transfer station; and Hilltop compost facility in Verona Township.</td>
</tr>
<tr>
<td>1/30/85</td>
<td>8/19/85</td>
<td>Plan inclusion of Irvington Township compactor; A. Fiore and Sons; transfer station in Newark; Materials Recovery Facility of Blanchard street transfer station and MRF in Newark; City of Newark compost facility; South Orange Township compost facility; and Verona Borough compost facility.</td>
</tr>
<tr>
<td>1) 4/29/87</td>
<td>10/26/87</td>
<td>Major Update composing the 1987 Base Solid Waste Management Plan. Includes up-dated data base; seven hospital/animal shelter incinerators; four compost facilities; blanket compost siting policy; district recycling plan; district contingency plan; long term solid waste strategy; waste flow policy; and RRIT Fund disbursement.</td>
</tr>
<tr>
<td>2) 6/3/87</td>
<td>6/8/87</td>
<td>Plan inclusion of; Waste Management of NJ transfer station in Newark; Solid Waste Transfer and Recycling transfer station in Newark; and, Solid Waste Transfer and Recycling transfer station in Orange.</td>
</tr>
</tbody>
</table>
3) 8/17/88 7/14/85 Plan inclusion of RRIT Fund use and modified disbursement schedule.

4) 10/26/88 12/30/88 Plan inclusion of modified RRIT Fund use and disbursement schedule.

5) 10/26/88 9/1/89 Plan inclusion of Columbus Hospital incinerator in Newark. Certification noted plan deficiencies with respect to N.J.S.A. 13:1E-21B (1), (3) and (4).

6) 1/25/89 7/5/89 Plan inclusion of the district recycling plan.

7) 9/12/90 1/17/92 Plan inclusion of the RRIT Fund uses and disbursement; Certification noted plan deficiencies with respect to N.J.S.A. 13:1E-21B (1), (3) and (4). Certification directed the County to submit plan amendment within 180 days addressing Task Force Recommendations.
Certification considered (1) Ordinance No. 0-90-0012, which purported to establish a “blanket” inter-district agreement for the county to accept out-of-district waste and to authorize American Ref-fuel to enter directly into contracts for delivery of waste to the incinerator from out-of-district sources; and (2) Ordinance No. 0-90-001, which attempted to incorporate the Eastern Waste contract into the County Plan. The county submitted the plan amendment in August 1990, but did not provide the transcripts to administratively complete the file until July 1991. By that time, the county and BCUA were negotiating an inter-district arrangement for waste supply and ash disposal. The Department rejected the “blanket” inter-district agreement and the authorization for direct contracting by American Ref-Fuel as inconsistent with county planning responsibilities. The Department remanded the portion of the amendment relating to Eastern Waste to the County so that the County could include its actual ash disposal arrangements. The Certification noted plan deficiencies with respect to addressing the Task Force Recommendations.
<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/2/13/90</td>
<td>2/22/93 Plan inclusion of Advanced Enterprises Recycling Center in Newark and the Milburn Compost Facility. DEPE cited plan deficiencies with respect to the Task Force recommendations, in-state landfill capacity, and update of truck routes.</td>
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<tr>
<td>7/24/91</td>
<td>2/22/93 Plan inclusion of Advanced Enterprises Recycling Center in Newark and the Milburn Compost Facility. DEPE cited plan deficiencies with respect to the Task Force recommendations, in-state landfill capacity, and update of truck routes.</td>
</tr>
<tr>
<td>10/9/92</td>
<td>5/7/93 Plan inclusion of Regional Recycling Transfer Station/MRF in Newark. DEPE cited same plan deficiencies as described in the 2/22/93 certification and directed a response from Essex County by 11/1/93.</td>
</tr>
<tr>
<td>11/9/92</td>
<td>12/10/93 Addition of white goods and lead acid batteries (vehicle batteries) to the list of designated recyclables in the District Recycling Plan. Inclusion of UMDNJ ABB Sanitec microwave facility for processing regulated medical waste in Newark, subject to the state moratorium issued September 1993 on the sale, operation and siting of ABB Sanitec Units pending further evaluation of air emissions and other operational concerns (expected to be completed by February 1994). DEPE also advised Essex County that any further amendments to include medical waste facilities will be reviewed within the context hierarchy and source reduction initiatives set forth in the State’s Comprehensive Regulated Medical Waste Management Plan (Solid Waste Management State Plan Update 1993-2002 (Section II). Finally, DEPE approved the ECUA as the implementing agency of the County’s solid waste management plan.</td>
</tr>
<tr>
<td>12/8/93</td>
<td>Initial Task Force Amendment, submitted to DEPE on</td>
</tr>
</tbody>
</table>
INVENTORY
THE ESSEX COUNTY DISTRICT SOLID WASTE MANAGEMENT PLAN

INDEX

Inventory of all Essex Plan Amendments

1. (a) The 1987 Base Plan, adopted April 29, 1987
   (b) DEPE certification, dated October 26, 1987

2. (a) Plan Amendment, adopted June 3, 1987, relating to inclusion of transfer stations
   (b) DEPE Certification, dated June 8, 1987

3. (a) Plan Amendment, adopted August 17, 1988, relating to RRIT Fund use and disbursement
   (b) DEPE certification, dated July 14, 1989

4. (a) Plan Amendment, adopted October 26, 1988, relating to RRIT Fund use and disbursement
   (b) DEPE certification, dated December 30, 1988

5. (a) Plan Amendment, adopted October 26, 1988, relating to inclusion of Columbus Hospital incinerator
   (b) DEPE certification, dated September 1, 1989

6. (a) Plan Amendment, adopted January 25, 1989, relating to inclusion of district recycling plan
   (b) DEPE certification, dated July 5, 1989

7. (a) Plan Amendment, adopted September 12, 1990, relating to inclusion of RRIT Fund use and disbursement
   (b) DEPE certification, dated January 17, 1992

8. (a) Plan Amendment, adopted June 27, 1990
   (b) DEPE certification, dated March 16, 1992

9. (a) Plan Amendment, adopted February 13, 1990, relating to inclusion of Advanced Enterprises Recycling Center
   (b) Plan Amendment, adopted July 24, 1991, relating to inclusion of Milburn Compost Facility
   (c) DEPE certification, dated February 2, 1993

10. (a) Plan Amendment, adopted May 7, 1993, relating to inclusion of Regional Recycling Transfer Station/MRF
    (b) DEPE certification, dated September 9, 1992

11. (a) Plan Amendment, adopted September 9, 1992, relating to the addition of white goods and lead acid batteries as designated recyclables in the District Recycling Plan
    (b) Plan Amendment, adopted May 12, 1993, relating to the inclusion of an ABB Sanitec facility at UMDNJ into the Plan
(c) Plan Amendment, adopted August 4, 1993, relating to designating ECUA as implementing agency of County’s solid waste management plan

(d) DEPE certification, dated December 10, 1993

12. (a) Plan Amendment, adopted December 8, 1993, relating to first Task Force Amendment endorsing 60% recycling goals
BASE PLAN
1(a) the 1987 Base Plan
Adopted April 29, 1987
Certified: October 26, 1987
Resolution No.: 0-87-005

Public Notices: (1st): April 13, 1987
(2nd):

Public Hearing(s): April 22, 1987
COUNTY OF ESSEX

SOLID WASTE MANAGEMENT PLAN

April 30, 1987
As Amended June 3, 1987
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table I</td>
<td>HMDC O&amp;D Reports, 1985, Solid Waste Disposal</td>
<td>13</td>
</tr>
<tr>
<td>Table II</td>
<td>Essex County Weighing Study, 1982, Solid Waste Disposal</td>
<td>15</td>
</tr>
<tr>
<td>Table III</td>
<td>Solid Waste Disposal Comparisons</td>
<td>17</td>
</tr>
<tr>
<td>Table IV</td>
<td>Solid Waste Projections</td>
<td>19</td>
</tr>
<tr>
<td>Table V</td>
<td>Recycling Tonnage Claims</td>
<td>20</td>
</tr>
<tr>
<td>Table VI</td>
<td>Municipal Recycling Rates</td>
<td>21</td>
</tr>
<tr>
<td>Table VII</td>
<td>Total Tonnage Recycled By Material, 1984</td>
<td>23</td>
</tr>
<tr>
<td>Table VIII</td>
<td>Essex County Solid Waste Composition</td>
<td>24</td>
</tr>
<tr>
<td>Table IX</td>
<td>Facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Landfills</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>B. Energy Recover</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>C. Incinerators</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>D. Chemical Processing &amp; Treatment</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>E. Transfer Stations</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>F. Compost</td>
<td>32</td>
</tr>
<tr>
<td>Table X</td>
<td>Map Facilities</td>
<td>34</td>
</tr>
<tr>
<td>Table XI</td>
<td>Solid Waste Collection and Disposal Practices</td>
<td>36</td>
</tr>
<tr>
<td>Table XII</td>
<td>Municipal Solid Waste Costs</td>
<td>41</td>
</tr>
<tr>
<td>Table XIII</td>
<td>Municipal Source Separation Programs</td>
<td>45</td>
</tr>
<tr>
<td>Table XIV</td>
<td>Essex County Markets for Recyclable Materials</td>
<td>47</td>
</tr>
<tr>
<td>Table XV</td>
<td>Resource Recovery Investment Tax District Fund</td>
<td>64</td>
</tr>
<tr>
<td>Table XVI</td>
<td>District Tax Fund Disbursement Schedule</td>
<td>65</td>
</tr>
<tr>
<td>Table XVII</td>
<td>Recycling Implementation Schedule</td>
<td>74</td>
</tr>
<tr>
<td>Table XVIII</td>
<td>Composting Implementation Schedule</td>
<td>81</td>
</tr>
</tbody>
</table>
This Plan Update differs from the 1979 Plan and Amendments in that it constitutes a major Plan Modification. The data base has been updated to include 1985 solid waste generation data, collection and disposal costs and recycling rates and totals. This update satisfies requirements under the Statewide Source Separation Act which mandates the County to include in its Solid Waste Management Plan a County “Recycling Plan” which includes recycling goals for each municipality and an implementation schedule which meets the State’s objectives.

A new policy regarding vegetative waste has been incorporated in this update which allows a composting facility to be included in the Plan without a Plan Amendment. The policy states that any composting facility within the District consistent with the approved District Solid Waste Management Plan and meeting existing environmental design and operation standards of the NJDEP does not require a Plan amendment for it to be included. The purpose of this policy is to expedite the process for municipalities, since each is required to compost vegetative waste.

Additionally, the Modification addresses County obligations as cited in the County Service Contract for the Energy Recovery Facility, including the issues of third party waste, ash residue and nonprocessible waste. These issues have been addressed to satisfy contractual requirements.

Although all contractual requirements for energy recovery have been fulfilled by this update, the County is also obligated to adopt in its Plan an outline of the proposed uses of monies and a schedule for disbursement of funds due to the County under the Resource Recovery Investment Tax Fund. A financial plan and schedule for disbursement of funds accrued from 1985 to 1990 as required for reimbursement has been included.

Finally, this Plan revision enables the County to present one complete and comprehensive document on how solid waste is managed in Essex County. The resulting document can be easily reviewed by government officials, private industry and County residents. The Plan goes beyond NJDEP requirements by providing an implementation plan for composting, recycling and energy recovery and a section on proposed publicity and education efforts. It enables the County to enforce all contractual requirements for energy as well as source separation activities mandated in the Statewide Source Separation Act.

In complying with NJDEP requirements this Plan update has been reviewed by the Solid Waste Advisory Council and recommended the Board of Chosen Freeholders for adoption. A public hearing was held and the Plan, as follows, has been adopted.
GLOSSARY OF TERMS

ACCEPTABLE WASTES – that portion of Solid Waste which is (a) collected and disposed of as part of municipal waste collection, (b) is commercial and industrial waste that can be processed, (c) described in Permitted Waste Types and includes those substances excluded by the definition of Acceptable Waste in the Service Agreement and those included under the definitions of Unacceptable Waste, (d) Hazardous Waste, and (e) those materials source separated for recycling.

ADDITIONAL PROCESSING CONTRACTS – contractual or other arrangements made allowing the vendor to accept and process Acceptable Waste other than Contract Waste and Excess Waste.

BY-PASSED WASTE – means any Acceptable Waste that could have been but was not processed at the Energy Recovery Facility and was diverted to an alternate disposal facility (e.g. landfill).

CO-COMPOSTING FACILITY – a solid waste facility which utilizes a controlled biological process of degrading mixtures of nonhazardous solid waste and sewage sludge.

BUY-BACK CENTER – a solid waste facility which utilizes a controlled biological process of degrading mixtures of nonhazardous solid waste and sewage sludge.

COMMINGLED RECYCLABLE MATERIAL – nonputrescible, source separated, recyclable metal, glass, paper and plastic materials which would otherwise become nonhazardous solid waste which are mixed at the source of waste generation in order to improve the convenience of storage, handling and transport to a recycling center.

COMPOSTING FACILITY – solid waste facility which utilizes a controlled biological process of degrading nonhazardous solid waste.

ENERGY RECOVERY FACILITY (ERF) – a solid waste disposal facility, at which permitted waste is incinerated and materials and energy from the process are recovered and sold.

HAZARDOUS WASTE – means Residue or any material or substance delivered to the Facility whether or not accepted by the Company which is (a) hazardous waste as defined in either the Solid Waste Disposal Act, 42 U.S.C. SS 6901 et seq. (1976), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. Sections 6901 et seq. (1984), and the regulations thereunder, or in N.J.S.A. 13:1E-38, and the regulations thereunder, as the same may be amended or supplemented from time to time, (b) special nuclear or by-product materials within the meaning of the Atomic Energy Act of 1954, as the same may be amended or supplemented from time to time, or (c) a material or substance determined after the Contract Date by any court or governmental agency or unit having appropriate jurisdiction to be subject to special or extraordinary handling or disposal requirements due to the character or quality of the material or substance.

HOST MUNICIPALITY – the municipality in which a solid waste facility is located.
HOST MUNICIPALITY AGREEMENT – an agreement between the host municipality and the County which allows a solid waste facility to be built in the host municipality as long as certain requirements are met.

LEAF COMPOSTING FACILITY – a solid waste facility which is designed and operated for the purpose of composting leaves, either exclusively or in combination with other Type 23 wastes, as identified in N.J.A.C. & : 26-2.13.

MATERIALS RECOVERY FACILITY (MRF) – a solid waste facility such as a transfer station which is designed, operated and permitted to process a non-hazardous solid waste stream by utilizing manual and/or mechanical methods to separate from the incoming waste stream categories of useful materials which are then returned to the economic mainstream in the form of raw materials or products for reuse.

MUNICIPAL CONTRACT – a contract for garbage collection and disposal services between a municipality and garbage hauler generally for all residential and a limited amount of commercial waste.

MUNICIPAL SOLID WASTE – (MSW) – waste originating in a community consisting of household waste and that portion of commercial and institutional waste covered by the municipal collection route or contract and is included in Type 10 Waste.

NONPROCESSIBLE WASTE – means that portion of Solid Waste that is accepted at the Energy Recovery Facility and is included in Type 13 Waste (bulky, construction), or is not reasonably capable of being processed at the Energy Recovery Facility.

PATHOLOGICAL WASTE – means Waste which may be considered infectious or bio-hazardous originating from hospitals, public or private medical clinics, departments or research laboratories, pharmaceutical industries, doctors or dental offices, nursing homes, blood banks, forensic medical departments, mortuaries, veterinary facilities and other similar facilities and includes equipment, instruments, utensils, formats, laboratory waste (including pathological specimens and formats attendant thereto), surgical facilities, equipment, bedding and utensils (including pathological specimens and disposable formats attendant thereto), sharps (hypodermic needles, syringes, etc.) offal and body parts, biological materials (vaccines, medicines, etc.) and other similar materials, but does not include any such Waste which is determined by evidence satisfactory to the Company to have been rendered non-infectious and non-bio-hazardous.

PROHIBITED WASTE TYPES – material types that are specifically prohibited for disposal at the Energy Recovery Facility which include: Type 12, dry sewage sludge; Type 13, bulky waste; Type 25, animal and food processing waste; Type 27, dry industrial waste; specifically hazardous waste generated by small quantity generators, non-hazardous oil spill clean-up waste, dry non-hazardous pesticides, research and development process waste, asbestos-containing materials, dry non-hazardous chemical waste and contaminated soils.

RECYCLABLE MATERIAL – material which would otherwise become non-hazardous solid waste which can be separated, collected, processed and returned to the economic mainstream in the form of raw materials or products.
RECYCLING CENTER – a facility designed and operated solely for receiving, storing, processing and transferring source-separated non-putrescible or source-separated, commingled non-putrescible metal, glass, paper, plastic containers, corrugated and other cardboard, or other recyclable materials approved by the Department of Environmental Protection.

RESIDUE – any material that remains after the completion of thermal, mechanical or chemical processing, and includes Non-Processible Waste inadvertently delivered to the Energy Recovery Facility.

SANITARY LANDFILL – a solid waste facility, at which solid waste is deposited on or into the land as fill for the purpose of permanent disposal or storage for a period of time exceeding six months (except that it shall not include any waste facility approved for disposal of hazardous waste).

SOLID WASTE – means waste other than incinerator residue, demolition and construction debris, sewage sludge in any form, sewage and other highly diluted water-carried materials or substance, materials or substances in gaseous form, Pathological Waste and Hazardous Waste.

SOLID WASTE FACILITY – any system, site, equipment or building which is utilized for the storage, collections, processing, transfer, transportation, separation, recycling, recovering or disposal of solid waste. Said definition shall not include a recycling center.

SOLID WASTE FACILITY PERMIT – certification of approved registration and engineering design for a non-hazardous solid waste facility. (For the purposes of N.J.A.C. 7:26-16 and 16A, a solid waste facility permit shall mean a license as that term is defined at N.J.A.C. 7:26-16.2).

SOURCE SEPARATED – the process of separating recyclable materials from the solid waste stream at the point of waste generations.

UNACCEPTABLE WASTE – means that portion of waste that is not Acceptable Waste or Hazardous Waste. This category of waste is prohibited from entering the Energy Recovery Facility.

WASTE – means all materials or substances that as of the Contract Date, were, or as of any subsequent date are or were, generally discarded or rejected as being spent, useless, unused, unwanted, worthless or in excess to the owners at the time of such discard or rejection including garbage, refuse and other discarded materials resulting from industrial and commercial operations and from domestic and commercial activities, rubbish and ashes.

WASTE TYPE 10, MUNICIPAL – (household, commercial and institutional) waste originating in the community consisting of household waste from private residences, commercial waste which originates in wholesale, retail or service establishments such as restaurants, stores, markets, theaters, hotels and warehouses, and institutional waste material originating in schools, hospitals, research institutions and public buildings. Laboratory waste and infectious wastes are not included in this category.

WASTE TYPE 12, DRY SEWAGE SLUDGE – sludge from a sewage treatment plan which has been digested and dewatered and which does not require liquid handling equipment.
WASTE TYPE 13, BULKY – large items of waste material such as appliances, furniture, whole trees, branches, tree trunks and stumps. Also included are waste building materials and rubble resulting from construction, remodeling, repair and demolition operations on houses, commercial buildings, pavements and other structures. Discarded automobiles, trucks and trailers and large vehicle parts and tires are included under this category.

WASTE TYPE 23, VEGETATIVE – waste material from farms, plant nurseries and greenhouses that are produced from the raising of plants. This waste includes such crop residues as plant stalks, hulls, leaves and tree waste processed through a wood chipper.

WASTE TYPE 25, ANIMAL AND FOOD PROCESSING WASTES – processing waste materials generated in canneries, slaughterhouses, packing plants or similar industries. Also included are dead animals.

WASTE TYPE 27, DRY INDUSTRIAL – waste materials resulting from manufacturing, industrial and research and development processes and operations which are not hazardous in accordance with the standards and procedures set forth at N.J.A.C. 7:26-8. Also included are non-hazardous oil spill cleanup waste, dry non-hazardous pesticides dry non-hazardous chemical waste, hazardous waste generated by small quantity generators, research and development process waste and asbestos containing materials.

All references to Waste Types herein are qualified in their entirety by this reference to the New Jersey Department of Environmental Protection regulations and their definition of waste types. Please see also the attached defined term chart.

SECTION I: BACKGROUND

Solid Waste Management Plan

In 1979, Essex County produced its first Solid Waste Management Plan. This document resulted from an analysis of research which indicated a decrease in available landfill space in New Jersey and an increase in costs to dispose of garbage. Any solution to the impending garbage disposal crisis had to satisfy four criteria. It had to: offer reliable long-term operation; not impact adversely on the environment; fall within the realm of economic feasibility in terms of finance and operation; and be more cost-effective than alternative disposal methods such as transport to out-of-office landfills.

Given emerging evidence on the long-term adverse effects of land filling on the environment and the even more immediate problem of no suitable landfill site within the county, it was decided to seek a solution which integrated recycling and energy recovery.

Reliability

A waste to energy facility which burned garbage to produce steam would meet the first criteria of reliability so long as it was built according to the best available technical standards. Such a facility would also provide a long-term disposal solution for up to 90% of the County’s waste. An aggressive recycling program would reduce the Solid Waste stream by at least 15% and would also prove to be a long-term mean of Solid Waste reduction.

Environmental Impact
Environmental impacts were of paramount importance given past concerns associated with land filling and the public’s demonstrated support of environmentally sound solutions to waste disposal problems. A survey of available technologies indicated that certain systems could safely and efficiently burn garbage while producing steam which would then be sold to PSE&G. The environmental impact of recycling has historically been positive, and when combined with energy recovery, it was theorized that the removal of glass and metals from the Solid Waste Stream would also increase the efficiency of the burn rate, affording a higher BTU value in the energy recovery process.

Economics

Inexpensive disposal of garbage at in-state landfills, even in 1979, was coming to an end. With garbage relying solely on land filling, the only option would be to use transfer stations to take garbage to distant, out-of-state sites in western Pennsylvania or northern New York State. The siting of an energy recovery facility within the county would provide a more economically-feasible option for disposal. Recycling, because it is partially offset by revenues and because it is not regulated as is the garbage industry, would continue to operate in an extremely economical fashion. The County planned to increase its recycling rate by providing residents with the conveniences of source separated but commingled recyclables. The premise was that if residents could separate glass, aluminum and paper, would be more likely to recycle, thus increasing the participation rate and level of materials diverted from the Solid Waste stream. Once collected from residents they could be sorted at a centralized facility and upgraded for sale to various markets.

The Energy Recovery Facility

Negotiations for the financing, construction and operation of a waste-to-energy facility were successfully completed as of February 28, 1986, by the execution of all necessary contracts.

Essex County as the project sponsor was responsible for assuring a guaranteed long-term supply of Acceptable Waste to the facility, for providing back-up landfill for Residue, non-processible waste By-passed Waste, for the public participation aspects of the project and for establishing the disposal fee at the facility.

The Port Authority as the project developer, for the facility was responsible for the general implementation of the project, including the procurement of an energy recovery vendor, the financing of the project and participation in the negotiations for the sale of recovered energy and materials.

Under a Host Municipality Agreement which was approved by the Newark Municipal Council on April 22, 1985, the City of Newark agreed to facilitate the conveyance of marketable title to the site from the Newark Housing Authority to the Port Authority. As Host Municipality, Newark became eligible for economic benefits. They included $1,500,000 to be applied to the construction costs of City designated industrial development projects, 100,000 worth of related Port Authority technical services and an escalating $1,300,000 annual consideration (or credit) against the City’s waste disposal fee. This Agreement established joint committees for environmental monitoring and affirmative action.
The County and Port Authority agreed that the best approach to project implementation was to seek the services of qualified private sector full service firms for the design, construction and operation of the facility. Of the twenty-three firms that responded in 1982, to the advertised Request for Qualifications, four firms were selected for Request for Proposals. In July, 1983, Browning-Ferris Industries (BFI) of Houston, Texas was selected by the Port Authority as the vendor. American REF-FUEL Company of Essex County, a partnership the sole partners which are subsidiaries of BFI and Air Products and Chemicals, Inc., would provide equity capital estimated at approximately $50 million for the facility. REF-FUEL would also have full service responsibilities for design, construction and operation. The facility would be a 2,277 ton per day plant using proven mass burning technology to convert garbage to energy.

Public Service Electric and Gas Company (PSE&G) would purchase the electrical energy recovered by the facility from the combustion process as agreed in a contract between American REF-FUEL and PSE&G.

Although all necessary contracts have been signed, commencement of construction of the facility is conditioned upon the satisfaction of Conditions Precedent, including: site acquisition and mitigation; procurement of residual landfill; finalization of the 48 million State loan; and approval of the County Service Contract through the McEnroe Process. Beginning construction is anticipated for the summer of 1987.

Landfill

Delays caused by the process of siting and contracting for the facility caused the start up date at the facility to be postponed until 1990, making interim landfill disposal critical. The County’s present landfill situation developed to what it is today based on an agreed Consent Judgment between the HMDC and Essex County. Leading to this Consent Judgment in 1981, and NJDEP directive required the HMDC to provide additional landfill capacity to accommodate Essex County waste from July, 1981, to January, 1985, when the waste-to-energy facility was expected to be operational. HMDC Commissioners, by resolution, rejected DEP’s directive to provide new landfill capacity for Essex County. In 1982, a Consent Judgment was issued which required HMDC to construct and operate an additional baler and balefill in Meadowlands District to accept Essex County Waste until September 2, 1988, an amended date for Consent Judgment relieved HMDC of the requirement to construct an additional baler for Essex County, and fixed July 31, 1987, as the date Essex County waste, would no longer be accepted in the Meadowlands District. In return, the HMDC was permitted to impose a surcharge on incoming waste, the proceeds of which were to provide funds for the waste-to-energy facility. The amount was defined as equal to the annual interest expense on $15 million of tax free revenue bonds issued for 20 years.

As part of the Consent Judgment, NJDEP agreed to sponsor a landfill site selection study. The 1982 study, conducted by Dresdner Associates, identified six top ranked sites, three of which were in the Meadowlands District. The HMDC vetoed the utilization of the sites and the issue was not pursued.

Recycling

Source separation/recycling programs became an integrated part of the County’s solid waste management strategy when the decision was made to downsize the energy recovery facility incorporating a 15% recycling rate. This decision was made based on the results of a study
sponsored by the County. The 1983 report, “The Integration of Energy and Material Recovery in the Essex County Solid Waste Management Program” concluded it was beneficial to energy recovery operations to integrate recycling or material recovery programs. The benefits included: lower total capital, debt and operational costs as a result of a significant reduction in facility size; substantial savings to municipalities in the form of avoided disposal costs; increased number of employment opportunities related to the overall through supplying industries in New Jersey with recycled raw materials from local sources; and reduced environmental impact. The Integration Report was incorporated in the Solid Waste Management Plan by a Plan Amendment on June 29, 1983.

SECTION II: GENERATION

Analyzing the Solid Waste generation rate of Essex County is difficult to do given the information currently available. Existing date only accounts for quantities of Solid Waste which has been disposed, not for the amounts initially generated. Generation rates can be estimated by adding the total amount of material recycled to the amount disposed.

This section analyzes and compares the various data sources and the credibility of the information. The three sources studied in this document include: The Hackensack Meadowlands Development Commission (HMDC) Origin and Destination (O&D) 1985 Summary Reports; The Study of Municipal Solid Waste Quantity, Essex County, 1982; and information supplied from the municipality. The collected data is categorized by municipality, waste type, per capita disposal rate, daily averages and yearly totals.

HMDC O&D Reports

Table I summarizes the 1985 HMDC O&D Reports. In 1985, the HMDC recorded 1,240,212 tons of waste received from Essex County. Of that total, 663,028 tons were classified as municipal Solid Waste (MSW). On an average each person in the County disposed of 5.02 pounds of waste per day. When the 1985 recycling tonnage, 113,285 tons (Table V), is included in the MSW total, the average per capita generation rate increases to 5.88 pounds.

Problems in the O&D Report result from inaccurate data. This is primarily due to the fact that rather than recording actual weight, the HMDC records volume and then converts that figure to tonnage. As packer trucks have different capacities and are filled to varying degrees, it is not possible to estimate amounts with any reasonable degree of accuracy.

The second concern with this type of reporting system arises from the way in which data is collected. Each hauler entering the landfill (NSLA 1-C) completes a form which identified the amount of Solid Waste, the type and its origin. The HMDC record is based upon the driver's knowledge of his load. The driver must then determine whether the truck is filled to capacity or only partially filled. The driver must also cite the origin of the load and identify its type. All of this information is subjective and unverified creating the opportunity for inconsistencies. Errors in accurately quantifying truck capacity, determining origin and type are further compounded by the following factors: Out-of-county Solid Waste mixing with in-County Solid Waste; inappropriate mixing of in-County Solid Waste and; Solid Waste types being mixed or falsely identified.
A sample of the inconsistencies when comparing the HMDC data with data from the Weighing Study, done for Essex County in 1982, can be found in the Township of Essex Fells. The daily per capita generation rate in the HMDC O&D Report is .89 pounds while in the 1982 Weighing Study it is 4.13 pounds. Essex Fells is a community of some 700 affluent homes with virtually no commercial establishments.

The differences between the rates in these studies for Caldwell is even more startling. The HMDC O&D Report shows 6.2 pounds per person per day whereas the Weighing Study shows 27 pounds per person per day. Demographically, Caldwell has only light commercial and no industrial zoning. The Weighing Study shows only 8 tons per day of commercial waste generated in Caldwell. Therefore, the difference cannot be dismissed as the commingling of commercial and residential waste.

It is clear that without consistent weighing of Solid Waste and better control of outside Solid Waste it is not possible to accurately assess the amount of Solid Waste disposed. Only recently have scales become operational at the HMDC and utilized by Essex County, in spite of the legislative requirements which were enacted in 1983.

**Study of Municipal Solid Waste Quantity**

The second source of data is the “Study of Municipal Solid Waste Quantity, Essex County”, conducted by SCS Engineers (May, 1982). The data collected from this Weighing Survey also has several shortcomings. All vehicles entering the landfill during the survey period were identified and recorded according to truck type, capacity, hauler registration number and by owner/operator. Truck drivers were asked to identify the source of Solid Waste by city. From the recorded information, density measurements were undertaken which showed statistically significant differences in densities from truck to truck.

Similarly, a certain percentage of error was introduced when utilizing an average density in the conversion process. Although the Solid Waste was weighed, the sample used was not random which, statistically, leaves more room for error. The results of the Weighing Survey indicated a 4.19 pounds per capita disposal rate for the County derived from a MSW total of 555,984 tons. A 4.49 pounds per capita generation rate was estimated when the total amount recycled was included with disposal amounts. This is generally closer to accepted national per capita generation averages and represents more accurate averages for the County as a whole. For these reasons the Weighing Survey results were used as the basis for sizing decisions made in 1983 for the Energy Recovery Facility.

Statistical theory suggests that the margin of error in estimating a total population from a sample (which is what is done in any sample survey) increases greatly if one attempts to extract estimates for subgroups of a total population. Translated from statistical language and applied to the case at hand, this means that a Countywide weighing survey will lead to a much more accurate estimate of the weight of the Solid Waste disposed by the County as a whole than it will for the weight disposed by individual municipalities. This statistical principle is clearly displayed if one looks at the wild disparities in estimated disposal by municipality in the column derived from the County weighing survey. Experience tells us these results are unlikely and thus confirms statistical method in warning us not to rely on municipal estimates derived in this manner.

**The Municipality**
The final source of information is the municipality itself. Most municipalities contract with a private hauler for garbage collection services. In the absence of disposal charges based on weight, private haulers have little incentive to gather accurate weight or composition data. Where municipalities provide their own collection services, the data is more reliable. Each municipality must know how much Solid Waste is collected in order to properly prepare for the following years budget. Another reason for its greater reliability is that the municipality only collects within municipal boundaries, thus eliminating extraneous Solid Waste.

All three sources are compared in Table III. Due to the fact that not all municipalities have records of Solid Waste collected, this data cannot be used for the purposes of this Plan.

Projections

In projecting Essex County’s Solid Waste generation for the next 10 years, a constant population and per capita generation rate is assumed (Table IV). The basis for making these assumptions lies with population projections. In the Economic/Demographic Model produced by the NJ Department of Labor, Office of Demographic and Economic Analysis, there is a projection that Essex County’s population will decline. Based on past trends of slight population decreases and more recent trends showing steady increases, the County assumes a relatively constant population for the next 10 years as well as a similarly constant disposal rate.

The HMDC disposal data is used for Solid Waste projections primarily because of its consistency with respect to per capita rates. The data was also chosen for the simple reason that the NJDEP utilizes the same data in its Solid Waste flow analyses. Data that was originally recorded in cubic yards has been converted to tons. The conversion factor used is 3.3 cubic yards to one ton. In order to estimate the total amount of Solid Waste generated, it is necessary to know not only the amount going to disposal but also the amount being recycled (Table V).

Tonnage Recycled

The 1985 annual total tonnage recycled indicated that the county is currently recycling approximately 6% of the Type 10 or municipal Solid Waste stream and approximately 7.4% of the overall Solid Waste stream which consists of Type 10 (municipal), Type 13 (bulky) and Type 23 (vegetative) wastes. Table VI indicates two recycling rates for each municipality, Type 10 and overall recycling rates. The rates vary considerably between the two categories and between each municipality. Several municipalities have a higher overall recycling rate due to composting, commercial recycling and bulky and white goods recycling programs. Such programs have proven to substantially reduce the Solid Waste stream. Lower recycling rates consistently occur in the urban areas of the county where less municipal recycling occurs. In 1987, the targeted recycling rate for municipalities is 15% by weight and by 1988, a 25% reduction must be achieved. In order to successfully meet these goals, considerable effort is needed by many municipalities.

It is difficult to fully assess how much recycling is occurring or how much recycling has actually increased over past years. This is due primarily to the way in which data is collected. The County’s source for recycling data is the New Jersey Department of Environmental Protection,
Office of Recycling “Tonnage Grant” applications which are filed annually by municipalities. This reporting system has a number of inadequacies which lead to under-reporting of the materials being recycled.

The primary problem occurs when a municipality determines that it will not qualify for a grant and consequently does not submit an application. In those instances the annual data for that municipality is lost. In other cases, municipalities will gather data for an application and determine at some point that pursuit of further data is not justified. In these cases, municipalities under-report the materials recycled. Additionally, some recycling is conducted on a cash basis in the private sector and will never be documented in any fashion.

Table VII lists the amounts recycled in 1984 by material. Table VIII lists the various components of the Solid Waste stream broken down into residential and commercial waste types and their respective percentages of the total Solid Waste stream.
### Solid Waste Disposal

#### Waste Types (Tons/Year)

<table>
<thead>
<tr>
<th>Population</th>
<th>Type 10</th>
<th>Type 12</th>
<th>Type 13</th>
<th>Type 23</th>
<th>Type 25</th>
<th>Type 27</th>
<th>Total</th>
<th>2 Pounds per capita per day</th>
<th>3 Pounds per capita per day</th>
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</thead>
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<td>27</td>
<td>651</td>
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<td>0</td>
<td>18</td>
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<td>897</td>
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<td>0</td>
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<td>318</td>
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<td><strong>Total</strong></td>
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<td>551,246</td>
<td>5,670</td>
<td>1,593</td>
<td>18,179</td>
<td>1,240,212</td>
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</table>

**Population:** 1985 Census Provisional Estimate  
**Calculated by dividing Type 10 waste by the population**  
**Calculated by dividing Type 10 waste by the population, multiplied by 312 days (312 disposal days)**

| 10 – Municipal | 23 – Vegetative | 25 – Animal and Food Processing | 13 – Bulky | 27 – Non-Chemical Industrial |
## Essex County
### Solid Waste Disposal

<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
<th>1 Daily Average Tons</th>
<th>2 Tons/Year</th>
<th>1 lbs/capita per day</th>
<th>2 lbs/capita per year</th>
<th>1 daily average tons</th>
<th>1 lbs/capita per day</th>
<th>1 lbs/capita per year</th>
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<td>1,885</td>
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<td>6,115</td>
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<td><strong>Total</strong></td>
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<td><strong>626</strong></td>
<td><strong>206,666</strong></td>
<td><strong>1.99</strong></td>
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</table>

**Notes:**
- Study of Municipal Solid Waste Quantity, Essex County, May 1982
- SGS Engineers
- Table 8: Estimated Quantity of Residential and Commercial Solid Waste, collected respectively from cities in Essex County. Based on a 6 day analysis. Calculated by multiplying daily average tons and pounds per capita per day, respectively by 312 days/year. 312 days per year represents the 6 Disposal Days per week times 52 weeks per year.
- SCS Engineers
With
Municipal Documentation, HMDC O&D Reports and Essex County Weighing Study
Waste Type 10 (Tons/Year)

<table>
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<tr>
<th></th>
<th>Municipal, '85</th>
<th>lbs/per capita</th>
<th>HMDC, '85</th>
<th>lbs/per capita</th>
<th>Weighing Study, '82</th>
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Table IV

Solid Waste 10 Year Projections by Municipality
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Note: These projections are based on a constant population, therefore assuming a constant solid waste disposal rate. The HMDC 1985 solid waste disposal data are used as the basis for projections. See explanation on the limitations of the data in this Section.
1. Roseland in 1982 did not supply documentation for 876 tons and did not apply for grants for the following two years.

2. The total amount applied for in the grant program.

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</tr>
<tr>
<td>Essex Fells</td>
<td>329</td>
<td>454</td>
<td>9</td>
<td>200</td>
</tr>
<tr>
<td>Fairfield</td>
<td>9,966</td>
<td>20,888</td>
<td>22</td>
<td>897</td>
</tr>
<tr>
<td>Glen Ridge</td>
<td>5,565</td>
<td>897</td>
<td>29</td>
<td>250</td>
</tr>
<tr>
<td>Irvington</td>
<td>34,503</td>
<td>11,753</td>
<td>318</td>
<td>5,043</td>
</tr>
<tr>
<td>Livingston</td>
<td>35,810</td>
<td>18,380</td>
<td>34</td>
<td>1,476</td>
</tr>
<tr>
<td>Maplewood</td>
<td>16,994</td>
<td>6,741</td>
<td>26</td>
<td>2,421</td>
</tr>
<tr>
<td>Millburn</td>
<td>18,478</td>
<td>10,401</td>
<td>165</td>
<td>5,605</td>
</tr>
<tr>
<td>Montclair</td>
<td>24,906</td>
<td>11,006</td>
<td>3,022</td>
<td>4,477</td>
</tr>
<tr>
<td>Newark</td>
<td>292,743</td>
<td>349,922</td>
<td>173</td>
<td>51,423</td>
</tr>
<tr>
<td>North Caldwell</td>
<td>2,896</td>
<td>1,562</td>
<td>41</td>
<td>690</td>
</tr>
<tr>
<td>Nutley</td>
<td>13,610</td>
<td>18,610</td>
<td>143</td>
<td>2,797</td>
</tr>
<tr>
<td>Orange</td>
<td>18,061</td>
<td>13,263</td>
<td>92</td>
<td>110</td>
</tr>
<tr>
<td>Roseland</td>
<td>11,431</td>
<td>16,365</td>
<td>27</td>
<td>372</td>
</tr>
<tr>
<td>South Orange</td>
<td>12,428</td>
<td>4,807</td>
<td>1,044</td>
<td>2,909</td>
</tr>
<tr>
<td>Verona</td>
<td>11,160</td>
<td>5,203</td>
<td>45</td>
<td>819</td>
</tr>
<tr>
<td>West Caldwell</td>
<td>8,760</td>
<td>5,643</td>
<td>85</td>
<td>3,186</td>
</tr>
<tr>
<td>West Orange</td>
<td>25,006</td>
<td>14,953</td>
<td>189</td>
<td>6,724</td>
</tr>
<tr>
<td>Total</td>
<td>663,028</td>
<td>551,246</td>
<td>5,670</td>
<td>97,570</td>
</tr>
</tbody>
</table>

1985 HMDC Origin and Destination Reports on waste disposal

Total amount of materials recycled as documented by the NJDEP, Office of Recycling in the Tonnage Grant Program

Total material recycled categorized as Type 10 waste as documented by the NJDEP, Office of Recycling in the Tonnage Grant Program. This category excludes ferrous and non ferrous materials, waste oil, and vegetative waste.

The recycling rates are determined by dividing the recycling total by the amount disposed plus the amount recycled.
<table>
<thead>
<tr>
<th>Materials:</th>
<th>Material Tons</th>
<th>Category Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspaper</td>
<td>16,816.5</td>
<td></td>
</tr>
<tr>
<td>Corrugated</td>
<td>11,119.4</td>
<td></td>
</tr>
<tr>
<td>High-grade</td>
<td>3,673.9</td>
<td></td>
</tr>
<tr>
<td>Other (mixed)</td>
<td>3,267.4</td>
<td></td>
</tr>
<tr>
<td>Total Paper</td>
<td>34,877.2</td>
<td></td>
</tr>
<tr>
<td>Total Glass</td>
<td>3,598.1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum</td>
<td>50.1</td>
<td></td>
</tr>
<tr>
<td>Non-ferrous</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Ferrous Cans</td>
<td>192.2</td>
<td></td>
</tr>
<tr>
<td>Ferrous Scrap</td>
<td>757.3</td>
<td></td>
</tr>
<tr>
<td>White Goods</td>
<td>216.3</td>
<td></td>
</tr>
<tr>
<td>Auto Scrap</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>Leaves</td>
<td>8,205.7</td>
<td></td>
</tr>
<tr>
<td>Wood Chips</td>
<td>267.6</td>
<td></td>
</tr>
<tr>
<td>Manure</td>
<td>1,099.1</td>
<td></td>
</tr>
<tr>
<td>Asphalt</td>
<td>9,825.5</td>
<td></td>
</tr>
<tr>
<td>Food Waste</td>
<td>2,209.8</td>
<td></td>
</tr>
<tr>
<td>Motor Oil</td>
<td>390.8</td>
<td></td>
</tr>
<tr>
<td>Tires</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>Batteries</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Total Other</td>
<td>23,247.3</td>
<td></td>
</tr>
</tbody>
</table>

Source: Tonnages approved in Tonnage Grant Program: 61,722.6
Department of Environmental Protection, Office of Recycling
Table VIII
Essex County
Solid Waste Composition
Percent (by weight)

<table>
<thead>
<tr>
<th>Component</th>
<th>Residential</th>
<th>Commercial/Industrial</th>
<th>Combined</th>
<th>Total in Processible Wastestream *(tons/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>6.9</td>
<td>3.6</td>
<td>5.97</td>
<td>119.6</td>
</tr>
<tr>
<td>Food</td>
<td>1.3</td>
<td>10.5</td>
<td>3.92</td>
<td></td>
</tr>
<tr>
<td>Plastic</td>
<td>6.4</td>
<td>4.5</td>
<td>5.87</td>
<td>117.6</td>
</tr>
<tr>
<td>Glass</td>
<td>8.3</td>
<td>3.1</td>
<td>6.8</td>
<td>136.8</td>
</tr>
<tr>
<td>Ferrous</td>
<td>5.3</td>
<td>5.1</td>
<td>5.25</td>
<td>105.2</td>
</tr>
<tr>
<td>Aluminum</td>
<td>1.3</td>
<td>0.7</td>
<td>1.13</td>
<td>22.6</td>
</tr>
<tr>
<td>Corrugated</td>
<td>14.0</td>
<td>25.7</td>
<td>17.36</td>
<td>347.7</td>
</tr>
<tr>
<td>Organics</td>
<td>39.1</td>
<td>35.1</td>
<td>38.01</td>
<td></td>
</tr>
<tr>
<td>Pines</td>
<td>5.8</td>
<td>3.2</td>
<td>5.07</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>11.4</td>
<td>8.5</td>
<td>10.59</td>
<td></td>
</tr>
<tr>
<td><strong>Total tons</strong></td>
<td></td>
<td></td>
<td></td>
<td>849.5</td>
</tr>
<tr>
<td><strong>Total Samples</strong></td>
<td>35.0</td>
<td>20.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total in Processible Wastestream based on 2002.9 Tons/Day (7 Days/Week)

Table IX in this section lists all of the existing solid waste facilities in the county. The six types of facilities are summarized in the following table:

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Number of Operating Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill</td>
<td>0</td>
</tr>
<tr>
<td>Resource Recovery</td>
<td>0</td>
</tr>
<tr>
<td>Compost Facilities</td>
<td>15</td>
</tr>
<tr>
<td>Incinerators</td>
<td>7</td>
</tr>
<tr>
<td>Transfer Stations</td>
<td>7</td>
</tr>
<tr>
<td>Chemical Processing &amp; Treatment</td>
<td>3</td>
</tr>
</tbody>
</table>
Complete One Table for each Proposed Waste Flows

Facility Type: Landfills

**Facility Type: Landfills**

<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location (Municipality/Street)</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIC</td>
<td>0712 B</td>
<td>Kearny</td>
<td>1</td>
<td>Essex County</td>
<td>Yes</td>
<td>July 1987</td>
<td>N/A</td>
</tr>
<tr>
<td>Essex County Park – SLF</td>
<td>0715 A</td>
<td>Millburn Township (So. Orange Ave.)</td>
<td>5</td>
<td>10-13-23</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Newark City – Oak Island</td>
<td>0714 C</td>
<td>Newark (Ave A. &amp; Pioneer St.)</td>
<td>5</td>
<td>Unknown</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Fiore SWDA</td>
<td>0714 D</td>
<td>Newark (Rutherford St.)</td>
<td>5</td>
<td>Unknown</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Trucking &amp; Waste Co.</td>
<td>0714 E</td>
<td>Newark (Blanchard St.</td>
<td>5</td>
<td>Unknown</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Richard DeVino</td>
<td>0714 F</td>
<td>Newark (Port St.)</td>
<td>5</td>
<td>13</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Authority – SLF</td>
<td>0714 G</td>
<td>Newark (Wilson)</td>
<td>Disruption</td>
<td>Unknown</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Richard Devino – SLF</td>
<td>0714 H</td>
<td>Newark (South St.)</td>
<td>4</td>
<td>13</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Facility Status Categories

1) Operating – With Approved Engineering Plans
2) Operating – No Approved Engineering Plans
3) Closed – With Approved Closure Plan
4) Closed – No Approved Closure Plan
5) Terminated
6) Not Open Yet
## Existing Solid Waste

### Facility Type:

- Landfills
- Resource Recovery Facilities
- Composting Facilities
- Incinerators
- Others: Specify

### Facility Status Categories

1. Operating – With Approved Engineering Plans
2. Operating – No Approved Engineering Plans
3. Closed – With Approved Closure Plan
4. Closed – No Approved Closure Plan
5. Terminated
6. Not Open Yet

### Proposed Waste Flows

<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location (Municipality/Street)</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills: Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition Site</td>
<td>0714 R</td>
<td>Newark</td>
<td>4</td>
<td>13</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Existing Solid Waste
### Proposed Waste Flows

<table>
<thead>
<tr>
<th>Facility Type: Landfills</th>
<th>Resource Recovery Facilities</th>
<th>Composting Facilities</th>
<th>Incinerators</th>
<th>Others: Specify</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location (Municipality/Street)</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills: Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Recovery Facility</td>
<td>0714 G</td>
<td>Newark (Raymond &amp; Blanchard)</td>
<td>5</td>
<td>Unknown</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Essex County Energy Recovery Facility</td>
<td>071424</td>
<td>Newark (Blanchard St.)</td>
<td>6</td>
<td>10-23-27 (Essex County)</td>
<td>Yes</td>
<td>N/A</td>
<td>2250 tons/day</td>
</tr>
</tbody>
</table>

### Facility Status Categories
1) Operating – With Approved Engineering Plans
2) Operating – No Approved Engineering Plans
3) Closed – With Approved Closure Plan
4) Closed – No Approved Closure Plan
5) Terminated
6) Not Open Yet
Complete One Table for each Proposed Waste Flows

Facility Type: Landfills
Resource Recovery Facilities
Composting Facilities
Incinerators
Others: Specify

<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location (Municipality/Street)</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills: Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Orange General Hospital Incinerator</td>
<td>East Orange</td>
<td>1</td>
<td>Unknown</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Hospital Center at Orange</td>
<td>Newark</td>
<td>6</td>
<td>Pathological/Biological</td>
<td>Yes</td>
<td>N/A</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Beth Isreal Hospital</td>
<td>Newark</td>
<td>1</td>
<td>Pathological/Biological</td>
<td>Yes</td>
<td>N/A</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Bloomfield Animal Shelter</td>
<td>Bloomfield</td>
<td>1</td>
<td>Pathological/Biological</td>
<td>Yes</td>
<td>N/A</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Columbus Hospital</td>
<td>Newark</td>
<td>1</td>
<td>Pathological/Biological</td>
<td>Yes</td>
<td>N/A</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Mountainside Hospital</td>
<td>Montclair</td>
<td>1</td>
<td>Pathological/Biological</td>
<td>Yes</td>
<td>N/A</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>College of Medicine and Dentistry</td>
<td>Newark</td>
<td>1</td>
<td>Pathological/Biological</td>
<td>Yes</td>
<td>N/A</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Barnabas Livingston</td>
<td>Livingston</td>
<td>1</td>
<td>Pathological/Biological</td>
<td>Yes</td>
<td>N/A</td>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Facility Status Categories
1) Operating – With Approved Engineering Plans
2) Operating – No Approved Engineering Plans
3) Closed – With Approved Closure Plan
4) Closed – No Approved Closure Plan
5) Terminated
6) Not Open Yet
### Existing Solid Waste Proposed Waste Flows

#### Facility Type: Landfills
- Resource Recovery Facilities
- Composting Facilities
- Incinerators
- Others: Specify

<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills: Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hline Co. (SCA)</td>
<td>0714 J</td>
<td>Newark (Lister Ave.)</td>
<td>1</td>
<td>17-18-26-70-72-76-77</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Oil Corp.</td>
<td>0714 T</td>
<td>Newark (Frelinghysen Ave.)</td>
<td>1</td>
<td>70</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Lesson Enviro Systems</td>
<td>0714 U</td>
<td>Newark (Doremus)</td>
<td>4</td>
<td>76-77</td>
<td>Yes</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>North America</td>
<td>0714 W</td>
<td>Newark (Gilligan St.)</td>
<td>1</td>
<td>70</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Facility Status Categories
1) Operating – With Approved Engineering Plans
2) Operating – No Approved Engineering Plans
3) Closed – With Approved Closure Plan
4) Closed – No Approved Closure Plan
5) Terminated
6) Not Open Yet
## Existing Solid Waste

### Proposed Waste Flows

#### Facility Type: Landfills

<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location (Municipality/Street)</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills: Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caldwell Trucking Co. Transfer Station</td>
<td>0707 A</td>
<td>Fairfield (Passaic Ave)</td>
<td>1</td>
<td>73-74</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>A. Hunt Chemical Co.</td>
<td>070 B</td>
<td>Fairfield Boro (foot of Roosevelt Place)</td>
<td>1</td>
<td>76</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Comm. Refuse ? Transfer Station</td>
<td>0714 L</td>
<td>Newark (Pointier St.)</td>
<td>1</td>
<td>10-13-27</td>
<td>Yes</td>
<td>N/A</td>
<td>150</td>
</tr>
<tr>
<td>Yeling &amp; Salvage Transfer Station</td>
<td>0714 S</td>
<td>Newark</td>
<td>1</td>
<td>10-13-27</td>
<td>Yes</td>
<td>N/A</td>
<td>150</td>
</tr>
<tr>
<td>Newark Disposal Service</td>
<td>0714 V</td>
<td>Newark (foot of Passaic St.)</td>
<td></td>
<td>10-12-13-18-23-25-27</td>
<td>Yes</td>
<td>N/A</td>
<td>150</td>
</tr>
<tr>
<td>Reclamation</td>
<td>Applic/85-09</td>
<td>Newark (Blanchard St.)</td>
<td>6</td>
<td>10-27 Bergen, Morris, Hudson, Passaic, Essex, Union</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Fiore &amp; Sons Sanitary Disposal</td>
<td>Applic/85-92</td>
<td>Newark (McCarter Hwy)</td>
<td>2</td>
<td>10-13-27</td>
<td>Yes</td>
<td>N/A</td>
<td>88</td>
</tr>
<tr>
<td>Irvington Trash Compaction</td>
<td>Irvington (Coiter St.)</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Yes</td>
<td>N/A</td>
<td>500</td>
</tr>
</tbody>
</table>

**Facility Status Categories**

1) Operating – With Approved Engineering Plans
2) Operating – No Approved Engineering Plans
3) Closed – With Approved Closure Plan
4) Closed – No Approved Closure Plan
5) Terminated
6) Not Open Yet
<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location (Municipality/Street)</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills: Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saddle Brook Hospital SWDA</td>
<td>0704 A</td>
<td>Cedar Grove (Bradford &amp; Grove)</td>
<td>5</td>
<td>Unknown</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Cedar Grove Township Leaf Dump</td>
<td>0704 B</td>
<td>Township of Cedar Grove (Ridge Rd)</td>
<td>1</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Maplewood Compost Site</td>
<td>0711 A</td>
<td>Maplewood Township</td>
<td>1</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Millburn Compost Site</td>
<td>0712 A</td>
<td>Millburn Township (Kennedy Pkwy)</td>
<td>2</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Essex County Compost</td>
<td>0712 C</td>
<td>Millburn Township (So. Orange Ave)</td>
<td>1</td>
<td>23 sole source</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Newark Compost</td>
<td>0714 M</td>
<td>Newark (Herbert Pl.)</td>
<td>5</td>
<td>23 sole source</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Newark Compost Site</td>
<td>071426</td>
<td>Newark (Rutherford St.)</td>
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<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Sanitarium Compost</td>
<td>0715 A</td>
<td>No. Caldwell Borough (Courter Lane)</td>
<td>1</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Roseland Compost</td>
<td>0718 A</td>
<td>Borough of Roseland (Eagle Rock Ave.)</td>
<td>1</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>South Orange Compost Fac.</td>
<td>0719 A</td>
<td>South Orange</td>
<td>2</td>
<td>23 sole source</td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Sanitarium SWDA</td>
<td>0720 A</td>
<td>Borough of Verona (Courier Lane)</td>
<td>5</td>
<td>23 sole source</td>
<td>N/A</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Facility Status Categories
1) Operating – With Approved Engineering Plans
2) Operating – No Approved Engineering Plans
3) Closed – With Approved Closure Plan
4) Closed – No Approved Closure Plan
5) Terminated
6) Not Open Yet
Complete One Table for each Facility Type: Landfills Resource Recovery Facilities Composting Facilities Incinerators Others: Specify

<table>
<thead>
<tr>
<th>Facility</th>
<th>DEP #</th>
<th>Location (Municipality/Street)</th>
<th>Status: See Below</th>
<th>Waste Flow: a) by waste type and municipality b) if sole source: indicate same</th>
<th>Is waste flow consistent with Approved Plan</th>
<th>Planned/Approximate Closure Date</th>
<th>Capacity: Landfills: Capacity in Others: (Tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Waste Transfer</td>
<td>0720 B</td>
<td>Borough of Verona (Commerce Ct)</td>
<td>1</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Compost Center</td>
<td>0720 C</td>
<td>Borough of Verona (Sanitarium Rd)</td>
<td>4</td>
<td>23 sole source</td>
<td>Yes</td>
<td>Nov. 1985</td>
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<tr>
<td>Caldwell Borough Dump</td>
<td>0721 A</td>
<td>West Caldwell (Bloomfield Ave)</td>
<td>1</td>
<td>23 sole source</td>
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<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Caldwell Borough Compost</td>
<td>0721 B</td>
<td>West Caldwell Borough (Pine Tree Place)</td>
<td>1</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Orange Compost</td>
<td>0722 A</td>
<td>Township of West Orange (Mt. Pleasant Ave.)</td>
<td>1</td>
<td>23 sole source</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
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<td>Bloomfield Compost</td>
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<td>Bloomfield Township</td>
<td>2</td>
<td>23 sole source</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Livingston Compost</td>
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<td>Township of Livingston (Dorsa Ave.)</td>
<td>2</td>
<td>23 sole source</td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Essex Fells</td>
<td></td>
<td>Essex Fells</td>
<td>2</td>
<td>23 sole source</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
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</tbody>
</table>

Facility Status Categories
1) Operating – With Approved Engineering Plans
2) Operating – No Approved Engineering Plans
3) Closed – With Approved Closure Plan
4) Closed – No Approved Closure Plan
5) Terminated
6) Not Open Yet
District Policy on Composting and Vegetative Waste Facilities

Essex County acknowledges compost facilities as Solid Waste management facilities and is therefore including a compost and vegetative waste policy as part of the District Solid Management Plan.

It is the policy of the Essex County Solid Waste Management District that any new application for compost facility or temporary facility for the disposal of on-site generated vegetative wastes within the district is consistent with the approved Solid Waste Management Plan provided it meets existing environmental design and operation standards of the NJ Department of Environmental Protection. This is not an endorsement of NJDEP Policy of on-site disposal of vegetative and construction debris.

For the purpose of this Plan, “compost facility” is defined as any facility utilized for the natural conversion of organic materials to humus (similar to topsoil) by microorganism activity. A waste facility is any facility utilized for the disposal of vegetative wastes (Type 23 and also inclusive of tree stumps) which are generated on site (e.g., land being cleared for conversion to agricultural purposes), with facility being terminated upon the completion of land clearance and disposal activities.
Table XI: Municipal Solid Waste Collection and Disposal Practices

In this Table, collection and disposal practices are outlined by municipality, including the type and extent of services, point of pickup, contract expiration date and costs. The County encourages all municipalities to separate collection and disposal costs.

Separate payment of collection and disposal costs has not been the historical norm. With the anticipated increases in disposal costs, it is to a municipality’s advantage to solicit bids for collection only and pay disposal costs directly. Thus, speculation by haulers on future increases does not become part of a lump sum bid of collection and disposal. The municipality benefits by securing the lowest long-term price for collection.

As an alternative to this arrangement, municipalities are encountered to solicit bids which provide disposal fee rebates for materials recycled when a lump sum bid for collection and disposal is deemed necessary or desirable. In either case, the avoided cost of disposal for materials recycled becomes an economic reality.

This section provides a list of major solid waste haulers permitted, by the Board of Public Utilities (BPU), to operate in Essex County. This list is for informational purposes only and is not complete, only major garbage haulers are cited.
<table>
<thead>
<tr>
<th>Municipality</th>
<th>Type of Collection Service</th>
<th>Point of Pickup</th>
<th>Extent of Service</th>
<th>Hauler Name</th>
<th>Contract Expiration Date</th>
<th>Annual Collection Cost ($)</th>
<th>Annual Disposal Cost ($)</th>
<th>Total Annual Solid Waste Mgt. Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belleville</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>Haulaway</td>
<td>89</td>
<td>688,880</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bloomfield</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>BFI</td>
<td>3/89</td>
<td>749,868</td>
<td>547,260</td>
<td>1,297,128</td>
</tr>
<tr>
<td>Caldwell</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>A. Miele</td>
<td>2/88</td>
<td>219,374</td>
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<td></td>
</tr>
<tr>
<td>Cedar Grove</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>A. Margangi</td>
<td>3/31/89</td>
<td>221,736</td>
<td></td>
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<tr>
<td>East Orange</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M,SC</td>
<td>White Bros.</td>
<td>8/88</td>
<td>885,288</td>
<td>660,000</td>
<td>1,545,288</td>
</tr>
<tr>
<td>Essex Fells</td>
<td>P</td>
<td>Backyard</td>
<td>H</td>
<td>P. Farese</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairfield</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>Marangi</td>
<td>12/1/87</td>
<td>227,604</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glen Ridge</td>
<td>MC</td>
<td>Backyard</td>
<td>H,B,Y,M,C</td>
<td>A. Miele</td>
<td>12/87</td>
<td>492,930</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irvington</td>
<td>M</td>
<td>Curbside</td>
<td>H,B,Y,M,SC</td>
<td></td>
<td></td>
<td>1,300,000</td>
<td>690,000</td>
<td>1,990,000</td>
</tr>
<tr>
<td>Livingston</td>
<td>P</td>
<td>Backyard</td>
<td>H,Y</td>
<td>Pucillo &amp; West Essex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maplewood</td>
<td>P</td>
<td>Backward</td>
<td>H,Y</td>
<td>BFI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millburn</td>
<td>M</td>
<td>Curbside</td>
<td>H,B,Y,M,SC</td>
<td></td>
<td></td>
<td>517,991</td>
<td>215,370</td>
<td>733,301</td>
</tr>
<tr>
<td>Montclair</td>
<td>M</td>
<td>Backyard</td>
<td>H,B,Y,M,SC</td>
<td>Petrozello</td>
<td></td>
<td>905,000</td>
<td>451,230</td>
<td>1,356,230</td>
</tr>
<tr>
<td>Newark</td>
<td>M</td>
<td>Curbside</td>
<td>H,B,Y,M,SC</td>
<td>Petrozello Municipal</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No. Caldwell</td>
<td>MC</td>
<td>Backyard</td>
<td>H,B,Y,M</td>
<td>S&amp;H Trucking</td>
<td>1/31/89</td>
<td></td>
<td>240,000</td>
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</tr>
<tr>
<td>Nutley</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>Marangi</td>
<td>12/31/87</td>
<td>713,448</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td>MC</td>
<td>Curbside</td>
<td>H,Y,M,SC,SI</td>
<td>Petrozello</td>
<td>9/31/87</td>
<td>429,666</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roseland</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>BFI</td>
<td>4/1/86</td>
<td>136,000</td>
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</tr>
<tr>
<td>So. Orange</td>
<td>P</td>
<td>Backyard</td>
<td>H,B,Y,M,C</td>
<td>South Orange Disposal</td>
<td></td>
<td>427,032</td>
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<td></td>
</tr>
<tr>
<td>Verona</td>
<td>MC</td>
<td>Backyard</td>
<td>H</td>
<td>BFI</td>
<td>12/31/88</td>
<td>344,481</td>
<td></td>
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</tr>
<tr>
<td>W. Caldwell</td>
<td>MC</td>
<td>Curbside</td>
<td>H,B,Y,M</td>
<td>BFI</td>
<td>11/30/88</td>
<td>942,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key to Collection type and materials:
- MC - Municipal Contract
- P - Private
- M - Municipal
- H - Household
- B - Bulky
- Y - Yard
- C - Commercial
- SC - Some Commercial
- SI - Some Industrial
- M - Municipal

Source: Information provided by each municipality, through current solid waste collection contracts, as of June 1986. These costs reflect the date the contract became effective. For many municipalities the costs reflect 1984 costs, current costs may be higher. Therefore, these costs should not be used for comparison purposes.
C.D. & A.F. Marangi, Inc.       AJ Pinto
Tri County Disposal Services       White Brothers Trucking Co.
John G. Pucillo
Donald Robertozzi
Thomas Smothers
South Orange Disposal Co.
Joseph Costa, Inc.
Anthony J. Miele
C. Pyskaty & Sons, Inc.
Angelo Miele & Sons, Inc.
Inter-Boro Disposal, Inc.
Pinrose Company, Inc.
C. Egan & Sons
Haulaway Incorporated
Stivali Bros., Inc.
Peter J. Miele
Angelo Cicariello
Union Hill Disposal Co., Inc.
Louis Pinto & Son, Inc.
Jan M. Stevens
Compaction Systems Corp.
Manganelli Disposal Company
Suburban Disposal, Inc.
A. Rizzo Carting

AJ Pinto
White Brothers Trucking Co.
Industrial & Commercial Refuse Removal Service, Inc.
Sano Carting Company, Inc.
A.B. Capaldo
L. Pucillo & Sons, Inc.
Intercity Service, Inc.
Garofalo Brothers, Inc.
A.A. Mastr, Inc.
L.T. Roselle, Inc.
Nicholas J. Zimbardi
T. Farese & Sons, Inc.
Archie Roselli, Inc.
Frank M. Notanangelo
Newark Disposal Services, Inc.
Nicholas Enterprises, Inc.
Sanitary Waste Carriers, Inc.
Joseph Robertozzi
Angelo Pacio
Capasso Brothers, Inc.
Newark Carting Corporation
Frank's Sanitation Service, Inc.
Falgi Carting, Inc.
RD & Sons Disposal Service, Inc.
John Costa
Residential & Commercial Disposal Service, Inc.  Michael Sehettino
Irvington Metals Company, Inc.  Alex Williams
Albin S. Baechel  Thomas Grieves
R. Polumbo Carting, Inc.  Timofai Sanitation
K & J Carting, Inc.  Cali Carting, Inc.
Mauriello Disposal Service  Waste Disposal, Inc.
Araneo Scavenger Service  Jersey Carting, Inc.
Browning-Ferris Industries, Inc.  James Petrozello Co
A. Fiore & Sons  Giordano Company, Inc.
Newark Carting, Inc.  BFI of North Jersey
Table XII: Essex County Municipal Solid Waste Costs

All costs, in this Table, reflect the total tonnage disposed of as tabulated by the HMDC in their O & D 1985 Summary Reports, against the 1985 revised census population estimate. Categories include collections, disposal, per capita, per household, and per ton costs. The collections and disposal costs listed are the costs defined in each municipal garbage collections contract. Unit costs are per capita, household and ton are estimates only, calculated by dividing municipal total costs by municipal populations, housing units and tons generated.

Four municipalities in the County do not offer garbage collection services to residents. Rather each household contracts directly with the hauler. In these cases, the cost of disposal is unavailable.

These solid waste management costs are reflective of the municipalities contract with the hauler. The dates each contract became effective vary and therefore, costs reflect the effective dates dollar value. These costs cannot validly be compared. Costs today may be higher. Estimated per capita, per household and per ton costs are extrapolated from the solid waste collections and disposal costs as provided by the municipality. Each municipality collects data differently and therefore, comparisons between data cannot be made.
<table>
<thead>
<tr>
<th>Municipality</th>
<th>Total Annual Collect &amp; Disposal Cost ($)</th>
<th>1) 1985/86 Annual Collect Cost ($)</th>
<th>1) 1985/86 Annual Disposal Cost ($)</th>
<th>2) Population 1985</th>
<th>3) 1980 Housing Units</th>
<th>4) Estimated '85 #10 Waste Tons/Year</th>
<th>5) Estimated Annual Per Capita Cost ($)</th>
<th>5) Estimated Annual Per Household Cost ($)</th>
<th>5) Estimated cost/ton (#10 Waste)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belleville</td>
<td>688,880</td>
<td>36,077</td>
<td>13,395</td>
<td>25,993</td>
<td>19.09</td>
<td>51.43</td>
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<tr>
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<td>547,260</td>
<td>32,298</td>
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<td>Caldwell</td>
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<td>12,613</td>
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<tr>
<td>East Orange</td>
<td>1,545,288</td>
<td>660,000</td>
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<td>49.56</td>
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<td>Essex Fells</td>
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<td>329</td>
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<td>Fairfield</td>
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<td>8,333</td>
<td>2,200</td>
<td>22.83</td>
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<td>Glen Ridge</td>
<td>483,925</td>
<td>7,904</td>
<td>5,565</td>
<td>61.22</td>
<td>220.00</td>
<td>86.96</td>
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<tr>
<td>Irvington</td>
<td>1,990,000</td>
<td>690,000</td>
<td>34,810</td>
<td>31.71</td>
<td>77.96</td>
<td>57.10</td>
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<tr>
<td>Livingston</td>
<td>28,400</td>
<td>8,110</td>
<td>35,810</td>
<td>122.58</td>
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<td>Maplewood</td>
<td>22,909</td>
<td>8,141</td>
<td>16,994</td>
<td>179.28</td>
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</tr>
<tr>
<td>Millburn</td>
<td>733,361</td>
<td>215,370</td>
<td>18,478</td>
<td>37.76</td>
<td>103.69</td>
<td>39.76</td>
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</tr>
<tr>
<td>Montclair</td>
<td>1,356,230</td>
<td>451,230</td>
<td>24,906</td>
<td>35.07</td>
<td>90.79</td>
<td>83.8</td>
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<tr>
<td>Newark MC M</td>
<td>9,144,565</td>
<td>724,663</td>
<td>292,743</td>
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<td>75.33</td>
<td>31.2</td>
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<tr>
<td>No. Caldwell</td>
<td>240,000</td>
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<td>2,896</td>
<td>38.30</td>
<td>149.25</td>
<td>82.8</td>
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<td>Nutley</td>
<td>713,448</td>
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<td>12,610</td>
<td>24.41</td>
<td>66.92</td>
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<td>12,947</td>
<td>18,061</td>
<td>13.61</td>
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<td>11,431</td>
<td>24.73</td>
<td>73.80</td>
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<td>5,257</td>
<td>12,428</td>
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<td>5,344</td>
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1. Cost figures reported directly by municipality either from municipal contracts or budgets.
4. 1985 HMDC Origin & Destination Reports.
5. Calculations made by dividing municipal total costs by municipal, populations, housing units, and tonnages.
Recycling Programs

Municipal Programs

As of mid-1986 over 50% of the municipalities in the county had curbside collection programs. Of these, all collect newspaper and almost half collect more than one material. The most common collection frequency for curbside programs is twice per month, with once per week being the next preferred frequency.

Municipal and/or volunteer depot or drop-off programs exist in 13 municipalities. In eight cases the depots complement curbside programs by providing opportunities to recycle materials not collected curbside. Schedules of operation and the types of materials collected vary considerably for the depots. A summary of municipal collection programs can be found in Table XIII.

Commercial Programs

Commercial recycling programs in Essex County are not as well-known or documented as the municipal programs. For the greater part, commercial recycling focuses on corrugated cardboard, which is the second most commonly recycled material in the County. Corrugated, which is usually recycled in cooperation with either a scrap paper dealer or a solid waste hauler working with a dealer, is hauled in a source separated state to the dealer’s location where it is baled and shipped to mills. Some amounts of corrugated are recycled by haulers, who separate it from mixed commercial waste at transfer stations. No statistics are currently available on the relative volumes handled through each collection approach.

High-grade paper and food wastes are two other materials extensively recycled from commercial sources and are collected almost exclusively in a source-separated form.

Glass is collected from commercial sources, primarily bars and restaurants. One collector offers collection service in conjunction with providing a crusher which fits under the bar itself.

Markets for Recycled Materials

A significant number of changes and trends have occurred, during the past five years, in the various markets for Essex County recycling programs. Overall, the markets have stabilized and currently accept increasing amounts of materials at generally declining prices. Fluctuations have occurred both in the amounts of material accepted irrespective of price and in the prices themselves. During this period there have been a number of mills which have closed or moved out of the state. No new major mills consuming recycled raw materials have opened in the Northeast. Overall demand has been maintained or expanded through existing mills procuring greater amounts of recycled raw materials and through some expansion of export markets.

Another general trend is for municipal programs to increasingly use scrap paper dealers and intermediate glass processors. In the past municipalities shipped glass and newspaper directly to the mill. However, mill-direct shipping of newspaper has been harder to obtain and unloading times have increased. Mill-direct shipping of glass has decreased largely as a result of mill closings.

Table XIV lists available markets located in Essex County.
<table>
<thead>
<tr>
<th>Municipality</th>
<th>Material Recovered Municipal (Contracted) Program</th>
<th>Collection Practices</th>
<th>Freq. of Collection</th>
<th>Mandatory Source Separation Ordinance</th>
<th>Compost Facility</th>
<th>Materials Recovered From Volunteer Programs</th>
<th>Collection Practice</th>
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<tr>
<td>Belleville</td>
<td>Yes</td>
<td>Newspaper</td>
<td>Last depot</td>
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<tr>
<td>Bloomfield</td>
<td>News, glass, alum.</td>
<td>Curbside</td>
<td>1st garbage collec. day/week</td>
<td>No</td>
<td>Yes (no permit)</td>
<td>Office paper, news, glass, alum.</td>
<td>Depot</td>
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<td>Caldwell</td>
<td>News, glass, alum.</td>
<td>Curbside</td>
<td>1st garbage collec. day/week</td>
<td>Yes</td>
<td></td>
<td>News, glass, alum., corr, f, nf.</td>
<td>2nd Sat./Mo. Depot</td>
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<tr>
<td>Cedar Grove</td>
<td>News</td>
<td>Curbside</td>
<td>2x/month</td>
<td>Yes</td>
<td>0704 B</td>
<td>News, glass, alum.</td>
<td>Depot</td>
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<td>East Orange</td>
<td>Yes</td>
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<tr>
<td>Essex Fells</td>
<td>News, glass</td>
<td>Depot</td>
<td>Anytime/1st Sat./month</td>
<td>No</td>
<td>Yes (no permit)</td>
<td>News, glass, alum.</td>
<td>Depot</td>
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<td>Fairfield</td>
<td>News</td>
<td>Curbside</td>
<td>2nd Monday of month</td>
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<tr>
<td>Glen Ridge</td>
<td>News</td>
<td>Curbside</td>
<td>1st Saturday of month</td>
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<td>Irvington</td>
<td>White goods, scrap metal, OCC</td>
<td>Curbside</td>
<td>Weekly</td>
<td>Yes</td>
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<td>Oil</td>
<td>Depot</td>
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<td>News</td>
<td>Curbside</td>
<td>2x/month</td>
<td>Yes (no permit)</td>
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<td>Paper, glass, alum.</td>
<td>Depot</td>
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<td>News</td>
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<td>2x/month</td>
<td>Yes</td>
<td>0711A</td>
<td>News, glass, alum., oil, tinplate</td>
<td>Depot</td>
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<td>Millburn</td>
<td>News</td>
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<td>2x/month</td>
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<td>News, glass, alum., oil, f, nf.</td>
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<td>Biweekly</td>
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<td>Newark</td>
<td>No</td>
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<td>News, glass, alum.</td>
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<td>Orange</td>
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<td>Alum. (OCC)</td>
<td>Buy Back</td>
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<td>News</td>
<td>Curbside</td>
<td>2x/month</td>
<td>Yes</td>
<td>0718A</td>
<td>News, glass, alum.</td>
<td>Depot</td>
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<tr>
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<td>News</td>
<td>Drop-off</td>
<td>2x/month</td>
<td>Yes</td>
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<td>Verona</td>
<td>Paper, glass, alum.</td>
<td>Depot</td>
<td>Monday-Saturday</td>
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<td>Clothes, oil, news, glass, alum.</td>
<td>Depot (2)</td>
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<td>W. Caldwell</td>
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<td>Curbside</td>
<td>2x/month</td>
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<td>News, glass, alum.</td>
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Key:
- news – newspaper
- alum – aluminum
- f – ferrous
- OCC – old corrugated containers
- nf – non ferrous
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<th>Company</th>
<th>Contact Person</th>
<th>Phone Numbers</th>
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<th>Metals</th>
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<th>Other Services</th>
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<td>Pat Bastardo</td>
<td>374-1750 or 1751</td>
<td>HG</td>
<td>CO</td>
<td>AC</td>
<td>AS</td>
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<td>48-54 South 20th Street</td>
<td>James Bastardo</td>
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<td>HP</td>
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<td>Paul Grutch</td>
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<td>John Capriglione</td>
<td>201-589-4665</td>
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<td>374-1750 or 1751</td>
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<td>Ed Tylatki</td>
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<tr>
<td>Patsy Rogonese &amp; Sons, Inc.</td>
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<tr>
<td>Pyramid Recycling</td>
<td>Bob Ciancio</td>
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<td>NP</td>
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<tr>
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<td>Recycled Fiber of New Jersey</td>
<td>Billy Tuttle</td>
<td>50 Lockwood Street</td>
<td>HG</td>
<td>CO</td>
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<td>Newark, NJ 07105</td>
<td>Marty Hubbs</td>
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<tr>
<td>Schiabo Corporation</td>
<td>Frank Claps</td>
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<td>Tidewater Baling Corp.</td>
<td>Ted Shapiro</td>
<td>26st Charles Street</td>
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<tr>
<td>Young Recycling, Inc.</td>
<td>Peter Bart</td>
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<td>201-242-0057</td>
<td>AC</td>
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<td>960 Freylinghuysen Avenue</td>
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<td>AS</td>
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<td>Newark, NJ 07114</td>
<td>Barbara Bart</td>
<td>Recycling &amp; Salvage Corp.</td>
<td>201-242-2250</td>
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<td>Dan Fasano</td>
<td>201-242-2250</td>
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<tr>
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<td>GS</td>
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</tbody>
</table>

**Paper**
- **HG** – High Grade
- **NP** – Newspaper
- **MP** – Mixed Paper
- **CO** – Corrugated
- **MA** – Magazine

**Metals**
- **AC** – Aluminum Cane
- **AS** – Aluminum Scrap
- **FS** – Ferrous Scrap
- **TC** – Tin Cans (food cans)
- **LI** – Light Iron
- **BC** – Bimetal Cans

**Other**
- **K** – Kupfer (Copper)
- **P** – Papier (Paper)
- **E** – Eisen (Iron)
- **MA** – Magazine
- **GS** – General Scrap
Glass Service
GS – Glass Separated E – Storage containers
GM – Color Mixed P – Pick up of Materials
GP – Glass Plate K – Purchase of Contracts to Recycling Programs

Section IV: Solid Waste Management Strategy

I. Interim/Short Term Disposal

A. Interim Disposal Contingency Plan

On July 31, 1987, disposal at the Hackensack Meadowlands landfill, will be unavailable for Solid Waste generated in the County. It is anticipated that during the interim period, between landfill closure and opening of the energy recovery facility (ERF) in 1990, County Solid Waste will have to be delivered to landfills out of New Jersey. In anticipation of interim disposal needs, the County is stepping up an already successful recycling program in order to further reduce the quantity of Solid Waste requiring disposal. While recycling effectively reduces the volume of waste, significant amounts of Solid Waste still require disposal. Therefore, the County has found it necessary to develop a contingency plan for interim disposal. The objective of the Contingency Plan is to have available sufficient transfer, haul and disposal capacity to accommodate the County’s needs.

It would be most prudent to assume for this contingency plan that Essex County will be faced with long-distance haul to landfill disposal sites located out-of-state. This is due to the unavailability of appropriate garbage landfill sites in densely populated Essex County. Generally, Solid Waste disposal in New Jersey has been characterized by a rapidly dwindling supply of permitted landfill disposal capacity. Given the need for long-distance haul, there is no realistic way to develop an inexpensive interim disposal contingency plan.

A crucial component of this contingency plan, is the development of transfer stations. Transfer stations are facilities where collection trucks, usually of the “packer” type, are emptied into larger over-the-road vehicles with 2 to 4 times the carrying capacity. These large vehicles then transfer the refuse to distant disposal sites in a more economical manner.

Long distance hauling cannot be performed by collection vehicles as they would be, on the road to the landfill for a large proportion of total service time, not hold up to long distance haul and would not be fuel efficient for such distances. Therefore, Essex County has surveyed existing and proposed stations. It has been determined that the private sector is able and willing to develop, on its own, sufficient transfer station capability for the interim period.

Transfer stations must meet the following criteria in order to be included in the District Solid Waste Management Plan:

a. Will provide for maximum feasible recovery of recyclables from commercial Solid Waste in both the facility design and operating procedures.

b. Will have functioning truck scales and will weigh loads outbound as well as inbound, recyclables as well as Solid Waste bound for disposal. Tare weights will be subject to spot checking under State authority.

c. Will furnish annual reports of weights by Waste type, town of origin, and the destinations for outgoing wastes and recyclables.

d. Will be designed and operated so as to prevent any Wastes, or materials destined for recycling, from being on the ground outdoors. No outdoor transfers of Wastes from one vehicle to another will be tolerated. The only permitted discharge of Wastes from a vehicle will occur inside a permanent, roofed building. Sorting and removal of recyclables will only occur inside such a building. Likewise, the loading of vehicles for disposal or for recycling, will only occur inside such a building.
e. Will store Wastes and recyclable materials in uniformity with NJDEP regulations. In any event, containers or vehicles containing putrescible waste will be unloaded immediately upon arrival, and such Wastes will be removed from the transfer station site within 24 hours after arrival.

f. Will be operated so that storage of containers with nonputrescible loads, such as demolition Wastes, may remain on site up to 7 days after arrival, provided that they are arrayed neatly, preferably in straight rows and columns.

g. Will be designed and operated so that all drainage from Waste handling areas will be to sanitary sewers or to a wastewater treatment system acceptable to NJDEP, county and local water resource authorities.

Significant transfer capacity in excess of the County’s estimated rate of generation of Solid Waste will not be recommended for inclusion in the Plan. As soon as the County receives satisfactory proposal for Solid Waste flow directions to transfer stations whose capacity in the aggregate, equals the County’s current estimated generation of non-recycled Solid Waste, any proposals representing additional capacity are not likely to be recommended for inclusion.

After the energy recovery facility (ERF) is in operation some transfer station capacity will be required for the handling of Solid Waste which cannot be processed at the ERF. Estimates of this material are made in connection with the procurement of residue disposal services and are cited below:

  a. Nonhazardous Nonprocessible Waste, received at the ERF, but rejected for processing; 300 tons per week.

  b. Nonhazardous Nonprocessible Waste, generated within the County but not received at the ERF; up to 1800 tons per week, depending in part upon construction and demolition activity in the County.

  c. Bypassed Waste

  d. Unacceptable Waste

Table IX E reflects the transfer station facilities which are included in the District Plan.

Essex County is empowered through its Solid Waste Management Plan to continue the flow of all Essex County Solid Waste to designated disposal sites. Such a determination is called “flow control” and in the absence of existing landfill disposal sites, such redirection of wastes will devolve to the use of transfer stations.

Where no Solid Waste flow direction is specified, general State waste flow orders will govern. The interim period for which the Waste flow directions to transfer stations apply commences August, 1987, and ends when the Essex County ERF comes on line. In addition to Waste flow directions applicable to normal operations, Essex County will, if necessary, request temporary emergency Waste flow redirections from NJDEP during periods when routine collection, transfer or disposal facilities are not available.

All Waste flow directions affecting Essex County are strictly subsidiary to the direction of Acceptable Waste to the ERF pursuant to the Energy Recovery Contracts. When the ERF pursuant to the Energy Recovery Contracts. When the ERF begins accepting Acceptable Waste during partial operation, it is accorded absolute priority for all Acceptable Waste originating within Essex County. The facility operator will request delivery of the quantity of Acceptable Waste which it is ready to accept, and the County will designate specific municipal
or commercial Acceptable Waste portions, consistent with the priority accorded to the City of Newark by the Host Municipality Agreement. When the ERF achieves Acceptance for Full Operation, any other remaining Waste flow directions for Acceptable Waste will then terminate. The decision to extend transfer stations beyond that time will be based upon the handling of Waste that is not accepted at the Energy Recovery Facility (e.g., Bypassed Waste; Non-Processible Waste both from the County and the Energy Recovery Facility.)

To the extent the County does not need capacity in the Energy Recovery Facility REF-FUEL is permitted to take in Acceptable Waste from outside the County, the intent of which is to keep the Facility operating at full capacity. For the discussion on Merchant Waste, please see Section on “Acceptance of Waste From Outside Essex County,” page 28.

Inclusion within a District Plan becomes final only after adoption by the County Governing Body and approval by the Department of Environmental Protection. Approval as part of the District Plan is a necessary proposed private transfer station is also subject to certain other State approvals.

II. Long Term Strategy

A. Energy Recovery

The center piece of Essex County’s long term strategy is a mass burn waste-to-energy plant to be located at Blanchard Street in Newark. This plant will have a design capacity of 2,277 tons per day reducing the bulk of Essex County’s garbage and producing energy for sale to Public Service Electric and Gas. The reduction of over 2,000 tons per day of raw garbage to a process residue of about one-quarter by weight and less by volume of the incoming garbage for a period of at least 25 years is the largest component of the long-term solution. Landfill disposal will be utilized only for the much smaller portions of Residue and Bypassed Waste. The planning and sizing of the energy recovery plant has been fully integrated with the recycling program so that the total amount of Solid Waste requiring any kind of disposal is reduced as much as possible.

Essex County and the Port Authority of NY & NJ thoroughly examined technologies and determined that the European mass burn facilities with water wall furnaces’ have the most proven record of safe, reliable, and economical operation. The most modern state-of-the art air pollution control equipment for both particulate and acid gas removal have been added. The site has been carefully selected based upon objective criteria which rated it number one overall. This site has particular importance because it exists in an industrial zone, away from residences, and has convenient truck access off major highways. The site has received NJDEP approval after designation in the 1981 District Plan Revision and has also received approval by the City of Newark in a detailed Host Municipality Agreement (See appendices).

All contracts for construction and operation of the Essex County Energy Recovery Plant have been executed. Final NJDEP permits have been issued. Construction is expected to commence in the Summer of 1987 and take 2 ¾ to 3 years to complete.

As mentioned previously, when the Energy Recovery Facility begins accepting Acceptable Waste, it is and shall be accorded absolute priority for all Acceptable Waste originating within Essex County. The extension of any transfer stations beyond that time will be based upon the handling of Solid Waste that is not accepted at the Energy Recovery Facility (e.g., Bypassed Waste; Non-Processible Waste, both from County and ERF; and Unacceptable Waste) or transfer to the Energy Recovery Facility.

Administration and Enforcement Strategy – Authority and Scope
Under the New Jersey Solid Waste Management Act (P.L. 1975 c. 326), all counties were designated as Solid Waste Management Districts and became responsible for and implementing District Plans under the supervision of the Department of Environmental Protection (DEP). Essex County’s policy calls for the integrated development of recycling programs and an energy recovery facility (ERF). To accomplish this, we entered into a Host Municipality Agreement between the County, the City of Newark, and the Port Authority of New York and New Jersey on May 15, 1985. We have also completed a county Service Contract with the Port Authority. They in turn, have entered into several contracts with American REF-FUEL Company. The Department of Environmental Protection has issued the necessary final permits for the energy recovery facility which include a Certificate of Approved Registration and Engineering Design Approval (solid waste permit). Selected sections of the Solid Waste Permit are included as attachments.

The County has incurred various obligations arising from the Plan, the Host Municipality Agreement, the County Service Contract, and the Solid Waste Permit. In order to discharge these obligations we are required to adopt, as part of a 1986 revision to our Plan, an Administration and Enforcement Strategy. The purpose of the Administrator and Enforcement Strategy is to enable us to achieve the following essential outcomes:

- Delivery to the Essex County Resource Recovery Facility of all Acceptable Waste generated within the Essex County Solid Waste Management District.
- Establishment of comprehensive, mandatory recycling programs in each municipality in the County for residential, commercial, institutional and industrial sources of Solid Waste.
- Compliance with truck routing requirements for refuse vehicles traveling to and from the Facility.
- Assuring that all refuse vehicles delivering Acceptable Waste to the Facility are equipped with proper exhaust silencers.

**Registration Requirements**

The chief mechanism for administering and enforcing the policies to achieve the objectives stated above will be a registration system.

Prior to delivering Acceptable Waste to the Facility, District Haulers must be granted registrant status. Granting of such registrant status is contingent upon compliance with requirements set forth herein. The County reserves the right to make all determinations with respect to compliance with these requirements by District Haulers prior to and following the granting of registration. Registered District Haulers shall display on their vehicles or have their drivers carry any identification stickers, markings or cards as the County may deem necessary. Registrations may be revoked if a District Hauler fails to maintain compliance with these requirements or applicable laws and regulations of the State of New Jersey or the United States.

Haulers of Acceptable Waste from outside Essex County using the Facility will be subject to the same regulations as District Haulers reasonably pertaining to health, safety and traffic scheduling and routing. These regulations will be reflected in contracts between American REF-FUEL and non-District Haulers and in any inter-district waste flow agreements entered into by Essex County.

**Specification of Routes**

All vehicles delivering Acceptable Waste to the Facility and leaving the Facility, which are operating in municipalities other than the City of Newark, shall utilize the following specified routes. All Acceptable Waste collection / transportation contracts and tariffs effective during the term of Facility operation with respect to Essex County municipalities other than Newark shall contain provisions for compliance with this requirement.
Specific routing (N.J. Turnpike, US 1 & 9, and other Interstates) will be described on a case-by-case basis for haulers delivering Acceptable Waste from outside the District.

The routes to be used by all vehicles departing from Essex County municipalities and traveling to the facility are specified below. All such vehicles leaving the Site shall exit on the facility access roads to Raymond Boulevard eastbound, and proceed to either the N.J. Turnpike or Route 1-9.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Routes</th>
</tr>
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<tbody>
<tr>
<td>1. Belleville</td>
<td>Route 21 South to Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>2. Bloomfield</td>
<td>Belleville Avenue to Route 21 South to Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>3. Caldwell</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
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<td>4. Cedar Grove</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>5. East Orange</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>6. Essex Fells</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>7. Fairfield</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>8. Glen Ridge</td>
<td>Belleville Avenue to Route 21 South to Route 280 East to N.J. Turnpike South. Exit Turnpike at jughandle.</td>
</tr>
<tr>
<td>9. Irvington</td>
<td>Lyons Avenue to Route 78-24 East Route 1-9 North. Exit at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>10. Livingston</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>11. Maplewood</td>
<td>Route 78-24 East to Route 1-9 North. Exit at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>12. Millburn</td>
<td>Route 78-24 East to Route 1-9 North. Exit at interchange 15E. Enter facility at jughandle.</td>
</tr>
<tr>
<td>15. Nutley</td>
<td>Route 21 South to Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
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<td>16. Orange</td>
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<td>17. Roseland</td>
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<td>18. South Orange</td>
<td>Route 78-24 East to Route 1-9 North. Exit at interchange 15E. Enter facility at jughandle.</td>
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<td>19. Verona</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
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<td>20. West Caldwell</td>
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</tr>
<tr>
<td>21. West Orange</td>
<td>Route 280 East to N.J. Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jughandle.</td>
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</table>
interchange 15E. Enter facility at jughandle.
Waste Flow Control

No District Haulers shall deliver Acceptable Waste generated within the County to any other solid waste disposal or resource recovery facility within or outside the borders of the State of New Jersey unless specifically directed to do so by the County consistent with the County Service Contract or the NJ Department of Environmental Protection (DEP). Monitoring and enforcement will be as provided by regulations of the NJDEP and NJBPU.

Acceptance of Waste From Outside Essex County

Over the expected range of Acceptable Waste BTU per pound values, the potential merchant waste contribution to the Energy Recovery Facility is minor compared to the total Energy Recovery Facility capacity. For purposes of explanation, the Energy Recovery Facility will consist of three furnace/boiler units, each with the capacity to process 759 Tons per Day of Acceptable Waste having a Higher Heating Value of 5300 BTU per pound. Correspondingly, the rated capacity of the Plant is 2277 Tons per Day of Acceptable Waste, or 681,500 Tons per year. The Energy Recovery Facility will process on a first priority basis all of Essex County Acceptable Waste with a Guaranteed Tonnage amount of 680,000 Tons per Year. At 5300 BTU/LB Acceptable Waste, the potential amount of merchant waste is 1,500 Tons per Year or .3 percent of the total Energy Recovery Facility capacity.

With 500 BTU/LB Acceptable Waste (a feasible result), the rated capacity of the Energy Recovery Facility is 2,430 Tons per Day of Acceptable Waste, or 727,300 Tons per Year. This represents a potential merchant waste portion of 47,300 Tons per Year or 6.5 percent of the total Energy Recovery Facility capacity.

The County recognizes its obligations under Section 4.06 of the County Services Contract with the Port Authority. That section, and its corresponding Section 4.06 in the Service Agreement between the Port Authority and American REF-FUEL Company of Essex County, provides that to the extent the County does not need capacity in the Energy Recovery Facility, REF-FUEL is permitted to take in Acceptable Waste from outside the Co. Such Acceptable Waste would be accepted under Additional Processing Contracts, which the Service Contract and Service Agreement allow under conditions that assure the County of sufficient processing capacity to meet its needs, while permitting the Port Authority and REF-FUEL to maintain the economic viability of the Facility.

If REF-FUEL proposes to obtain Acceptable Waste from another District within New Jersey, the County agrees, given State approval, to enter into inter-district waste flow agreements permitting deliveries of such waste.

The County sees the potential benefit of, and is willing to pursue with REF-FUEL, the State, and other Districts, an inter-district waste agreement that would provide for reciprocal disposal of Bypasses Waste with other Districts (the so-called “Omnibus Inter-district Waste Agreement”).

If Acceptable Waste is not available from another District within New Jersey, the Company may obtain Acceptable Waste from outside New Jersey, so long as that is consistent with Section 4.06.

Exclusion of Hazardous Waste and Certain Type 27 Waste

Sections 2 and 26 of the Permit (Attached) prohibit the processing of Hazardous Waste and Certain components of Type 27 waste (Dry industrial waste) in the Facility “(specifically the following sub-categories only: Hazardous waste as defined in N.J.A.C. 7:26-1.4, N.J.A.C. 7:26-8 and 40 CFR 261 which is generated by small quantity generators (7:26-8.3); non-hazardous chemical waste; research and development process
waste; asbestos containing materials such as ceiling tiles and insulation; and contaminated soils). All Solid Waste collection/transportation contracts and tariffs effective during the term of Facility operation with respect to Essex County municipalities shall contain provisions for compliance with this requirement.

The County, in cooperation with American REF-FUEL, shall inspect vehicles at the Facility in order to prevent the delivery or acceptance of Unacceptable Waste or Hazardous Waste.

In addition to efforts to be undertaken by the County, all District Haulers shall take steps, including the mailing of advisory notices to commercial/industrial Waste generators, to inform Waste generators of the prohibition of these Wastes as stated in the Permits. Evidence that such steps have been taken shall be required of District Haulers as a condition for registration.

Enforcement and penalties will be pursued as provided by State statutes affecting Solid Waste and Hazardous Waste transportation and disposal. Penalties are as follows:

- **First offence**: summons and fine up to 500.
- **Second offence**: vehicle forfeiture summons, and fine, revocation of facility access registration, possible revocation of DEP and BPU permits.

In 1988, the County will conduct a survey of all Type 27 waste generators to determine total and individual generation of prohibited Waste Type 27 subcategories. Following the survey, all generators will be notified of the prohibition of their affect Waste subcategories and be informed of their legal disposal alternatives.

**Exhaust Silencers**

Section 22 of the Permit (attached) requires the establishment of a program to ensure that all vehicles delivering Acceptable Wastes to the Facility to be equipped with operating exhaust silencers (mufflers). All Acceptable Waste collection/transportation contracts and tariffs effective during the term of facility operation with respect to Essex County municipalities shall contain provisions for compliance with this requirement.

The County, in cooperation with American REF-FUEL, intends to inspect vehicles at the Facility in order to carry out this Permit requirement. Enforcement and penalties will be as provided by State, County and municipal statutes regarding motor vehicles and noise control. Repeated violation may result in revocation of facility access registration. Furthermore, all vehicles should be maintained and operated in accordance with all applicable DEP standards.

**Essex County District Resource Recovery Investment Tax Fund Financial Plan and Disbursement Schedule** (Authority: P.L. 1985, c.38)

- **Purpose**

  This section sets forth a financial plan and schedule for the disbursement of funds derived from Resource Recovery Investment Taxes collected in accordance with P.L. 1985, Chapter 38.

- **Background**

  On February 4, 1985, Governor Kean signed into law P.L. 1985 Chapter 38 (commonly known as “A-1778”) which established, among other things, a Resource Recovery Investment Tax (“Tax”). This Tax is levied on the owner or operator of every sanitary landfill facility. The Tax is levied at a rate of $1.00 per ton the first year, and increases annually by $1.00 per ton for the first three years, to $4.00 per ton, and remains at this level until the eleventh year. In the eleventh year, the Tax is repealed.
P.L. 1985, Chapter 38, also established a Resource Recovery Investment Tax Fund in the State Department of Treasury (“State Fund”). The State Fund contains sub-accounts for each county and is the depository for the Tax revenue generated in the respective county. Each county is directed to create a District Resource Recovery Investment Tax Fund (“District Fund”) which is to act as the depository for the monies disbursed to the county from its sub-account in the State Fund. The county is authorized to expend the monies in the District Fund in accordance with a plan which outlines the proposed uses of the monies and a schedule for their disbursement. The plan is to be adopted as an amendment to the county’s district solid waste management plan. The plan for the use of the monies may be amended as necessary, provided it is done in accordance with procedures for District Plan amendments.

On October 31 of each year in which monies remain in its District Fund, the county must file an audit, prepared by an independent public accountant, of the District Fund and any expenditures therefrom with the Local Finance Board in the Division of Local Government Services in the Department of Community Affairs. Further, if the New Jersey Department of Environmental Protection (“DEP” or “Department”) determines that a county has failed to fulfill its responsibilities under the New Jersey Solid Waste Management Act (“SWMA”), DEP may assume the administration of the District Fund for the purpose so authorized and set forth below. A determination by DEP that the county has finding that the county has not made a good faith effort towards identifying sufficient available suitable sites for solid waste facilities within the county, or negotiating inter-district agreements, to provide for the disposal needs of the county.

Pursuant to section 15b of PL. 1985 Chapter 38, the Resource Recovery Investment Tax Revenues may be used:

1. To reduce the rates charged to all users by a resource recovery facility serving the county in order to provide a gradual transition to resource recovery facility rates from sanitary landfill facility rates; A county may achieve reductions through the use of monies in its district investment tax fund to pay directly part of the fees charged for disposal to all users of a resource recovery facility;

2. To design, finance, construct, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposing of those solid waste which cannot be processed by a resource recovery facility or the waste products resulting from the operation of a resource recovery facility;

3. To design, finance, construct, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposal of solid waste, on a long term basis, if a county can demonstrate to the satisfaction of the Department that utilization of a resource recovery facility is not feasible for disposal of the solid waste generated in that county;

4. To finance the closing costs for the proper closure of any terminated sanitary landfill facility located within a county whenever that county has made an investment tax rate adjustment for this purpose in accordance with the study conducted pursuant to section all of the amendatory and supplementary act; and

5. To administer the investment tax fund, up to an amount not to exceed 2% of the total monies appropriated to the fund during the fiscal year.

The State aid derived from the Tax shall be distributed to the county based on the total amount of solid waste disposed of within Essex County (“County”) during the previous calendar year as determined by DEP.
c. **Specific Uses for the District Fund Applicable to Essex County**

The County will utilize the monies in the District Fund to finance the construction and part of the operation of the county’s Recycling Center. The Recycling Center is an integral part of the County’s comprehensive, long-term solid waste management strategy. It will complement the County’s waste-to-energy facility, local and regional yard waste composting facilities and a sanitary landfill for the disposal of non-processible materials, process residues, non-permitted wastes and by-passed wastes.

The Recycling Center will accept source-separated, non-putrescible, commingled recyclables primarily from curbside collection programs. In the facility these materials will be sorted and processed to consuming industries’ specifications. The facility will be constructed and operated by a private entity, under contract to the County.

d. **Justification of District Fund Use for the Essex County Recycling Program**

1. **Authorization to Use the District Fund for Recycling**

The A-1778 authorizes use of the District Fund for only certain defined purposes. Section 15b (1) authorizes use of the fund “to reduce the rates charged to all users by resource recovery facilities serving the county in order to provide a gradual transition to resource recovery facility rates from sanitary landfill facility rates. A county may achieve reductions through the use of monies in its district investment tax fund to pay directly part of the fees charged for disposal to all users of the resource recovery facility.” The Essex County Recycling Program falls within this purpose because (a) the use of the fund will be related to a resource recovery facility, (b) the resource recovery facility will serve the entire county, and (c) the fund will be used to reduce the net costs of resource recovery to provide general transition between resource recovery and sanitary landfill tipping fees.

First, the County Recycling Program is related to a “resource recovery facility.” The phrase “resource recovery facility” is defined in section 2v of A-1778 to include “a mechanized composting facility or any other solid waste facility constructed or operated for the collection, separation, recycling, and recovery of metals, glass, paper, and other materials for reuse or for energy production.” Under this definition, the County’s waste-to-energy facility, regional composting facilities, and its Recycling Center would all be resource recovery facilities.

Moreover, the definition of “solid waste facility” is sufficiently broad so that vehicles utilized in the Essex County Recycling Program and its operation and maintenance costs would be considered to be part of the composting facilities or Recycling Center. although there is no definition of “solid waste facility” in A-1778, A-1778 is an amendment to SWMA, which defines “solid waste facilities” to “mean and include plants, structures, and other real personal property acquired, constructed, or operated or to be acquired, constructed, or operated by a person pursuant to the provisions of this or any other act, including transfer stations, incinerators, resource recovery facilities, sanitary landfill facilities or other plants for the disposal of solid waste and all vehicles, equipment and other real and personal property and rights therein and appurtenances necessary or useful and convenient for the collection or disposal of solid waste in a sanitary manner.” (emphasis added). N.J.S.A. 13:1E-3h.

The recycling vehicles and the entire recycling program, including operations and maintenance thereof, are “appurtenances necessary or useful and convenient for the collection or disposal of solid waste in a sanitary manner” and are related to the composting facilities and the Recycling Center.
Second, the composting facilities and Recycling Center are facilities which will serve the entire county. Therefore, funds expended for the Essex County Recycling Program will be expended in connection with facilities that will serve the entire county.

Third, use of the District Fund to finance the Essex County Recycling Program will reduce the rates for resource recovery. Use of the fund to subsidize recycling is equivalent to use of the fund to reduce tipping fees for the waste-to-energy facility. Because the County is requiring countywide recycling, it will be able to construct a waste-to-energy facility with decreased capacity costs and tipping fees. In addition, with fewer “nonprocessibles,” the operation and maintenance costs for the waste-to-energy facility will likely be lower. Finally, by removing the recyclable materials, the County will be able to produce a processible wastestream with improved combustion characteristics, producing more energy, less ash and less emissions per ton than a wastestream unaffected by recycling.

2. Justification for Immediate Disbursement

The disbursement schedule adopted herein is divided into an initial and long term disbursement schedule. The initial disbursement schedule calls for immediate utilization of investment tax funds for the Recycling Facility prior to the opening of the waste-to-energy facility. Immediate use of those funds for recycling is warranted to ensure that the Recycling Center becomes fully operational before the waste-to-energy facility opens. Time is needed to provide proper training of collection personnel, to maximize collection and processing efficiency, to thoroughly educate County residents as to their participation to the opening of the waste-to-energy facility. These objectives must be met to reduce the level of waste entering the waste-to-energy facility to a level compatible with final facility design capacity.

Long Term Disbursement Schedule

During the latter half of 1987 the county will conduct a study of appropriate long-term uses of the District Fund. As it now appears, part of the fund will be utilized to provide capital to create regional leaf composting facilities, urban recycling programs which are unrelated to the Recycling Center and to offset, in whole or in part, the cost of operating recycling and composting facilities.

Prior to the establishment of the Recycling Center and funding of other urban recycling facilities, each municipality will be surveyed as to their desire to utilize such facilities. The total system needs and costs will then be established.
Table XV
Essex County Resource Recovery
Investment Tax District Fund

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tons of Waste (1)</td>
<td>$818,246</td>
<td>$1,239,766</td>
<td>$1,118,288 (3)</td>
<td>$1,008,123 (4)</td>
<td>$1,008,123</td>
<td>$273,585 (5)</td>
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<tr>
<td>Subtotal</td>
<td>$818,246</td>
<td>$2,479,532</td>
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<td>$4,032,492</td>
<td>$4,032,492</td>
<td>$1,094,340</td>
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<tr>
<td>Total (2)</td>
<td>$801,881</td>
<td>$2,429,941</td>
<td>$3,287,768</td>
<td>$3,951,842</td>
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<td>$1,072,453</td>
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<tr>
<td>Grand Total</td>
<td>$801,881</td>
<td>$3,231,822</td>
<td>$6,519,590</td>
<td>$10,471,432</td>
<td>$14,423,274</td>
<td>$15,495,727</td>
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</table>

(1) Based on HMDC Origin & Destination forms from Essex County waste for 1985
(2) Includes 2% to NJ Treasury for auditing and administrative costs connected with the fund
(3) Assumes: 10% reductions in municipal (type 10) and bulky (type 13) wastes over 1985 tons
(4) Assumes: 20% reduction in municipal (type 10) and 15% reduction in bulky (type 13) wastes over 1985 tons
(5) Assumes: 33% of processible waste stream processed through waste-to-energy facility as shakedown tonnage. Processible waste stream of 820,757 tons based on following assumptions: 20% reduction in municipal (type 10) over 1985 tonnage due to recycling activities, 66% reduction in bulky waste (type 13) due to permit condition on prohibiting acceptance of (non-processible) type 13, approximately 80% reduction in non-hazardous dry industrial waste (type 27) due to permit conditions prohibiting acceptance of certain sub categories of type 27.
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling Center</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Capital Cost (estimated)</td>
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<tr>
<td>Reserve for Start-up Operating Subsidy</td>
<td></td>
</tr>
<tr>
<td>Regional Leaf Compost Facility</td>
<td>100,000</td>
</tr>
<tr>
<td>Site Improvement &amp; Equipment</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$2,900,000</td>
</tr>
</tbody>
</table>
The County Service Contract with the Port Authority, approved by the Board of Chosen Freeholders May 7, 1986, places upon the County the responsibility to arrange for reservation of landfill capacity for ultimate disposal of residue and bypassed waste.

The execution and adoption by the county and approval by the State of the process Residue Option Agreement contemplated by the County Service Contract is a Condition Precedent for commencing construction of the Resource Recovery Facility. Further, such agreement is necessary to cause the Port Authority to be willing to reaffirm project economics, and thereby release funds for construction, for site acquisition and for payments to the County to cover past and current Division of Solid Waste Management expenses.

In August, 1986 the County issued a Request for Qualifications for such disposal with a deadline of October 8, 1986. Ten firms sent qualification statements, and of those, the Division selected eight to receive the Request for Proposal November 17, 1986. On the deadline of January 5, 1987, four proposals were received. All respondents to the RFP contemplated disposing the residue at landfills out of state.

Proposals were evaluated by a committee composed of County and Port Authority representatives, assisted by consultants to the County. Based on that evaluation, the two top-rated proposers were invited to make presentations to the County on February 11. Later that month, one proposer's sites were inspected, and the cognizant state regulatory authority was consulted regarding the operating history of the sites.

Each of the two to ranked vendors appears to be able to commit from 3 to 6 times the permitting landfill volume needed by the County for the first 7 years of Facility. The proposed sites are in Western New York and Ohio. The initial price quotations are well within the range expected by the County. We intend to complete negotiations and put a proposed contract before the Board of Freeholders during April.

Payments for the residue disposal agreement will not be made from the County Budget. Instead the payments will initially be provided by the Port Authority, which will look to the project tipping fees for repayment.

It should be noted that the County seeks an option agreement. The effect will be to let the County take advantage of less expensive disposal or residue utilization options should they become available before the Facility is in operation.

The public announcement of the County’s vendor evaluation process is reproduced below.

COUNTY OF ESSEX, NEW JERSEY
DIVISION OF SOLID WASTE MANAGEMENT

RESOURCE RECOVERY RESIDUE AND BYPASS DISPOSAL OPTION AGREEMENT
ANNOUNCEMENT OF VENDORS SELECTED FOR NEGOTIATION

DATE: February 4, 1987

Pursuant to the County’s Request for Proposals from vendors of disposal services for the Essex County Resource Recovery Facility, the following vendors are invited to make presentations to the County on Wednesday, February 11, 1987:
Based on the results of the presentations, the County will complete its evaluation of the proposals and decide whether to enter negotiations with any proposer.

Essex County extends its thanks to the following proposers, from whom additional information is not solicited at this time:

Accent Investments, Inc.
257 Central Avenue
Jersey City, New Jersey 07307

BFI Waste Systems
1800 Parkway Drive
Hanover, Maryland 21076

The principal criteria which were employed in this initial selection were as follow:

1. Ability to guarantee available disposal capacity in permitted landfill(s).
2. Ability to accomplish transportation to those landfill(s).
3. Experience in managing wastes, with emphasis on long distance hauling.
4. Submission of a price proposal in a form responsive to the Request for Proposals.

B. Recycling

The current plan for expansion of source separation and material recovery is derived primarily from the adopted policy established in the Integration Report. An Administration and Enforcement Strategy, developed by the County, and various provisions of proposed State mandatory recycling legislation have also been incorporated into the plan.

The recycling plan focuses primarily on two wastestreams: municipal (a combination of residential and commercial) and commercial. The municipal wastestream recycling element is further divided into separate strategies for urban municipalities (East Orange, Irvington, Newark, Orange) and the remaining suburban municipalities. The commercial wastestream recycling element is concentrated on large and moderate volume commercial waste generators.

Overall, the County has adopted two waste reduction goals which are to be achieved through recycling. The first, waste reduction of 15% by weight, is targeted for 1987. This goal applies to municipal and commercial wastestreams and is particularly important as it has been incorporated in the sizing of the Energy Recovery Facility (ERF). The second goal, 25% reduction by weight, applies to municipal wastestreams and is targeted for 1988.

Municipal Recycling – Suburban
Recycling programs are to be developed around three materials in addition to leaves. Municipalities have the option of designating which three materials are to be recycled, including newsprint, glass, metals and plastics. All municipalities must source separate leaves for composting.

Regularly-scheduled residential curbside pick-up is the collection strategy of choice for suburban recycling programs. These collections shall occur not less than twice a month and be available to residences of four or fewer families. Additionally, all suburban municipalities must have multi-material drop-off centers open to the public also not less than twice per month, preferably on weeks alternate to curbside collections if curbside is provided only twice per month. Municipalities are encouraged to support all existing and future volunteer-operated recycling programs. At a minimum, municipalities are required to publicize all drop-off opportunities whenever publicizing curbside programs.

Municipal drop-off centers should be designed to accommodate the storage of used appliances. A number of municipalities currently recycle these “white goods,” deriving considerable benefit in separate mixed waste collection. These items, as well as others typically classified as bulky wastes, will not be accepted for disposal at the ERF. As a practical matter, separate collection will be essential. A number of scrap dealers currently purchase white goods (see Market List).

All municipalities are required to establish office paper recycling programs in order to recover the paper produced by the municipal government. It is recommended that cooperative arrangement be established with local businesses to create programs which are large enough to warrant frequent collection by paper buyers.

Municipal Recycling – Urban

Urban municipalities are also required to recycle three designated materials, of their choice, plus leaves.

Urban municipalities (East Orange, Irvington, Newark and Orange) have the choice of establishing curbside multi-material collection as previously described or of establishing buy-back centers. They may also chose to vary the approach depending on the neighborhood. Research has generally shown that the mix of housing types and neighborhood characteristics play a primary role in determining which approach is preferred.

In those neighborhoods or wards with predominately one to four family houses, curbside collection is generally preferred. In neighborhoods with greater housing densities, particularly those with high-rise apartments buildings the buy-back center collection approach is generally preferred. Experience in major urban centers in the U.S. indicates the buy-back center is a viable approach for innercity neighborhoods. County staff will be available to advise which approaches are most suitable for each area, but each municipal government must adopt a program in which all areas of the city will be covered by either buy-back centers or multi-material curbside collection.

The white goods and office paper recycling program requirements for suburban municipalities applies equally to urban municipalities who can avail themselves of the unique opportunity offered by the concentration of available paper in a relatively small area. This economy of scale will improve service from the paper buyers as well as the rice received from the Paper. Cities are encouraged to develop cooperative programs with businesses or to otherwise encourage and assist in the establishment of office paper recycling programs by businesses.

County Recycling Center
The County will provide intermediate processing services for source separated but, commingled recyclables collected through municipal curbside recycling programs. As described in the Integration Report (Essex County, 1983), the County has recognize the value of providing a facility and/or service whereby mixed recyclable materials can be received, processed, stored and sold in large consistent quantities consuming industries. The primary benefits of such facilities are twofold. First, it reduces directly the number of material separations required of a resident to participate in the program. This added convenience has the potential (and to some extent demonstrated effect of increasing participation, and hence, waste reduction. The second advantage is the aggregation of materials from a number of municipal sources, which provides the opportunity to receive the highest possible prices for the materials. With the upgrading provided by mechanical processing, this facility can guarantee a consistent supply and quality of materials.

Description and Function

The Recycling Center proposed by the County is intended to accept and process the following materials: glass food and beverage containers, metal food and beverage containers, newspaper, corrugated cardboard and possibly mixed plastic containers. These materials will be commingled and set out in one or two categories by the residential and small-volume commercial waste generators for collection.

At the Recycling Center, the materials will be sorted (through a combination of manual and mechanical methods) into basic categories: glass (by color into clear, green, brown), steel cans, aluminum cans, paper (by grade to newspaper, corrugated, mixed) and mixed plastic. The glass will be crushed and contaminants removed; steel and aluminum cans will be flattened and shipped, baled or bulk, to another facility for further processing.

It is anticipated that paper will be handled by scrap dealers working in partnership with the Center operator. The paper will be accepted at either the Center or the dealers’ existing facilities. Alternately, paper will be accepted at the Center and be upgraded and baled for subsequent shipment.

Only a few companies currently have experience in building and operating Recycling Centers of this type. The County is negotiating with two domestic and three West German companies who provide these services. Although the range of operating experience varies among these companies, the systems offered by all appear to be similar in overall function and design. The County has determined that while equipment for these Centers is available from a number of sources, there appear to be numerous advantages to using a single operator who will employ an integrated system of proprietary equipment. This arrangement allows for a full service contract in which equipment and operating guarantees are provided by a single contractor, similar to the arrangement entered into by the County for the energy recovery facility.

Service Area

The service area for the Recycling Center is essentially the 22 municipalities of the County. Most, if not all, of the suburban municipalities are expected to use the facility for processing and marketing glass and cans. Their use of the Center for processing and marketing of paper will depend upon the final decision on the Centers role in processing paper as well as the length and desirability of renewing current contracts between municipalities and markets.

Urban municipalities are expected to use the Center in conjunction with curbside collection and buy-back centers. It is not considered likely that the buy-back centers would utilize the Recycling Center for material processing. This function is oftentimes best performed on-site at the buy-back centers. It is possible that the buy-back centers will find it advantageous to market their processed material through the Recycling Center. It
is also possible that high-rise apartment building recycling programs will use the Center for processing and marketing of mixed recyclables.

Site

While a portion of the Blanchard Street site for the ERF has been designated for the Recycling Center, the County is now reexamining the adequacy of the site in light of some changes anticipated in the size and nature of the recycling center project. It now appears that the capacity of the Recycling Center will need to be greater than originally anticipated due to increased reliance of urban municipalities on curbside collection. Also, there are increasing possibilities for including plastic containers in the stream of commingled food and beverage containers. This would entail both a larger Recycling Center, as well as a separate facility, probably on the same site, to process the plastics from the Recycling Center. All of the foregoing would indicate that the 1 ½ to 2 acre portion of the Blanchard Street site would be too small.

The County is therefore examining the potential availability of other sites in the County which might be appropriate for the project. The site search is being conducted with assistance from the Economic Development Corporation of Essex County, the City of Newark and consultants. The search is focused on finding a site of 6-10 acres in an industrial area with adequate road access.

A number of appropriate sites have been identified and are now being evaluated.

Procurement Process

The County has investigated the various procurement processes available to acquire the Recycling Center and associated operation services. It has been determined that procurement through the process available under P.L. 1985 c. 38 for resource recovery facilities is not applicable to Recycling Centers. Therefore, in the absence of a technical change in the law or a legal opinion from NJDEP to the contrary, it is unlikely that the County will use this procurement method.

The County is currently considering developing the Recycling Center in a “partnership” with either the Essex County Economic Development Corporation or the Essex County Improvement Authority. Such a partnership would provide the County with a benefit in procurement of the Center and/or financing.

The County is currently examining the requirements for procurement under the Local Public Contract Laws. This would essentially involve competitive bidding based on specifications produced and advertised by the County, with award of the contract going to the lowest responsible bidder. While this process is much less desirable than the “McEnroe process”, it is an approach available immediately to the County and may require substantially less time to implement.

Commercial Recycling

Generators of commercial, institutional, and industrial waste are required to either establish source separation programs for the designated recyclable materials or enter into arrangements with haulers for the removal of these materials at Material Recovery Facilities (transfer stations with recycling). The materials designated for recycling from commercial wastestreams are: corrugated cardboard, high grade office paper, newspaper, glass and metal food beverage containers.

During Facility operation, haulers will receive notification if periodic inspection of waste loads indicates inadequate removal of recyclables. The same hauler may then be subject to selected repeat wasteload inspections to closely monitor compliance. Upon a second failed inspection, haulers will be notified and be
required to achieve compliance within 60 days. After 60 days continued non-compliance will subject haulers to fines, tipping fee penalties, and possible revocation of facility access registration.

Haulers will be notified by the County of non-compliance with the District Plan if requirements contained herein are not met on schedule. Facility access registration will not be granted until compliance is achieved. Access to interim disposal facilities may be limited as a penalty for non-compliance. Enforcement may also be pursued by NJDEP under P.L. 1976 c. 326.

Recycling of Acceptable Waste

The County and each municipality shall not permit recycling of materials (whether municipal or commercial) which are Acceptable Waste which has been directed by the County to the Energy Recovery Facility if the anticipated use of such recycled materials is for the incineration or the production of energy.

Oil Recycling: To the extent that regulations allow, all municipalities should provide a collection point for used oil generated by residents. Alternatively, the municipality must develop a plan to identify all used oil collection centers already available in town (service stations) and to promote the use of such centers by the public. Details on State statutes that govern used oil collection centers are available from the County.

Additionally, all used oil generated by the municipality should be recovered and recycled by a waste oil dealer that has been licensed and approved by the State.

Mandatory Separation Ordinances: By the second quarter of 1987, municipalities shall have enacted ordinances requiring the separation of recyclables from waste and where curbside collection is being utilized, prohibiting anyone other than the municipalities’ designated collectors from taking recyclables set out for the municipally scheduled collection.

Mandatory separation ordinances and anti-scavenger ordinances should be enforced by the municipality through a system of inspections, notices and fines. Inspections at the curbside should be routine and fines substantial enough to deter non-compliance.

Municipal Contract Designation: By the second quarter of 1987 municipalities shall have designated a staff member and an alternate who shall serve as a primary liaison to the County and State for the development and operation of the municipal recycling program. It is recommended that either the designee or the alternate be the Municipal Manager of Administrator.

Promotion and Education: By the second quarter of 1987, municipalities shall submit to the County a description and schedule for a program of publicity and education for all persons affected by the recycling program. A publicity and education campaign should precede the initiation of a recycling program and continue for the duration. The goal should be to achieve a maximum level of participation through education and public information.

A publicity and education campaign should include, but not be limited to:

- an annual direct mailing to all residences describing local or regional recycling opportunities.
- provision of a local telephone number and contact person for inquiries from residents or businesses.
- quarterly advertisements of recycling opportunities in a local newspaper.
Regular press releases are also encouraged. These should include updates on the program, general, recycling information, and prompts to residents to participate. Also, municipalities are encouraged to include mention of recycling whenever notices regarding waste collection are published.

**Reporting:** Beginning in the second quarter of 1987 and continuing each year during the term of facility operation, the municipality shall transmit to the Essex County Division of Solid Waste Management annual reports on the tonnage of recyclable materials collected by municipal, private and volunteer programs and delivered to the market in the preceding calendar year. For those years in which the State Office of Recycling administers the Recycling Tonnage Grant Program, a summary of the municipal application will suffice. Thereafter, municipalities must continue to submit summaries in the same fashion.
<table>
<thead>
<tr>
<th>Objectives</th>
<th>1984</th>
<th>1988</th>
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<tbody>
<tr>
<td>Municipality designates recycling Coordinator</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>County solicits proposals and enters into contracts/agreements for recycling services (intermediate processing and material marketing).</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Municipalities establish collection programs for leaves and three other recyclable materials.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Municipalities pass or amend ordinances to require recycling of materials for which marketing agreements exist.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Municipalities establish separate collection program for leaves.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>All leaves collected by municipalities are directed to compost facilities</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Municipalities institute office paper recycling in main offices.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Municipalities submit to County a program description and schedule for recycling program education and publicity.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Municipalities submit annual report of recycled materials.</td>
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<td></td>
</tr>
<tr>
<td>Commercial waste haulers notify County whether their account will see Recycling Center or will source separate recyclables.</td>
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<td></td>
</tr>
<tr>
<td>Recycling Center Development</td>
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<td>X</td>
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<tr>
<td>Complete Facility procurement</td>
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<tr>
<td>Begin Construction</td>
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<tr>
<td>Begin Operation</td>
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<td>X</td>
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<tr>
<td>Monitoring and Enforcement of Recycling Policies</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Commercial waste haulers report to County on intent to use Recycling Center of establish source separation programs.</td>
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<td></td>
</tr>
<tr>
<td>Commercial recycling program commence.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Municipalities develop separate collection program for bulky waste (white goods) and submit to County for review</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Municipalities begin collection of white goods.</td>
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<td>X</td>
</tr>
</tbody>
</table>
C. Municipal Leaf Composition

Background

Since the State banned leaf and brush burning in 1972, there are now only two vegetative waste management options available: composting or disposal. Due to limited disposal capacity, the pending State Source Separation Act proposes a ban on the disposal of leaves at landfills. Additionally, leaves will not be accepted for disposal at the County’s Energy Recovery Facility, when operational.

Essex County has a long standing commitment to composting as the preferred disposal option for municipal leaves. This Plan anticipates the adoption of State legislation which will ban leaf disposal at landfills. It further anticipates that “each district recycling plan shall identify the leaf composting facility or facilities to be utilized by each municipality within the county”.

The County will provide technical assistance and coordination in diverting as much vegetative waste as possible from the landfill. It is the County’s objective to maximize the amount of composted material used as soil amendments, landscape dressing and cover material at landfills.

Essex County produces an estimated 700,000 cubic yards of vegetative waste annually from the mature suburban residential communities, extensive park system and urban street areas. A variety of collection practices are used to collect these leaves, including: leaf vacuums, street sweepers, front-end loaders and bagged leave collections. Most methods that involve a separate pickup of leaves are compatible with composting except bagged collection which requires labor intensive efforts to empty the plastic bags at the compost site. Municipalities must develop methods to separate leaves from mixed trash or collection alternatives that will best integrate with municipal composting.

Ten of the 22 Essex County municipalities have DEP-permitted composting operations while several other operate sites without permits. The County also operates two permitted facilities. In nearly all of the ten towns with permits, facilities are inadequately sized and cannot accommodate the leaves generated within the municipality. This is true of most unpermitted sites as well. Therefore, there is substantial need for expanding the scope and number of permitted compost operations in the county.

Composting Experiments

The County, in its commitment to identify practical composting options and techniques, has undertaken two compost demonstration projects. The first, conducted by Rutgers University, on County property, involved a scientific determination of appropriate windrow size to assure the fullest and fastest decomposition of leaves. Three different levels of technology were also tested to determine if the application of “passive” and “forced” aeration resulted in improved decomposition over “static pile” composting. Finally, the experiment measured the impact of, and the potential for, including grass clippings in compost windrows. The results of these tests were published in the “Leaf Composting Manual for New Jersey Municipalities”. Recently, conclusions from that manual were incorporated into the NJDEP’s revised “Compost Permit Requirements”. The County encourages municipalities to use this manual for technical information on appropriate composting methods.

After the experiments with on-site processing of leaves, the County conducted a test using paper bags instead of plastic bags as an alternative container for collecting leaves. The purpose of the experiment was to determine if paper bags were durable enough to hold leaves while at the same time be able to decompose in composting operations. Working in conjunction with the Township of West Caldwell, the County secured 1000 thirty gallon paper bags. The bags were given to residents where the leaves were bagged and then collected by municipal crews. The bagged leaves were taken to the West Caldwell compost site, where they were formed into windrows, and the decomposition rate observed. The results supported the original hypotheses that paper bags would naturally decompose with leaves.
The County documented the test and its results in a Report within was distributed to all Essex County municipalities. These conclusions should prove important to towns as a collection option where leaves are normally bagged in plastic. The continued use of plastic bags is inconsistent with compost project unless a town is willing to invest the required resources to empty and remove the plastic bags.

Composting Options

The County’s approach is to identify a regional site that could be shared by one or more municipalities and operated by either the towns, the County or a private entrepreneur. Siting studies have been conducted and municipalities have been asked to suggest sites (public or private) for further study. Composting options are described below.

Backyard Composting

Backyard composting is the only option which directly involves waste reduction at the source. For this reason it is appropriate to aggressively promote it. Furthermore, as it is not complicated, expensive or time-consuming, simple “How To” flyers and brochures will be made available to residents. It holds, however, only limited promise to reduce Essex County’s overall need to dispose of leaves.

In the more urbanized areas, yards are very small and close together. It is unrealistic to expect homeowners to give up even a small piece of property for composting. Additionally, potential objections by neighbors might further discourage it. At the same time, many suburban West Essex homeowners with large yards contract for landscaping services and would not realistically be inclined to maintain a composting pile or pay to have it maintained. Even if backyard composting became very popular wherever practical, it would not be adequate for Essex County’s need.

Municipal Composting Facilities

Municipal sites offer important advantages in terms of minimal transportation costs for municipalities and easy access for local residents to deliver vegetative material and pick up the finished product. Municipal sites need not be limited to operations on municipal property. Municipalities may explore the use of nonpublic land within their boundaries. For example, Public Services Electric and Gas Company will consider proposals to utilize parts of their extensive right of way. Undeveloped private property might also be made available by a property owner in exchange for a tax reduction. Local options are best explored by each municipality given their familiarity with local property uses.

Cooperative Composting Facilities

Several existing municipal compost facilities have excess capacity in these cases, a potential exists for the host municipality to share its site capacity in exchange for operational assistance from the exporting town or for other considerations. Also, certain existing sites, if managed more effectively, would have more capacity. A combination or exchange of available municipal resources would provide the means for better management to the benefit of all involved.

The County will identify those sites with excess capacity and those which can be operated more efficiently in order to assist in coordinating efforts.

One potential problem exists related to this option. Some of the sites are operated as leaf dumps rather than effective leaf composting facilities. Development of these facilities as cooperative multi-municipal sites would
not be encouraged without an improvement in operating methods in order to produce effective leaf decomposition. In these cases it may be important to emphasize more technologically-advanced or otherwise more intensive operations that allow for greater volumes to be processed in a given area.

Regional/County Composting Facilities

Due to the inability of many municipalities to find adequate local compost sites, the County has been exploring the benefits of a regional facility to accept and process leaves from more than one local source. Such an operation could be run on a large scale providing benefits similar to or in addition to cooperative municipal programs. The difficulty has been in identifying sites. Potentially, the County could expand operations of its own permitted composting facilities, reopen formerly permitted facilities that have gone unused for some time or site a new facility. In addition to the limitations of open land, the drawbacks for this option, are that the costs to acquire land and operate the site(s) will have to be paid with county and/or municipal funds. Road access to existing county sites would need to be improved and transportation costs might be high for certain municipalities. Finally, this option would not be expected to accommodate all of the towns without current sites unless site management practices were of higher technology where leaves would be processed faster and in less space.

Compost Facilities at Landfills

A composting operation adjacent to an existing or closed landfill is a particularly attractive option for reasons including that: a vast amount of usable property is available; a ready outlet for the product as cover material is available; truck transportation routes are already established; the land use would be permanent.

The fact that the final compost product can substitute for cover material, makes the economics of such an operation more attractive. Capital costs would potentially be minimal since the necessary equipment might already be available at a landfill.

This option would require approval and cooperation from the Hackensack Meadowlands Development Commission (HMDC) and also require relatively sophisticated program management. The operation would preferably belong to the HMDC but would be paid for through compost tipping fees. Alternatively, the HMDC could provide property to the County, a group of cooperating municipalities or to a private party. The County will continue to explore this option.

Privately Operated Facilities Outside the County

In the absence of sufficient in-County facilities, there are privately operated compost facilities in other New Jersey Counties. These companies accept vegetative wastes for a fee and are responsible for processing and marketing the material. Obviously, these facilities will involve greater travel time and distance than local solutions. Secondly, operators are unlikely to make the end product available free of charge to the public works crew or general public as many municipalities currently do.

High Technology

There are numerous high technology composting methods that decompose vegetative material at accelerated rates. These technologies allow for larger amounts of material to be composted on smaller sites. Since higher technologies usually involve high capital costs and increased supervision, it is important to develop an appropriate efficiency of scale by combining the resources and wastes of many communities.

Selection Options
The composting needs of the County will be addressed and satisfied according to the following measures:

1. Conduct, in cooperation with municipalities, a comprehensive campaign to increase the practice of waste reduction through backyard composting.
<table>
<thead>
<tr>
<th>Objectives</th>
<th>1987</th>
<th>1988</th>
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<tbody>
<tr>
<td>County established policy for use as mulch on public property</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>County determine available excess capacity at existing permitted municipal sites</td>
<td>X</td>
<td></td>
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<tr>
<td>Municipalities identify compost sites which can accommodate their leaf concentration</td>
<td>X</td>
<td></td>
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<tr>
<td>Municipalities without a site demonstrate that no suitable site is available within municipal boundaries and that they are unable to negotiate an agreement to use an existing facility</td>
<td>X</td>
<td></td>
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<tr>
<td>Municipalities provide records of leaf generation, volume collected, volume composted and volume reducted. Also provide handling and disposal costs.</td>
<td>X</td>
<td></td>
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<tr>
<td>County encourages private sector development of composting operations</td>
<td>X</td>
<td></td>
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<tr>
<td>County seeks determination from HMDC on use of site at landfill</td>
<td>X</td>
<td></td>
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<tr>
<td>County identifies regional composting sites</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>County determines ultimate composting sites for all municipalities. Waste flow assignments are made</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Site improvements and/or equipment purchases made</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Municipalities and County promote backyard composting</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>County identifies markets for finished compost product, raw leaves and woodchips</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>County researches advanced composting technologies</td>
<td>X</td>
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</table>
2. Since paper bags can go directly into a composting operation, encourage the use of paper bags as a substitute for plastic in leaf collection. This option will involve working with the DEP to modify current permit requirements.

3. Conduct a comprehensive survey of municipal leaf generation, collection and disposal/composting methods.

4. Conduct research on high-technology composting options.

5. Provide technical assistance in preparation of municipal permit applications and site operation.

6. Explore the potential to expand existing permitted site capacities through the introduction of high technology composting methods.

7. Encourage and coordinate interlocal agreements to share site capacity in exchange for labor, equipment or other mutually agreeable considerations as well as encourage sharing and cooperative purchase of equipment to process compost material. Furthermore, the County will explore the potential to share County equipment.

8. Explore the establishment of a regional composting site on County or private property.

9. Encourage and help facilitate private sector interest in providing compost services.

10. Explore the establishment of a compost operation in the Hackensack Meadowlands.

D. Waste Reduction and Marketing Strategies

The purpose of the County government establishing internal policies for County employees, regarding Recycling, Waste Reduction and Procurement are threefold. Through these policies the County has been able to reduce the volume of its waste while directly contributing to strengthening the demand and price for products made from recycled materials. By implementing such policies, the County takes the lead in meeting its responsibilities and serves as a model for municipalities.

The Policies are categorized into four sections including:

1. Avoid/discontinue purchasing policies and practices which either work against recycling, decrease the effectiveness of the office paper recycling program or otherwise contribute to the generation of more solid waste.

2. Require purchase of items which are more recyclable.

3. Create preferences for purchase of products made from recycled raw materials.

4. Require other purchasing and administrative practices which contribute to greater recycling and/or reduce generation of solid waste.

In order to achieve these objectives, an Internal Recycling Committee has been established, primarily responsible for planning and implementing these policies. In order to effectuate such practices, the Internal Recycling Committee has established a preference for competitive-priced recycled products. Essentially, this means that a recycled-product may cost up to 10% above the cost for products made from virgin materials in order to compete in the low bid process.
The procurement practices, in particular, serve as a market development strategy. Governments which encourage the collection of recyclable materials have a responsibility to consume recycling products. This practice improves the demand for recycled raw materials and consequently has a positive impact on the price structure for that commodity. The goal is to purchase as much of the County’s paper as possible made from recycled fiber. The policies not only include paper products but extends to other products, including: plastic trash bags; retreaded tires; recycled asphalt and crumb rubber and; all janitorial products.

All other agencies, public or private, are encouraged to use recycled products especially if recyclables are collected.

E. Publicity and Education

It has always been the intent of the Division of Solid Waste Management to pursue an integrated approach to energy recovery and recycling. This integrated approach has carried over into the field of public information such that program implementation relies heavily on a comprehensive publicity and education program.

The County’s approach to public information has three components: to educate, inform and motivate.

**EDUCATION** involves letting the public know about energy recovery and recycling.

**INFORMATION** tells the public what the County is doing in both areas.

**MOTIVATION** is a combination of education and information which helps people translate their favorable attitude into an actual behavior. The key to motivating the public is to create a sense of urgency (vis-à-vis the solid waste management crisis) and then provide them with a convenient means of relieving that anxiety by participating in a recycling program or supporting energy recovery.

The efforts to educate the public focus on the State’s recycling and solid waste curriculum, press releases, meetings, feature articles, the Essex Recycler (the Division of Solid Waste Management’s newsletter), town-specific newsletters and flyers and the use of audio/visual material like the Essex County “Recycling Revolution” videotape and slide shows.

Informing the public needs to be locally based, as each municipality provides a different recycling program for its residents. Technical assistance is provided to both municipal and volunteer/civic groups upon request.

Energy Recovery

The primary goal regarding energy recovery is to improve and maintain public acceptance of the energy recovery facility. Public forums are one way to attain favorable public opinion of the County’s plans for handling solid waste. The Solid Waste Advisory Council (SWAC), which meets regularly was formed to give community leaders, municipal officials, private industry representatives and individual citizens access to the plans and activities of the Division of Solid Waste Management and to provide members of the SWAC the opportunity to discuss and vote on certain actions to be undertaken by the County.

SWAC members and Division staff serve on both ad-hoc and standing subcommittees, specifically the Recycling Technical Advisory Committee (RTAC) and the Resource Recovery Technical Advisory Committee (RRTAC).

The past services of the consulting firms of Konheim and Ketcham and Gershmann, Brickner and Bratton have assisted in increasing the credibility of the County’s solid waste management plans. To maximize citizen
participation, surveys and interviews were conducted in Newark, the Host Municipality, and focused heavily on the Ironbound section, which is one-quarter of a mile from the proposed site of the Energy Recovery Facility (ERF). Over 60 local community leaders were also interviewed in order to identify the attitudes of these opinion leaders toward the garbage problem, recycling and the proposed ERF.

From these interviews, concerns were identified and addressed in both the County's Environmental Impact Statement (EIS) and in a special bilingual tabloid called the Energy Recovery Report. These papers were distributed at, luncheonettes, bakeries, liquor stores and retail stores. A slide show was also presented to various organizations detailing the garbage crisis. Konheim and Ketcham conducted extensive reviews of the EIS in order to augment the material which addressed public concerns. A new tabloid, Essex County Energy Report, was distributed in a similar fashion to the previous edition, except it focused more specifically on the concerns identified in the surveys.

The following objectives are to be undertaken by the County in order to meet its goal of improving and maintaining public acceptance of the energy recovery facility:

1. The production and distribution of a videotape on the facility to be used for civic and municipal groups and as a file tape for all television stations.

2. The production and distribution of a quarterly Division of Solid Waste Management newsletter which will focus on energy recovery issues.

3. Issuance of feature articles and press releases which focus on the positive benefits to the host community specifically, and the County generally, and siting and operating an Energy Recovery Facility.

4. Creation of radio and television interview situations for County experts to discuss energy recovery and recycling in a positive way.

Recycling

By devising and implementing a rigorous promotion and education campaign, the County’s goal is to maximize public knowledge and consciousness of solid waste management issues and increase public participation in source separation and recycling programs.

The following activities have been undertaken and will be continued in order to accomplish the aforementioned goals:

1. Publication and distribution of a quarterly newsletter on recycling (the Essex Recycler).

2. Implementation of the State’s solid waste and recycling curriculum “Here Today, Here Tomorrow”.

3. Coordination of seminars, workshops, conferences and meetings with municipal, civic and volunteer recycling liaisons.

4. Provision of services to the individual communities including:
   a. public speaking engagements.
   b. technical assistance in planning a publicity and education program.
5. Maintaining media contact through regular press releases, frequent feature articles to all county newspapers and public service announcements to radio and cable television stations.

6. Writing and distributing written promotional material.
   a. Brochures
   b. Essex County Householders Recycling Guide
   c. Flyers
   d. Newsletters

7. Development and distribution of audio/visual material.
   a. “Essex County Recycles” slide show
   b. “Essex County Recycling Revolution” videotape
   c. Audio/visual library of materials produced by other recycling programs throughout the United States and Canada
   d. Annotated bibliography of all promotional material

The county will focus on developing a more broad-based support group in each municipality which will include opinion leaders from business, school, church, civic and fraternal organizations and the municipal government, itself. The key will be on networking as much as possible while augmenting these efforts with written promotional materials.
1(b) DEPE Certification
October 27, 1987
A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Boards of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department approved, with modifications, the Essex County District Solid Waste Management Plan.

The Act requires that all districts plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for the ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district’s waste for the ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements).

The Act further provides that a district may review its plan at any time and if found inadequate, a new plan must be adopted. The Essex county Board of Chosen Freeholders completed such a review and on April 29, 1987 adopted an amendment to its approved district solid waste management plan.

The amendment represents a multifaceted update to the Essex County District Solid Waste Management Plan and contains the following: 1.) a glossary of terms used within the plan amendment and various resource recovery facility and ash residue contracts; 2.) an updated data base of solid waste generation, collection and disposal practices and costs and recycling rates and totals; 3.) an updated solid waste facility status report which also proposed to include in the approved plan a series of new facilities including six (6) hospital incinerators and one (1) animal shelter incinerator; 4.) a proposal to include in the approved plan a siting policy on composting and vegetative waste facilities; 5.) a proposal to include in the approved plan a mandatory district recycling plan; 6.) the district interim/short term contingency disposal plan7.) the district long term solid waste disposal strategy which further contains: 7.a.] an administration and enforcement strategy which includes: 7.a.1.] a policy for requiring disposal vehicle registration: 7.a.2.] an identification of specific routes for trucks using the resource
recovery facility: 7.a.3.] a waste flow control strategy: 7.a.4.] a policy governing the acceptance of waste generated outside of Essex County at the resource recovery facility: 7.a.5.] a policy for the exclusion of hazardous waste and certain type 27 wastes at the resource recovery facility: 7.a.6.] a policy requiring trucks using the resource recovery facility to be equipped with exhaust silencers: 7.b.] a strategy for the management of process residue from the recourse recovery facility; 8.) a waste flow policy addressing the county’s control over flow to designated disposal facilities; and 9.) the county’s proposal for the use of its resource recovery investment tax fund and its disbursement schedule.

The complete amendment submission was received by the Department of Environmental Protection on June 23, 1987, and copies were distributed to various state level agencies for review and comment, as required by law. The Department has reviewed this amendment and has determined that the amendment adopted by the Essex County Board of Chosen Freeholders on April 29, 1987 is approved, as modified, as provided in N.J.S.A. 13:1E-24.

B. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I, Richard T. Dewling, Commissioner of the Department of Environmental Protection have studied and reviewed the April 29, 1987 amendment to the Essex County District Solid Waste Management Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that this plan amendment, as modified, is consistent with the Statewide Solid Waste Management Plan.

In addition, the Division of Solid Waste Management circulated the plan amendment to sixteen review agencies and solicited their review and recommendations. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various agencies, bureaus, and divisions within the Department of Environmental Protection as well as the Board of Public Utilities. Also among these agencies were the Department of Community Affairs, the Department of the Public Advocate, the Department of Health, the Office of Recycling, the Department of Agriculture, the Department of Transportation, and the New Jersey Turnpike Authority. Of these agencies, the following did not object to the proposed plan amendment: the N.J.D.E.P. Divisions of Environmental Quality, Waste Resources, Fish, Game and Wildlife, Parks and Forestry, and Coastal Resources; the State Departments of Agriculture, Health and Transportation; the Board of Public Utilities and the New Jersey Advisory council on Solid Waste Management. The following agencies failed to respond to our requests for comments: the New Jersey Turnpike Authority, the Department of the Public Advocate, and the U.S. Environmental Protection Agency. The Green Acres Program, the Office of Recycling, the Department of Community Affairs and the Division of Solid Waste Management submitted substantive comments which are further addressed below.

The Green Acres Program commented that they cannot effectively review the plan amendment for consistency with programmatic objectives due to insufficient information. Of critical importance are block and lot designations (which were not supplied) for each of Essex County’s existing solid waste facilities, as well as individual street map locations. The Green Acres Program further commented on the proposed compost facility siting policy and its effect on unregistered compost facilities. The Green Acres Program recommends that the plan amendment not be approved and also advises that several currently operating compost facilities may already be in violation of Green Acres rules and regulations.

The Division of Solid Waste Management responds by agreeing that the solid waste facility status report as submitted is incomplete in certain aspects and the county is being requested to rectify the deficiencies. However, as identified in Section C. 3. of this certification, the vast number of solid waste
facilities noted within the plan amendment were previously incorporated within the Essex County Plan through historical plan certifications. In addition, in some cases where facilities were not previously incorporated within the Essex County Plan through historical plan certifications. In addition, in some cases where facilities were not previously incorporated into the plan as requested by N.J.S.A. 13:1E-4(b), they possess valid operating permits and, therefore, have gone through a state level review process. This plan inclusion and permit status was not adequately reflected in the plan amendment which led, in large part, to the concern expressed by the Green Acres program.

For those facilities which were historically included in the Essex County Plan, and for which operating permits were issued, the Green Acres Program position is not applicable. In cases where facilities were not historically included in the plan, but possess valid operating permits, plan inclusion approval is required by statute. For the newly proposed hospital/animal shelter incinerators, block and lot information is not critical at the planning stage inasmuch as these incinerators are located on established hospital/animal shelter grounds. However, in the case of compost facilities, three noted facilities have not been historically included in the plan, nor have they obtained operating permits. In that case, the Green Acres Program has a valid concern and Section C.3. required the county to submit full block and lot and map identification information as part of a subsequent plan amendment for state level review or to follow the newly adopted district compost policy for plan inclusion. As part of this compost policy, the full plan amendments process may not be needed. However, even under the compost siting policy, the applicants must still obtain facility permits and will be subject to the state level review process that is part of the technical phase of the Division of Solid Waste Management permit process.

In addition, the Division does not concur with the Green Acres position on the proposed compost siting policy. Said policy, as modified by the Department, does not alter the state level review component of the technical phase of the permit process. Therefore, the Green Acres Program will still be afforded an opportunity for substantive input for all new compost facilities. The proposed policy also does not legitimize unregistered compost operations which, if identified, may be subject to enforcement action and, for the purpose of the policy would, as a minimum, be treated as new facilities subject to the permit process.

The Office of Recycling commented extensively on the mandatory recycling plan contained in the plan amendment by stating:

1. The position of county recycling coordinator is not clearly designated as required in P.L. 1987, c. 102, section 3.b.

2. The amendment designates materials from the residential and commercial sectors, P.L. 1987, c. 102 requires the mandating of materials from the residential, commercial, and institutional sectors. Therefore, the designation of materials is deficient with respect to P.L. 1987, c. 102 in not addressing the institutional sector.

3. Municipalities are given “the option of designating which three materials are to be recycled, including newspaper, glass, metals and plastic”. This is contrary to P.L. 1987, c. 102 section 3.b.(2) which states that the district recycling plan shall designate the recyclable materials to be source separated in each municipality.

4. The amendment mentions that all municipalities are required to recycle white goods and office paper. It is unclear if these items are designated recyclables contributing to the 25% MSW reduction goal or are in addition to that goal. A municipality must provide for collection services for the pick-up of white
goods in order to classify them as one of their designated recyclable materials, contributing to the 25% MSW reduction mandate.

5. The amendment discusses the county’s plans to provide “intermediate processing services for source separated but, commingled recyclables collected through municipal curbside recycling programs”. The county intends to accept and process the following materials at the recycling center: “glass food and beverage containers, newspaper, corrugated cardboard and possibly mixed plastic containers”. The above satisfies the strategy requirements of section 3.b.(3) of P.L. 1987, c. 102, but again, the Office of Recycling seeks clarification of the intent of the county regarding the above as “designated recyclable materials”.

According to the Recycling Implementation Schedule on page 74, the recycling center is to begin operation by the 4th quarter of 1987. The Office of Recycling would like a copy of any contracts or bid specifications associated with the county’s plans for the development of this facility.

6. The inclusion of corrugated cardboard, high grade office paper, newspaper, glass and metal as designated recyclable materials in the commercial waste stream is acceptable. However, the county must note that the responsibility for the collection of designated recyclable materials belongs to each municipality, unless otherwise provided by the generator as per P.L. 1987, c. 102, section 3.b.

7. Recovery targets or “waste reduction goals” are outlined on page 68. A 15% waste reduction is targeted for 1987 and 25% for 1988. Documentation (weighing and/or composition studies, etc.) providing the basis for the determination of these recovery rates and schedules is necessary to be included in order for the Office of Recycling to determine if the goals can reasonably be expected to be met by the recycling of the materials designated.

8. This amendment indicates that each municipality must provide collection serviced for the pick up of designated recyclable materials in the residential sector. This meets the requirements of P.L. 1987, c. 102.

However, as per the conditions incorporated into the Certificates of Approved Registrations and Engineering Design Approval, issued to the American Ref-Fuel Company on 12/10/85, section 18.b.i., a curbside collection program will be coordinated between the county and the Occupational Training Center of Essex County. What is the status of this program and what plans are these for its continuation and/or expansion? The Office of Recycling would like to see proof of contracts or negotiations indicating the provision of such services within each municipality participating. If this program does exist and the county plans to expand such services, then a regional plan for providing such services must be included.

9. Language setting forth the manner in which the recycling plan may be amended or modified, if circumstances warrant such modification, were not included in this amendment as allowed in section 3.d. of P.L. 1987, c. 102.

This is an essential component to all district recycling plans. If not included in the present plan, then future modifications will require the formal solid waste management plan amendment process.

10. Enforcement of the recycling mandate involves municipal action mandating source separation ordinances and anti-scavenger ordinances. According to the amendment, these ordinances were to be enacted by the second quarter of 1987. The Office of Recycling requests one copy of each municipal ordinance.
In addition, the Office of Recycling requests a narrative description of how the county will enforce the implementation of the district recycling plan.

11. Contrary to the county’s plan, P.L. 1987, c. 102, section 6.a., indicates that designated recyclables collection services are the direct responsibility of each municipality. Only one exception to this exists and this should be outlined in the plan. As per P.L. 1987, c. 102, section 6.d., each county plan shall indicate the manner by which municipalities may exempt person or businesses from the source separation requirements.

12. As per P.L. 1987, c. 102 section 3.c., priority consideration for recycling businesses must be given to businesses already engaged in recycling as of January 1, 1986. Businesses meeting the requirements for priority considerations must be listed in the plan.

13. The amendment indicates that “ten of the twenty Essex County municipalities have DEP-permitted composting operations while several others operate site without a permit…in addition the county operate two permitted facilities”. As per P.L. 1987, c. 102, section 13, each district recycling plan is to identify the leaf composting facility or facilities to be utilized by each municipality within the county. The plan is deficient with respect to this requirement.

14. The determination of the recovery targets is not discussed in quantitative terms, as required in section 3.(b)(4) of P.L. 1987, c. 102. The recovery targets for each county shall be determined by calculating the sum of the municipal solid waste stream disposed of as solid waste, as measured in tons, plus the total number of tons of recyclable materials recycled.

\[
\text{Materials Recycled} = \frac{\text{Recycled}}{\text{Total MSW}}
\]

15. Municipal publicity and education requirements outlined on page 73 of the plan satisfy the requirements of P.L. 1987, c. 102.

As a final note, the Office of Recycling requires the inclusion of the entire approved Administration and Enforcement Strategy (see American Ref-Fuel permit requirements 18.b.ii.) within the recycling plan.

The Division of Solid Waste Management responds that Essex County developed the recycling plan contained in the plan amendment prior to the enactment of the New Jersey Statewide Mandatory Source Separation and Recycling Act. As a result, gaps may exist between the requirements of P.L. 1987, c. 102 and the specifics of the Essex County recycling plan. Essex County is being furnished, by way of this plan certification, with the comments of the Office of Recycling and is directed to modify the recycling plan to conform to the requirements of P.L. 1987, c. 102.

The Department of Community Affairs commented that, given the lack of detailed financial specificity in the proposed amendment concerning the District Resource Recovery Investment Tax Fund, the Division of Local Government Services must necessarily defer substantive comment at this time.

The Division of Solid Waste Management responds by stating the Division shares the Department of Community Affairs’ concerns with respect to the level of detail of proposed uses of and disbursement
schedules for the Essex County District Resource Recovery Investment Tax Fund. The Division itself has commented extensively in these regards as is discussed below.

The Division of Solid Waste Management comments that it is satisfied that the proposed use for capital costs and reserve start-up operating subsidy for a recycling facility is in conformance with the requirements of N.J.S.A. 13:1E-150. Similarly, site improvement and equipment cost subsidy at the district's regional leaf compost facility is also an eligible use pursuant to N.J.S.A. 13:1E-150. The initial disbursement schedule provides a projection of the fund balance through 1990, under various technical assumptions. However, since the disbursement schedule fails to provide an accurate fund balance through December 31, 1986, to identify interest earnings on the fund balance to date, to identify fund recipients, and to identify the specific recycling facility to receive funds, the Department has modified the initial disbursement schedule as set forth in Section C. below. Also, long term proposed uses and disbursement schedules shall be the subject of a future plan amendment submission.

The provisions of the “McEnroe” legislation, N.J.S.A. 13:1E-136 et seq. which establish District Resource Recovery Investment Tax Fund accounts for the state’s 21 counties, set out a clear state policy objective to generate revenues in order to subsidize anticipated resource recovery tipping fees to a level which is competitive with disposal costs at landfills utilized by the counties. The subsidies created by legislation also were designated as incentives to make the transition from landfill disposal to capital intensive resource recovery technologies. Thus, the Act seeks to provide assistance to counties in order to expedite resource recovery technology implementation and to provide user benefits through a reduction in the tipping fees at resource recovery facilities. If a county can demonstrate recovery facility is not feasible for the disposal of solid waste generated in the county, then the District Resource Recovery Investment Tax Fund may be used to design, finance, construct, operate and maintain environmentally sound state-of-the-art sanitary landfill facilities.

Prior to disbursement from its district Resource Recovery Investment Tax Fund, however, a county must prepare a plan amendment which outlines the proposed uses of the moneys in its District Fund and established a disbursement schedule for those moneys in the fund. Two tests must be met: an eligible use test, which uses are limited to those identified in N.J.S.A. 13:1E-150b and a disbursement schedule test, which test criteria are not specifically provided in the Act.

Eligible uses of the fund are provided in Attachment 1, Part I, of this certification. In consideration of the intent and objectives of the Act outlined above and the specific limitations upon eligible uses of the fund provided in N.J.S.A. 13:1E-150, projects not formally identified in the approved district solid waste management plan shall not be funded with Resource Recovery Investment Tax Fund moneys. Therefore, in order to ensure user rate reduction and facilitate timely project implementation, disbursements from a District Resource Recovery Investment Tax Fund shall be made only to projects formally identified in the approach district solid waste management plan.

Pursuant to law, in order to provide safeguards as to how the investment tax funds are to be spent, a schedule for the disbursement of the moneys must be provided through the plan amendment process established under the New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.). In this way, a formal procedure for quantifying contributions to and withdrawals from the fund is established in order to maintain a running fund balance. Such a procedure may be followed using a variety of specific steps and methods of data presentation. In order to evaluate the adequacy of financial disbursement procedures, the Department has established criteria (see Attachment 1, Part II). Since the disbursement schedule submitted by Essex County failed to provide critical information such as fund balance, fund projection, timing of disbursements, and other critical disbursement information, it does not meet reasonable criteria for adequacy.
This plan amendment outlines proposed interim uses of the District’s Resource Recovery Investment Tax Fund and provides an interim schedule for disbursement of these moneys. Specifically, the proposed amendment provides for disbursement for capital costs and reserve starts up operating funds to subsidize the recycling center to be formally identified in the district plan, and for site improvement and equipment purchase for the District’s regional leaf compost facility. The amendment acknowledges that this proposed interim use of the fund would reduce rates charged to all users of a resource recovery facility. Moneys deposited in the fund subsequent to December 31, 1986 shall be disbursed in an amount, manner and schedule to be determined in a future plan amendment.

The proposed interim uses of moneys from the Essex County District Resource Recovery Investment Tax Fund are in conformance with requirements of N.J.S.A. 13:1E-150 to the extent that they reduce rates charged to all users by a resource recovery facility formally identified in the approved District Solid Waste Management Plan.

The utilization of fund moneys for these interim purposes will reduce the total magnitude of construction and operating costs for these facilities. These savings will be passed through to users of these facilities and thus reduce rates to users of the facilities.

The disbursement schedule is inconsistent with N.J.S.A. 13:1E-150 since it does not provide a reasonable or complete methodology for projecting the fund balance over the life of the fund and in identifying disbursements. The schedule fails to provide an estimate of interest earnings on the fund balance or to identify the timing and recipients of fund disbursements. Interest earned on the fund balance may only be disbursed for the uses approved in this or subsequent certifications. The Department recognizes that the fund balance projection embodies several technical assumptions concerning the quantity of solid waste disposed of in Essex County, and therefore, the actual balance of the fund may vary over time. Similarly, the timing of fund disbursement is dependent upon resource recovery project development.

In addition to the above discussion of the “McEnroe” legislation, the Division of Solid Waste Management comments that the solid waste facility status report must be further updated to reflect newly permitted or permit pending facilities and notes that the county has identified information that is not known and needs to be identified. In addition, the division recommended that the district compost siting policy be modified to include provisions for public input. A further clarification of truck routes from certain communities to the proposed resource recovery facility is also being requested by the Division. Finally, despite addressing contingency planning within the plan update, the Division notes that Essex County has not fully complied with my prior guidance in this regard. On February 23, 1987, I wrote to each freeholder director and county executive in the state to require the formulation of solid waste contingency plans based upon specific guidance contained within an attachment to my letter. Essex County is to be commended for addressing contingency planning within the amendment under consideration herein. However, in order to fully comply with my earlier directive, the county has been directed, within Section C of this certification, to submit a revised contingency plan which addresses and prioritizes short and long term contingency options. In addition, the Department has modified and approved the county’s long-term strategy for the use of out-of-state disposal facilities for the period 1993-1997 as a component of the county’s contingency plan.

**Certification of Essex County District Solid Waste Management Plan Amendment**

I, Richard T. Dewling, Commissioner of the Department of Environmental Protection, in accordance with N.J.S.A. 13:1E-1 et seq. which established specific requirements regarding the contents of the district solid waste management plans, and 13:1E-150 which established uses and disbursement schedule requirements for the Districts’ Resource Recovery Investment Tax Fund moneys, and P.L. 1987 c.102 which established specific requirements regarding the contents of the districts recycling plans, have reviewed the April 29, 1987
amendment to the approved Essex County Solid Waste Management Plan and certify to the Essex County Board of Chosen Freeholders that the April 29, 1957 amendment is approved, as modified, as further specified below.

1. **Glossary of Terms**

   The glossary of terms contained in the plan amendment reflects language found in various contracts for the resource recovery facility and ash residue disposal. The Department recognizes that the proposed glossary is part of the terms of the various contracts governing the operation of the resource recovery facility. The glossary is approved within that context. In addition, a number of terms must be addressed in more detail. Outside that context, the glossary is approved subject to any contrary or inconsistent definitions or requirements established in or pursuant to the statutes or regulations administered by the Department.

   The definition of “Prohibited Waste Types” is modified to reflect the specific materials contained under condition 2 of the Certificate of Approved Registration and Engineering Design Approval for the Essex County Resource Recovery Facility, dated December 10, 1985. The definition of “Pathological Waste” is inconsistent with the existing definition of the New Jersey Department of Health. Because of this inconsistency, the county is directed to clarify its overall intention toward the acceptance of medical waste within a subsequent amendment, focusing upon how the entire medical waste component will be handled for disposal. Finally, a typographical error has been made in the definition of “Buy-Back Center”. These items shall be addressed at a public hearing concerning a subsequent plan amendment submission within forty-five days of the data of this certification.

2. **Data Base**

   The updated data base of solid waste generation data, collection and disposal practices and costs and recycling rates and totals is accepted as preliminary planning data subject to further review.

3. **Solid Waste Facilities Status**

   The solid waste facility status report failed to list all facilities previously incorporated into the approved plan. Also, the facilities status listed facilities not previously identified in the district plan. The facilities status is broken down into six (6) categories:

   a. **Landfills**

      The landfill status section lists landfills that once operated, but are now terminated or are not operating. All landfills listed were previously incorporated within the Essex County Plan through earlier approvals.

   b. **Resource Recovery Facilities**

      The resource recovery status section lists two permitted facilities. The plan amendment correctly lists the CEA Resource Recovery Facility as terminated. The only permitted resource recovery facility is the Essex County Resource Recovery Facility permit number 0714x, to be located on Blanchard Street, in the City of Newark. The Blanchard Street site was incorporated in the plan through an earlier planning approval, which remains unaltered.

   c. **Incinerators**
The incinerator status section lists one hospital incinerator previously approved for inclusion into the approved plan and seven hospital/animal shelter incinerators proposed for inclusion into the district plan. The previously approved incinerator is the East Orange General Hospital Center, East Orange, Essex County. The inclusion of the following hospital/animal shelter incinerators into the district plan is approved.

- The Hospital at Orange Incinerator
  Orange, Essex County
- Beth Israel Hospital Incinerator
  Newark, Essex County
- Bloomfield Animal Shelter Incinerator
  Bloomfield, Essex County
- Columbus Hospital Incinerator
  Newark, Essex County
- Mountainside Hospital Incinerator
  Montclair, Essex County
- New Jersey College of Medicine and Dentistry Incinerator
  Newark, Essex County
- Saint Barnabas Hospital Incinerator
  Livingston, Essex County

d. Chemical P&T – Hazardous Waste Facilities

The county’s plan amendment identifies certain hazardous waste facilities as a part of their solid waste facilities status report. The district solid waste planning process incorporates only non-hazardous solid waste management facilities. As a result, the county’s solid waste facility status report is modified to delete this subsection.

e. Transfer Stations

The transfer station facilities status report lists (6) permitted facilities or facilities previously approved for plan inclusion. Omitted from the status report are four (4) permitted facilities or facilities previously approved for plan inclusion. The omitted transfer stations are:

- Maplewood Township Trash Compactor Transfer Station
  Maplewood Township, Essex County
- Waste Management of New Jersey Transfer Station
  Newark, Essex County
- Solid Waste Transfer and Recycling Transfer Station
  Newark, Essex County
Solid Waste Transfer and Recycling Transfer Station
Orange, Essex County

Of the six listed facilities, two have not been previously identified in the district plan. The two newly identified facilities are: Recycling & Salvage Transfer Station, facility number 0714S; and Newark Disposal Service, facility number 0714V. Inasmuch as these two facilities were issued operating permits in the early stages of the planning process, they are herein approved for plan inclusion pursuant to N.J.S.A. 13:1E-4(a). The remaining eight transfer stations, the four listed in the county plan and the four listed above, remain in the plan without alteration.

f. Compost Facilities

The compost facilities status report lists nineteen (19) operating or terminated compost facilities. Of the nineteen (19) compost facilities listed, four (4) have not been previously listed in the district plan. The four newly identified facilities are: Roseland Compost, facility number 0718A; Bloomfield Compost Facility, no facility permit; Livingston Compost Facility, no facility permit; and Essex Fells Compost Facility, no facility permit. Inasmuch as the Roseland Compost Facility has already been issued an operating permit, and was subject to a state level review as part of the technical phase of the permit process, it is approved for plan inclusion to correct this historical deficiency. However, for each of the three new and unpermitted facilities, Essex County is hereby directed to submit full block and lot and map identification information, in plan amendment form for state level review or to follow the newly adopted district policy regarding composting and vegetative waste facilities contained in Section C. 4. of this certification. In addition, each of these sites must obtain operating permits from the Division of Solid Waste Management.

With respect to all of the facility categories noted within Section C.3. above, the construction or operation of any solid waste facility shall be preceded by the obtainment of all necessary permits and approvals under N.J.S.A. 13:1E-1 et seq. and all other applicable laws. The issuance of construction and/or operating permits pursuant to the Solid Waste Management Act is limited to those applicants found by the Department and the Attorney General to be deserving of licensing under the provisions of N.J.S.A. 13:1E-126 et seq. In addition, Essex County shall submit a revised facilities status report following a public hearing to be held within forty five (45) days of the date of this certification and in plan amendment form to correct each status report category and to resolve all “unknown” status designations.

4. District Policy Regarding Composting and Vegetative Waste Facilities

The inclusion into the approved district plan of the district policy regarding composting and vegetative waste facilities is approved with modification. The proposed district policy states that any new application for a compost facility or temporary facility for the disposal of on-site generated vegetative waste within the district is consistent with the approved district plan provided it meets existing environmental design and operation standards of the Department of Environmental Protection.

The on-site vegetative waste disposal component of the policy is approved. However, the compost component of the policy does not provide for a public comment process. Therefore, the policy is modified, as per Departmental approval of previous district compost facilities inclusion policies for Cumberland County (certified on October 9, 1986), Somerset County (certified on December 11, 1986), and Sussex County (certified March 26, 1987), as follows:
Any publicly or privately operated compost facility is consistent with the approved Essex County District Plan and no further plan amendment is required to include the facility provided that:

a. The host municipality and the solid waste management district are notified in writing (by the applicant) of the proposed application and each receive a full copy of the complete application submitted to the Department including all engineering designs, reports, maps, etc., which the Department required of the applicant.

b. The applicant publishes two (2) notices of the proposed application, once each week for two (2) consecutive weeks, in a newspaper of general circulation within the host municipality. The district shall determine the contents of the notice which shall inform the public that this is their only opportunity within the planning stage to raise comments to the proposal.

c. No substantive objections to the site location are raised by the host municipality, the solid waste management district, or any other person; provided further, however, that if the county determines that substantive objections are raised, the proposed site and facility must be subject to the formal plan amendment process pursuant to N.J.S.A. 13:1E-23 and 24 including notices, public hearing, freeholder board approval, and subsequent DEP approval of the plan amendment. Further, prior to construction and operation the applicant must obtain from the Department Environmental Impact Statement approval and obtain a solid waste facility permit pursuant to N.J.S.A. 13:1E-4 or 5.

5. **District Recycling Plan**

The Essex County Recycling Plan is a multifaceted approach for the source separation and material recovery aimed mainly toward the municipal and commercial waste stream. The district recycling plan, as submitted, is approved. However, the Essex County District Recycling Plan was developed prior to the enactment of the New Jersey Statewide Mandatory Source Separation of Recycling Act, P.L. 1987, c.102. Therefore, certain requirements contained in P.L. 1987, c.102 have not been met in the district recycling plan. The Office of Recycling has reviewed, in Section B. of this certification, the district recycling plan and has identified areas that must be modified to meet the requirements of P.L. 1987 c.102.

6. **District Contingency Plan**

On July 31, 1987, Essex County, pursuant to a Judicial Consent Order, exhausted its disposal privileges within the Hackensack Meadowlands District. In response to this situation, the county implemented its short term contingency plan through the development of three transfer station projects, two of which were operational by August 1, 1987. The county’s initiative in this regard represented an unprecedented achievement in governmental leadership in the face of a potentially severe solid waste crisis. As a result, the county has already implemented its contingency plan to utilize transfer stations and out-of-state disposal for a three to five year period pending the operation of the planned resource recovery facility.

While the county has acted responsibly in addressing the implementation of its short term contingency plan, it has not fully addressed the analysis of both short and long-term contingency options as set forth in my February 23, 1987 letter to all freeholder directors and county executives in the state. Paramount to these options is an analysis of long-term residual, non-processible and bypass land filling. The county has yet to certify through the plan amendment process an absence of available in-county landfill sites, nor has it entered into an inter-district agreement with any other New Jersey
district to provide for landfilling services. In the absence of documented efforts to locate an in-county site and/or entering such agreements, the county’s use of long-term out-of-state capacity is approvable beyond 1992 solely as a component of contingency planning as further addressed in Section C. 7.b. below.

In light of the above, Essex County’s contingency plan is approved, but the county is ordered to resubmit a more detailed contingency analysis addressing both short and long-term plans in accordance with the guidance set forth in the attachment to my February 23, 1987 letter to County Executive Nicholas Amato. This analysis shall be submitted to the Department following a public hearing to be held within forty five (45) days of the date of this certification and in plan amendment form.

7. **Long Term Solid Waste Strategy**

The main component of Essex County’s long term solid waste strategy is the development of a mass burn waste to energy (resource recovery) facility to be located at Blanchard Street in Newark. This is an approved part of the district plan. In addition, the county has developed a comprehensive recycling strategy including the construction of an intermediate processing facility to serve the county. The plan inclusion of these facilities was approved in prior actions by the Department. In addition to these components, the county’s amendment submission has addressed other components of its long-term strategy as further noted below:

a. **An Administration and Enforcement Strategy**

   The administration and enforcement strategy is required due to various obligations arising from the district plan, the Host Municipality Agreement, the County Service Contract, and the permit authorizing the construction and operation of the resource recovery facility.

   The purpose of the administration and enforcement strategy is to ensure delivery of all acceptable waste generated within Essex County to the resource recovery facility; establish a mandatory recycling program; establish truck routing requirements for vehicles using the resource recovery facility; prevent the delivery to the resource recovery facility of hazardous waste, unacceptable waste and non-processible waste; and to require all refuse trucks using the administration and enforcement strategy has been broken down into six sub-categories as further addressed below:

1. **Registration Requirement**

   The county’s chief mechanism for administering and enforcing the policies mentioned above in 7.a. will be a county disposal vehicle registration system. This proposed vehicle registration system is approved. However, future submissions should outline the mechanics toward the development and implementation of this registration strategy as details become available, but in no case later than the commencement of resource recovery facility operation. In addition, the county registration system shall not supercede or impede the Departmental registration requirements as contained in N.J.S.A.C. 7:26-3.2.

2. **Specific Routes for Trucks using the Resource Recovery Facility**
The specific routes for trucks using the resource recovery facility are approved. However, Essex County must in a subsequent plan amendment identify the specific routes from the following municipalities to Route I-280. The municipalities requiring further route identification are: Caldwell, Cedar Grove, Essex Fells, Fairfield, Montclair, North Caldwell, Verona and West Caldwell. Also, a specific route shall be identified from the municipality of South Orange to Route I-78. Essex County shall submit a revised truck route identification, in plan amendment form, following a public hearing to be held within forty five (45) days of the date of this certification.

3. Waste Flow Control

The plan amendment states that no district haulers shall deliver acceptable waste generated within the county to any other solid waste facility (other than the Essex County resource recovery facility) or resource recovery facility within or outside the borders of the State of New Jersey unless specifically directed to do so by the county consistent with the County Service Contract or the New Jersey Department of Environmental Protection. Monitoring and enforcement will be provided by regulations of the Department and Board of Public Utilities. This waste flow control policy is approved with modification. Whereas the plan amendment only recognizes Department oversight of waste flow control, in actuality this oversight responsibility is shared by the Board of Public Utilities and the Department and the amendment is modified accordingly.

4. Acceptance of Waste from Outside Essex County at the Essex County Resource Recovery Facility

The plan amendment states that if excess disposal capacity exists at the resource recovery facility, beyond the needs of Essex County, REF-FUEL is permitted to take in acceptable waste from outside the county. Further, the amendment specifies that “such acceptable waste would be acceptable under additional processing contracts, which the Service Contract and Service Agreement allow under conditions that assure the county of sufficient processing capacity to meet its needs, while permitting the Port Authority and REF-FUEL to maintain the economic viability of the resource recovery facility”.

This same “Out-of-County Waste Policy” was submitted by the county and certified as approved by the Department in my June 8, 1987 Certification of the county’s June 3, 1987 plan amendment submission. However, the June 3 amendment was intended to address only the county’s emergency transfer station project. Through subsequent discussions with county officials, it was learned that both the “Out-of-County Waste Policy” and what the Department entitled the county’s “Waste Flow Policy Statement” were submitted in the June 3, 1987 plan amendment out-of-context in light of the emergency situation confronting Essex County at that time.

On April 29, 1987, the Essex County Board of Chosen Freeholders passed the amendment currently under consideration. However, the county did not submit the full plan amendment package, including the public hearing transcript, ordinance and proof of newspaper notice, until June 12, 1987. Therefore, the “Out-of-County Waste Policy” and “Waste Flow Policy Statement” components of the June 3, 1987 amendment were submitted to amend the base plan update amendment that this Certification addressed.
As a result, the June 8, 1987 Certification addressed these plan components without the benefit of the entire base plan update submission and was subsequently not considered within the overall context of that document. As a result, the county’s “Out-of-County Waste Policy” and “Waste Flow Policy Statement” have been reexamined in more detail as further addressed immediately below and in Section C.8. below.

While the plan amendment, as submitted, is not totally clear on the subject of out-of-county waste acceptance, the Department interprets the county’s strategy to be consistent with the state law as follows: The county’s overall waste flow strategy is based upon the ability of the county to control waste flow to designated facilities as was approved in the Department’s June 8, 1987 certification. Further, the strategy contains three basic steps in assuring an adequate flow of solid waste, particularly to the resource recovery facility, to ensure the economic viability of the project. First, the county has directed all acceptable solid waste to the resource recovery facility from within Essex County’s municipalities once the facility is operational. Second, the county’s strategy calls for the entering of reciprocal inter-district agreements with other New Jersey counties to provide additional solid waste as needed. The April 29, 1987 amendment represents the county’s portion of such an inter-district agreement and is an open invitation to all other New Jersey counties to enter into a reciprocal arrangement subject to any required state approval. Finally, should Essex County solid waste be insufficient to meet the needs of the facility, and if acceptable waste is not available from other New Jersey districts, the county proposes to allow the facility to arrange for the acceptance of waste from outside of New Jersey.

The above strategy as it relates to waste flow control and acceptance of out-of-county solid waste is approved with modifications. Once again, the position outlined in my June 8, 1987 certification of the June 3, 1987 amendment as it pertained to arrangements for the receipt of out-of-county and out-of-state waste through the entering of inter-district agreements subject to the plan amendment submission, review and certification process remains unchanged. In addition, in a subsequent plan amendment submission, to be made prior to facility operation, the county must submit a more detailed analysis of the mechanics of utilizing such inter-district agreements and out-of-state arrangements to secure merchant and spot market waste. In addition, a strategy for enforcing such waste flows and for notifying the Department of specifically authorized waste flow origin detailed analysis. Finally, it must be stated that pursuant to Condition 25 of the Certificate of Approved Registration and Engineering Design Approval for the Essex County Resource Recovery Facility, said facility is only authorized for the processing of 835 tons per unit per day, or at a heat release rate of 340,000,000 btu per hour per unit, whichever is more limiting.

5. **Exclusion of Hazardous Waste and Certain Type 27 Waste at the Resource Recovery Facility**

   Essex County is required, pursuant to Conditions 2. and 26. of its resource recovery facility permit, to exclude hazardous waste and certain type 27 (dry industrial) wastes from the Essex County resource recovery facility. The policy contained in the plan amendment for the exclusion of these wastes is approved. However, Essex County is directed to periodically submit to the Department written confirmation that the components of the waste exclusion policy, and items 2. and 26. of the Certificate of
Approval Registration and Engineering Design Approval for the resource recovery facility, have been carried out.

6. Exhaust Silencers

The policy requiring all vehicles using the resource recovery facility to be equipped with exhaust silencers is approved with modification. The requirement for exhaust silencers is approved, however, the policy goes on to state that all vehicles should be maintained and operated in accordance with all applicable Department of Environmental Protection standards. This statement is modified and approved as follows. All vehicles should be maintained and operated in accordance with all applicable state standards, rules, and applicable regulations.

b. Management of Process Residue From the Essex County Resource Recovery Facility

The plan amendment contains a long-term disposal strategy whereby the process residues from the Essex County resource recovery facility and bypassed waste would be contracted for disposal at out-of-state disposal facilities for the first seven (7) years of the life of the facility. This long term disposal strategy is approved with modifications.

The use of out-of-state disposal facilities for the period between 1987 through 1992 is approved. The use of out-of-state disposal facilities as the primary disposal strategy for the disposal of residue, bypass waste and non-processible waste between 1993 and 1997 is approved solely as a component of the county’s contingency plan. Essex County remains obligated to further address the provision of available suitable in-county landfill disposal sites as noted in Section C.6. above.

8. Waste Flow Policy Statement

As indicated in C.4. above, the county’s “Waste Flow Policy Statement” was submitted out-of-context as part of the June 3, 1987 Essex County Plan Amendment. I had certified approval of the basic provisions of that policy in my June 8, 1987 certification of the June 3 amendment. The policy outlines the waste flow control authority of Essex County, particularly as it pertains to the direction of acceptable waste to the planned resource recovery facility. This waste flow control policy is once again approved with modification to reflect the role of the Department and Board of Public Utilities pursuant to the Solid Waste Management Act and the Inter-district and Intradistrict Solid Waste Flow Rules.

9. Essex County Resource Recovery Investment Tax Fund Financial Plan and Disbursement Schedule

The proposed interim uses outlined in the plan amendment are in accordance with, and thereby satisfy, N.J.S.A. 13:1E-150 as they limit disbursement to reduce the rates charged to users of a resource recovery facility serving the county. Uses and a disbursement schedule for funds accrued subsequent to December 31, 1986 shall be addressed in a future amendment to the district plan. The ultimate demonstration of user rate reduction shall be the responsibility of the county. The proposed interim uses of the fund are hereby approved.
The provisions of the plan amendment concerning the allocation of activities over time as they relate to the District Resource Recovery Investment Tax Fund moneys are partially consistent with the disbursement schedule requirements of N.J.S.A. 13:1E-150. However, a methodology for identifying and allocating interest earnings on fund balances and the timing and recipient of fund disbursement must be provided. Also, the specific site identifications of the recycling facility proposed for disbursement funds must be incorporated into the district plan. Therefore, the plan amendment is modified accordingly.

The county shall satisfy these modifications through a subsequent plan amendment following a public hearing to be held within forty-five (45) days of the date of this certification.

D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with the within amendment to the Essex County District Solid Waste Management Plan and which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department of Environmental Protection and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the Essex County District Solid Waste Management Plan if such effective date of this amendment; provided, however, that any such registrant may, upon application to the Department of Environmental Protection, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operator and collectors/haulers registered with the Department of Environmental Protection and operating within Essex County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the Essex County District Solid Waste Management Plan. Any facility operator or collector/hauler who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department of Environmental Protection and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9, and 12 and all other applicable laws.

3. Types of Solid Waste Covered by the District Solid Waste Management Plans

The provisions of the Essex County District Solid Waste Management Plan shall apply to all solid waste defined in N.J.S.A. 13:1E-3 and sludge, septage, and hazardous waste. Also, all non-hazardous materials separated at the point of generation for sale
or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6).

4. Certification to Proceed with the Implementation of Plan Amendment

This document shall serve as the certification of the Commissioner of the Department of Environmental Protection to the Essex County Board of Chosen Freeholders and pursuant to N.J.S.A. 13:1E-24c. and f., the county shall proceed with the implementation of the approved amendment contained herein.

5. Definitions

For the purpose of the approval of this amendment and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those at N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-1.4 and 2.13.

6. Effective Date of Amendment

The amendment to the Essex County District Solid Waste Management Plan contained herein shall take effect immediately.

7. Reservation of Authority

Nothing contained herein shall be construed as a limitation on any other action taken by the Department of Environmental Protection pursuant to its authority under the law. The Essex County District Solid Waste Management Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan with appendices which includes the Department’s planning guidelines and rules, regulations, and orders of the Department, including the inter-district and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved.

8. Audit Requirements

Essex County shall, by October 31 of each year in which moneys remain in its District Resource Recovery Investment Tax Fund, file an audit of the fund and any expenditures therefrom with the Local Finance Board in the Division of Local Government Services in the Department of Community Affairs. The audit shall be conducted by an independent public accountant. A copy of the audit shall be provided to: Chief, Bureau of Solid Waste and Resource Recovery Financing, Division of Solid Waste Management, 401 East State Street, Trenton, New Jersey 08625.

Certification of Approval of the Amendment with Modifications by the Commissioner of the Department of Environmental Protection

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq, I hereby approve the amendment with modifications as outlined in Section C. of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on April 29, 1987. Further, I direct the Essex County Board
of Chosen Freeholders to address the modified components identified in Section C. of this certification through a subsequent plan amendment following a public hearing to be held within forty-five days of the date of this certification pursuant to N.J.S.A. 13:1E-24.

October 26, 1987
DATE

RICHARD T. DEWKING
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ATTACHMENT I


I. Proposed Uses

The moneys in the fund shall be disbursed only for the following purposes:

1. To reduce the rates charged to all users by a resource recovery facility serving the county in order to provide a gradual transition to resource recovery facility rates from sanitary landfill facility rates. A county may achieve reduction through the use of moneys in its district investment tax fund to pay directly part of the fees charged for disposal to all users of a resource recovery facility.

2. To design, finance, construct, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposing of those solid waste which cannot be processed by a resource recovery facility or the waste products resulting from the operation of a resource recovery facility.

3. To design, finance, construct, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposal of those solid waste on a long-term basis, if a county can demonstrate to the satisfaction of the department that utilization of a resource recovery facility is not feasible for disposal of the solid waste generated in that county;

4. To finance the closing costs for the proper closure of any terminated sanitary landfill facility located within a county whenever that county has made an investment tax rate adjustment for this purpose in accordance with the study conducted pursuant to N.J.S.A. 13:1E-146; and

5. To administer the investment tax fund, up to an amount not to exceed 2% of the total moneys appropriated to the fund during the fiscal year.

II. Disbursement Schedule

All disbursement schedules for District Resource Recovery Investment Tax Fund moneys shall include, but not be limited to the following:* 

1. Narrative which outlines the purpose, background and legislative justification of and authorization for the use of the funds;

2. Narrative which provides the purpose, description and objectives of the project proposed for receipt of fund moneys;

3. Narrative which provides specific project performance data, implementation schedules and project status;

4. A spread sheet or other tabular of budgetary format which provides at least the following information, over time (choice of the time interval is at the discretion of the county, but shall not be longer than annually):
   a. Initial fund balances;
   b. Additional deposits to fund based upon tax rates and projected waste generation and disposal figures, under various recycling/reduction assumptions and population/economic growth assumptions;
   c. Interest accrued on fund balance, by year;
d. Recipients of fund moneys, by amount, by proposed use, by time interval;
e. Use of moneys by recipients, by amount, by time interval;
f. If available, a budget for fund disbursement.

* A model format is attached. This format is from the approved Burlington County submission and is presented as guidance and need not be strictly adhered to. The Department recognizes that the data analysis may be presented in a variety of acceptable formats. For example, the Department has received a cash flow spreadsheet format that meets the criteria. This format is available for examination by the county.

Attachment
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<th>Year</th>
<th>Waste Generation Rate</th>
<th>Tons of Waste</th>
<th>Subtotal</th>
<th>Total</th>
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<td>338,282 tons</td>
<td>4,110,846.00</td>
<td>$655,449.48</td>
</tr>
<tr>
<td>1987</td>
<td>$3.00/ton</td>
<td>342,151 tons</td>
<td>1,358,530.00</td>
<td>$994,549.08</td>
</tr>
<tr>
<td>1988</td>
<td>$4.00/ton</td>
<td>346,051 tons</td>
<td>1,341,231.90</td>
<td>$1,341,231.90</td>
</tr>
</tbody>
</table>

1 Based on projected in-county waste disposal rates shown below.
2 Total is calculated minus a 2% N.J. Department of Treasury Share.

**BURLINGTON COUNTY ESTIMATED WASTE DISPOSAL RATE**

<table>
<thead>
<tr>
<th>Year</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN-COUNTY GENERATION</td>
<td>916.2</td>
<td>926.8</td>
<td>937.4</td>
</tr>
<tr>
<td>OUT-OF-COUNTY DISPOSAL</td>
<td>6.42</td>
<td>6.64</td>
<td>6.86</td>
</tr>
<tr>
<td>Bass River/Washington Township – tons/per/day</td>
<td>909.78</td>
<td>920.16</td>
<td>930.5</td>
</tr>
</tbody>
</table>

3 Waste generation rates are based on the USEPA per capita generation rate of 4.7 lbs/capita/day for 1985 and the population projections of the Delaware Valley Regional Planning Commission, as reported in the Burlington County Solid Waste Management Facilities Complex Conceptual Engineering Design and Master Site Plan Report, Volume I.

Waste generation rates should also account for waste reduction and recycling goals in projecting waste disposal in-county and waste generation in-county.
# Burlington County Regional Recycling Program Budget Plan

## 1986 – 1988

### Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eager Beavers (incl. truck)</td>
<td>$112,000.00</td>
<td>$232,000.00</td>
<td>$153,000.00</td>
</tr>
<tr>
<td>Box Truck w/ Dump</td>
<td>$80,000.00</td>
<td>$178,000.00</td>
<td>$128,000.00</td>
</tr>
<tr>
<td>Dump trailers</td>
<td>$28,000.00</td>
<td>$20,000.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Tractor</td>
<td>$23,500.00</td>
<td>$24,000.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>1 Van (for Coordinator)</td>
<td>$6,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Forklift</td>
<td>$7,000.00</td>
<td>$10,000.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Caterpillar w/ ft loader</td>
<td>$20,000.00</td>
<td>$25,000.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Radios w/ base</td>
<td>$17,000.00</td>
<td>$4,000.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$293,500.00</td>
<td>$643,000.00</td>
<td>$283,000.00</td>
</tr>
</tbody>
</table>

### Personnel

(Includes all fringe)

<table>
<thead>
<tr>
<th>Item</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Coordinator</td>
<td>$21,000.00</td>
<td>$23,900.00</td>
<td>$25,375.00</td>
</tr>
<tr>
<td>1 Asst. Coordinator</td>
<td>$17,290.00</td>
<td>$18,500.00</td>
<td>$19,610.00</td>
</tr>
<tr>
<td>Riders</td>
<td>$225,780.00</td>
<td>$364,773.00</td>
<td>$488,358.00</td>
</tr>
<tr>
<td>Drivers (SV &amp; EBT)</td>
<td>$218,068.00</td>
<td>$487,326.00</td>
<td>$649,642.00</td>
</tr>
<tr>
<td>Drivers (TT)</td>
<td>$26,800.00</td>
<td>$46,000.00</td>
<td>$69,000.00</td>
</tr>
<tr>
<td>Phone Operator</td>
<td>$14,500.00</td>
<td>$15,515.00</td>
<td>$16,446.00</td>
</tr>
<tr>
<td>Delran Equipment Operator</td>
<td>$5,270.00</td>
<td>-$16,000.00</td>
<td>$16,960.00</td>
</tr>
<tr>
<td>Southampton Equipment Operator</td>
<td>$0.00</td>
<td>$4,000.00</td>
<td>$16,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$528,708.00</td>
<td>$976,014.00</td>
<td>$1,301,392.00</td>
</tr>
</tbody>
</table>

### Operating (Curbside)

<table>
<thead>
<tr>
<th>Item</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>$70,000.00</td>
<td>$115,000.00</td>
<td>$140,000.00</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$40,000.00</td>
<td>$55,000.00</td>
<td>$70,000.00</td>
</tr>
<tr>
<td>Insurance</td>
<td>$60,000.00</td>
<td>$105,000.00</td>
<td>$135,000.00</td>
</tr>
<tr>
<td>Safety Apparel</td>
<td>$4,000.00</td>
<td>$4,000.00</td>
<td>$4,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$174,000.00</td>
<td>$279,000.00</td>
<td>$349,000.00</td>
</tr>
</tbody>
</table>

### Delran Recycling Center

<table>
<thead>
<tr>
<th>Item</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance</td>
<td>$5,000.00</td>
<td>$12,000.00</td>
<td>$14,000.00</td>
</tr>
<tr>
<td>Utilities</td>
<td>$5,000.00</td>
<td>$11,000.00</td>
<td>$12,500.00</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$1,500.00</td>
<td>$3,000.00</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>Supplies</td>
<td>$2,000.00</td>
<td>$7,000.00</td>
<td>$8,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$13,500.00</td>
<td>$33,000.00</td>
<td>$38,000.00</td>
</tr>
</tbody>
</table>

### Southern Recycling Center

<table>
<thead>
<tr>
<th>Item</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance</td>
<td>$0.00</td>
<td>$2,000.00</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>Utilities</td>
<td>$0.00</td>
<td>$2,000.00</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$0.00</td>
<td>$500.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$0.00</td>
<td>$4,500.00</td>
<td>$16,000.00</td>
</tr>
</tbody>
</table>

**Total Operating**: $716,208.00 $1,292,514.00 $1,704,392.00  
**Administration 9**: $64,458.72 $116,326.26 $153,395.28  
**Subtotal**: $780,666.72 $1,408,840.26 $1,857,787.28  
**Total Equipment**: $293,500.00 $643,000.00 $283,000.00
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>AMOUNT</th>
<th>AMOUNT</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAND TOTAL</td>
<td>$1,074,166.72</td>
<td>$2,051,840.26</td>
<td>$2,140,787.28</td>
</tr>
</tbody>
</table>
2(a) Plan Amendment to include Transfer Stations
Adopted: June 3, 1987
Certified: June 8, 1987
Resolution No.: 0-87-0009

Public Notices: (1st): May 18, 1987
               (2nd): May 24, 1987

Public Hearing(s): June 3, 1987
AMENDMENT TO ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN

This proposed amendment would remove the existing Section IV.I.A. on Pages 50 through 52, inclusive, and replace it with the following new text and Table XIV.A.
SECTION IV: SOLID WASTE MANAGEMENT STRATEGY

I. Interim Disposal Plan

On July 31, 1987, disposal at the Hackensack Meadowlands landfills, will be unavailable for Solid Waste generated in the County. It is anticipated that during the interim period, between landfill closure and opening of the energy recovery facility (ERF) in 1990, County Solid Waste will have to be delivered to landfills out of New Jersey. In anticipation of Interim disposal needs, the County is stepping up an already successful recycling program in order to further reduce the quantity of solid waste requiring disposal. While recycling effectively reduces the volume of waste, significant amounts of Solid Waste still require disposal. Therefore, the County has found it necessary to develop a plan for interim disposal. The objective is to have available sufficient transfer, haul and disposal capacity to accommodate the County’s needs.

A crucial component of this plan is the development of transfer stations. Transfer stations are facilities where collection trucks, usually of the “packer” type, are emptied into larder over-the-road vehicles with 2 to 4 times the carrying capacity. These larger vehicles then transfer the refuse to distant disposal sites in a more economical manner. Because additional economies may be achieved by performing long haul by rail, the County is encouraging the use of rail.

In order to induce private corporations to consider constructing transfer stations, and making the associated arrangements to haul and dispose of Solid Wastes, the Division of Solid Waste Management issued a Solicitation of Interest in Having Transfer Stations Included in the Essex County Solid Waste Management Plan on December 10, 1986. On the deadline of February 27, 1987, nine proposals were received. Subsequently some of the proposed sites were found to be problematic and proposers were permitted to substitute sites that would prove more suitable.

In order to be included in the Plan, proposed transfer stations must meet all applicable criteria of the New Jersey Department of Environmental Protection.

In addition, transfer stations will be required to provide for maximum feasible recovery of recyclables from Solid Waste in both the facility design and operating procedures.

Significant transfer capacity in excess of the County’s estimated rate of generation of Solid Waste is not recommended for inclusion in the Plan. Table XIV A shows the sites, their associated Waste types, estimated tonnages, routings, and originating towns. After the energy recovery facility (ERF) is in operation some transfer station capacity will be required for the handling of Solid Waste which cannot be processed at the ERF.

Table IX E reflects the transfer station facilities previously included in the District Plan.

Essex County is empowered through its Solid Waste Management Plan to continue the flow of all Essex County Solid Waste to designated disposal sites. Such a determination is called “flow control” and in the absence of existing landfill disposal sites, such redirection of Wastes will devolve to the use of transfer stations.

Where no Solid Waste flow direction is specified, general State Waste flow orders will govern. The interim period for which the Waste flow directions to transfer stations apply commences August 1, 1987, and ends when the Essex County ERF comes on line. In addition, to Waste flow directions applicable to normal operations, Essex County will, if necessary, request temporary emergency Waste flow redirections from NJDEP during periods when routine collection, transfer or disposal facilities are not available.
All Waste flow directions affecting Essex County are strictly subsidiary to the direction of Acceptable Waste to the ERF pursuant to the energy recovery contracts. When the ERF begins accepting Acceptable Waste during partial operation, it is accorded absolute priority for all Acceptable Waste originating within Essex County. The facility operator will request delivery of the quantity of Acceptable Waste which it is ready to accept, and the County will designate specific municipal or commercial Acceptable Waste portions, consistent with the priority accorded to the City of Newark by the Host Municipality Agreement. When the ERF achieves Acceptance for Full Operation, any other remaining Waste flow directions for Acceptable Waste will then terminate. The decision to extend transfer stations beyond that time will be based upon the handling of Waste that is not accepted at the Energy Recovery Facility (e.g., Bypassed Waste; Non-Processible Waste and Unacceptable Waste both from the County and the Energy Recovery Facility).

To the extent the County does not need capacity in the Energy Recovery Facility REF-FUEL is permitted to take in Acceptable Waste from outside the County, the intent of which is to keep the Facility operating at full capacity. For the discussion on Merchant Waste, please see Section on “Acceptance of Waste From Outside Essex County,” page 57.

Inclusion within a District Plan becomes final only after adoption by the County Governing Body and approval by the Department of Environmental Protection. Approval as part of the District Plan is a necessary precondition for development of private transfer facilities, but any proposed private transfer station is also subject to certain other State approvals.
Plan A

Table XIV A

Essex County New Jersey

Proposed Allocation of Solid Wastes to Transfer Stations

Unless continued by action of the Board of Chosen Freeholders and the State of New Jersey, these assignments will take effect August 1, 1987, and continue until the Essex County Resource Recovery Facility is in operation.

<table>
<thead>
<tr>
<th>TRANSFER SITES</th>
<th>WASTE TYPES, tons per day</th>
<th>TRUCK TRIPS INBOUND</th>
<th>TOWNS</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type 10</td>
<td>Type 13</td>
<td>Total</td>
<td>From Newark</td>
</tr>
<tr>
<td>100 Avenue A. Newark Waste Management of NJ</td>
<td>1248</td>
<td>0</td>
<td>1248</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Newark</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>So. Orange</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Millburn</td>
</tr>
<tr>
<td>Hill Street, Orange</td>
<td>714</td>
<td>0</td>
<td>714</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bloomfield</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cedar Grove</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fairfield</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Montclair</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No. Caldwell</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orange</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Roseland</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Verona</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W. Caldwell</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W. Orange</td>
</tr>
<tr>
<td>442 Frelinghuysen Ave., Newark, Solid Waste Transfer and Recycling, Inc.</td>
<td>248</td>
<td>1831</td>
<td>2079</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Belleville</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Livingston</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nutley</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>2210</td>
<td>1831</td>
<td>4041</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTES:

(1) All truck trips marked "280,Tpke,  3,Tpke, or 46,3,Tpke" will proceed on the Turnpike to Exit 15 E, then will use I & 9 South to 22, then exit from Rt. 22 at Frelinghuysen Avenue. Trucks routed on I-78 will get off at Exit 58A; if assigned to 100 Avenue A, they will use I & 9 South for 0.5 mile to Rt. 21, then north on Rt. 21 to designated street for right turn under Amtrak underpass; if assigned to 442 Frelinghuysen Ave., they will use I & 9 South for 0.5 mile to Rt. 22, then exit at Frelinghuysen Ave.

(2) Truck trips are estimated by assuming 8 tons per truckload.

(3) Tonnage figures are from 1995 Origin and Destination Reports from Hackensack Meadowlands Development Commission.00032
(IN THE MATTER OF CERTAIN AMENDMENTS) 
(TO THE ADOPTED AND APPROVED SOLID) 
(WASTE MANAGEMENT PLAN OF THE) 
(ESSEX COUNTY SOLID WASTE) 
(MANAGEMENT DISTRICT) 

CERTIFICATION 
OF THE JUNE 3, 1987 
AMENDMENT TO THE ESSEX COUNTY DISTRICT 
SOLID WASTE MANAGEMENT PLAN 

BY ORDER OF THE COMMISSIONER: 

A. Introduction 

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Boards of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department approved with modifications, the Essex County District Solid Waste Management Plan. 

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meting the solid waste management needs of the district for the ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district’s waste for ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements.) 

The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. The Essex County Board of Chosen Freeholders completed such a review and on June 3, 1987, adopted an amendment to its approved district solid waste management plan. 

The amendment proposed to incorporate into the district plan three emergency transfer station sites and associated waste flows to the transfer stations. The transfer stations will process Essex County solid waste prior to transport to out-of-state landfills for an interim period pending the operation of the planned Essex County resource recovery facility. The amendment also contains sections pertaining to Essex County’s waste flow direction powers, and a policy for the acceptance of waste generated from outside Essex County at the proposed Essex County resource recovery facility. 

The three transfer stations are:

1. Waste Management of New Jersey Transfer Station, located at 100 Avenue A., Block 1176, Lot 26, in the City of Newark, New Jersey;
2. Solid Waste Transfer and Recycling Transfer Station, located at 442 Frelinghuysen Avenue, Block 3516, Lot 24, in the City of Newark, New Jersey.

3. Solid Waste Transfer and Recycling Transfer Station, located at Hill Street, Block 94, Lot 19, in the City of Orange, New Jersey.

Following a public hearing attended by the Department, the Essex County Freeholders adopted the June 3, 1987 amendment to the Essex County District Solid Waste Management Plan to avert a solid waste disposal crisis in Essex County. As of July 31, 1987, Essex County will have no approved in-state solid waste disposal facility to use. To resolve this short-term disposal crisis, the Essex County Board of Chosen Freeholders have proposed the inclusion of the three above referenced transfer stations into the approved plan to process Essex County solid waste prior to transport to out-of-state landfills.

A draft of the amendment was received by the Department of Environmental Protection on May 20, 1986 and due to the potential for a solid waste crisis in Essex County, copies were distributed to various state level agencies for review and comment, as required by law. The Department has reviewed this amendment and has determined that the amendment adopted by the Essex County Board of Chosen Freeholders on June 3, 1987 is approved as provided in N.J.S.A. 13:1E-24.

B. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I, Richard T. Dewling, Commissioner of the Department of Environmental Protection have studied and reviewed the June 3, 1987 amendment to the Essex County District Solid Waste Management Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that this plan amendment is consistent with the Statewide Solid Waste Management Plan.

In addition, the Division of Solid Waste Management (DSWM) circulated the plan amendment to sixteen review agencies and solicited their review and recommendations. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various agencies, bureaus, and divisions within the Department of Environmental Protection as well as the Board of Public Utilities. Also among these agencies were the Department of Community Affairs, the Department of Public Advocate, the Department of health, the Office of Recycling, the Department of Agriculture, the Department of Transportation, and the New Jersey Turnpike Authority. Of these agencies, the following did not object to the proposed plan amendment: the N.J.D.E.P. Divisions of Parks and Forestry, Water Resources and Coastal Resources; the Green Acres Program, the Board of Public Utilities, the New Jersey Advisory Council on Solid Waste Management and the State Department of Transportation. The following agencies failed to respond to our requests for comments: the N.J.D.E.P. Division of Fish, Game and Wildlife; the State Departments of Agriculture, Health, Community Affairs, and the Public Advocate; the New Jersey Turnpike Authority, and the U.S. Environmental Protection Agency. The Division of Environmental Quality and the Office of Recycling submitted substantive comments which are further addressed below.

The Office of Recycling has commented that pursuant to the Certification of Approved Registration and Engineering Design Approval issued to American Ref-Fuel, Inc. for the Essex County Resource Recovery facility on December 10, 1985, Essex County must conform to an implementation schedule for recycling. One of the elements of the schedule was the adoption of an Administration and
Enforcement Strategy by January 1, 1987, which was to require, among other things, that all transfer stations operating after January 1, 1987 incorporate recycling into facility design and operation.

The Office of Recycling further commented that assurance is needed that these proposed facilities will be operating in conformance with an, as of yet undeveloped, Essex County recycling plan pursuant to P.L. 1987, c.102, Section 3, which mandates plan adoption by October 20, 1987.

Also, the requirements of P.L. 1987, c.102, Section 14, state that these proposed facilities shall be prohibited from accepting leaves between September 1 and December 31 of each year, beginning September of 1988.

Lastly, the Office of Recycling commented that no contract issued, or tariff granted for the proposed facilities may inhibit the growth of recycling in Essex County, or require a minimum daily throughput of solid waste, or require any put or pay provisions regarding the receipt of municipal solid waste.

The Department responds to the comments of the Office of Recycling by starting that the action being proposed by Essex County is a result of the lack of any authorized in-state solid waste disposal facility after July 31, 1987. The proposed transfer stations with the transport of the solid waste to out-of-state landfills are an emergency response to the impending disposal crisis facing the county. Any requirement imposed upon the proposed transfer stations that would delay their implementation beyond July 31, 1987 must be weighted against the impact that such delay would cause. The Department greatly encourages Essex County to maximize its recycling efforts in response to the above comments of the Office of Recycling. In addition, despite efforts to avert a solid waste crisis in the short-term, Essex County must comply with all applicable provisions of the mandatory Recycling Act.

The Division of Environmental Quality commented that transfer stations are subject to the provisions of N.J.A.C. 7:27-5, “Prohibition of Air Pollution”. This regulation prohibits odors and other air contaminants which interfere with the enjoyment of life or property. Also, N.J.A.C. 7:27-8.1(a)6 requires air pollution control permits for any equipment which vents a solid waste facility directly or indirectly to the outdoor atmosphere. Control devices to reduce odor and other air contaminants may be required on such vents.

The Division of Environmental Quality further commented that the Newark central business district is a non-attainment area for the pollutant carbon monoxide (CO). Trucks to and from the transfer facilities should avoid the Newark central business district, as well as the other county hot spots identified.

In response, these issues must be addressed during the technical review that will occur prior to operation of any of the transfer station facilities. Also, information provided by the Division of Environmental Quality will be forwarded to the transfer station operators for their consideration when submitting permit applications to the Department.

The Division of Solid Waste Management commented that the proposed plan amendment did not address the entire non-hazardous waste stream. Specifically, the solid waste types #23 (vegetative), 25 (animal and food processing) and 27 (industrial) were not individually identified and provided with a proposed waste flow. The certification document modifies the proposed plan amendment and provides a waste flow for all approved solid waste types. Further, the proposed plan amendment contained a policy concerning solid waste flow control that requires clarification. Therefore, Section C. of this certification clarifies the county's statement to reflect that Essex County has the power to initiate waste flow changes, and control waste flow, subject to DEP and BPU review and approval pursuant to the
plan amendment and rulemaking processes established within the Solid Waste Management Act and the Non-hazardous Waste Regulations.

The Division of Solid Waste Management also reviewed the proposed plan amendment section concerning the acceptance of waste from outside Essex County at the proposed Essex County resource recovery facility. This section was determined to be consistent with the Statewide Solid Waste Management Plan. Finally, representatives of the Division visited and studied each of the proposed transfer station sites and have determined that they were all capable of development in an environmentally sound manner.

C. Certification of the Essex County District Solid Waste Management Plan Amendment

I, Richard T. Dewling, Commissioner of the Department of Environmental Protection, in accordance with N.J.S.A. 13:1E-1 et seq. and N.J.S.A. 13:1E-21, which established specific requirements regarding the contents of the district solid waste management plans, have reviewed the June 3, 1987, amendment to the approved Essex County District Solid Waste Management Plan and certify to the Essex County Board of Chosen Freeholders that the June 3, 1987 amendment is approved as further specified below.

1. Transfer Stations

The inclusion into the district plan of the three transfer stations is approved. Specifically, the three transfer stations are:

a. Waste Management of New Jersey Transfer Station located at 100 Avenue A, Block 1176, Lot 26, in the City of Newark, New Jersey;

b. Solid Waste Transfer and Recycling Transfer Station located at 442 Frelinghuysen Avenue, Block 3516, Lot 24, in the City of Newark, New Jersey;

c. Solid Waste Transfer and Recycling Transfer Station located at Hill Street, Block 94, Lot 19, in the City of Orange, New Jersey.

2. Waste Flows

The proposed waste flows to the three transfer stations are modified and are approved as follows:

All solid waste types #10, 13, 23, 25 and 27 generated from within the Essex County municipalities of Irvington, Livingston, Maplewood, Millburn, and South Orange shall be directed to the Waste Management of New Jersey Transfer Station, located at Avenue A. Block 1176, Lot 26, in the City of Newark, Essex County, New Jersey.

All solid waste types #10, 23, 25 and 27 generated from within the Essex County municipality of Newark shall be directed to the Waste Management of New Jersey Transfer Station, located at 100 Avenue A, Block 1176, Lot 26, in the City of Newark, Essex County, New Jersey.

All solid waste types #10, 23, 25 and 27 generated from within the Essex County municipalities of Bloomfield, Caldwell, Cedar Grove, East Orange, Essex Fells, Fairfield, Glen Ridge, Montclair, North Caldwell, Orange, Roseland, Verona, West Caldwell and West Orange shall be directed to
the Solid Waste Transfer and Recycling, Inc. Transfer Station, located at Hill Street, Block 94, Lot 19, in the City of Orange, New Jersey.

All solid waste types #10, 13, 23, 25 and 27 generated from within the Essex County municipalities of Belleville and Nutley shall be directed to the Solid Waste Transfer and Recycling, Inc. Transfer Station located at 442 Frelinghuysen Avenue, Block 3516, Lot 24, in the City of Newark, New Jersey.

All solid waste type #13 generated from the Essex County municipalities of Bloomfield, Caldwell, Cedar Grove, East Orange, Essex Fells, Fairfield, Glen Ridge, Montclair, Newark, North Caldwell, Orange, Roseland, Verona, West Caldwell and West Orange shall be directed to the Solid Waste Transfer and Recycling, Inc. Transfer Station located at 442 Frelinghuysen Avenue, Block 3516, Lot 24, in the City of Newark, New Jersey.

In the event that any of the transfer stations noted in Section C.1. above are not operational by August 1, 1987, waste flows will be designated by the Department of Environmental Protection and the Board of Public Utilities through emergency waste flow directives.

3. Waste Flow Policy Statement

The inclusion into the district plan of the proposed policy pertaining to the powers of Essex County to control the flow of solid waste is approved, but must be clarified. As submitted, the waste flow policy statement fails to note that while the county has the power to initiate waste flow changes, and control waste flow, this action is subject to Department of Environmental Protection and Board of Public Utility review and approval pursuant to the plan amendment and rulemaking processes established within the Solid Waste Management Act and the Non-hazardous Waste Regulations.

4. Out-of-County Waste Policy

The inclusion into the district plan of the proposed policy pertaining to acceptance of solid waste generated from outside Essex County at the proposed Essex County resource recovery facility is approved. Specifically, the proposed policy stated that if American Ref-Fuel, Inc. proposes to obtain solid waste from another New Jersey solid waste management district, Essex County agrees, given state approval, to enter into reciprocal inter-district waste flow agreements permitting deliveries of the solid waste. Also, if processible solid waste is not available from another New Jersey solid waste management district, American Ref-Fuel, Inc. may obtain processible solid waste from outside New Jersey after they county enters into inter-district waste flow agreements and obtains state approval.

5. Routing Plan

The specific routing plan designating the transportation arteries to be used from each municipality to each of the three transfer stations is approved for inclusion within the district plan.

D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with the within amendment to Essex County District Solid Waste Management Plan and which was
executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation of disposal facility registered by the Department of Environmental Protection and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the Essex County District Solid Waste Management Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment; provided, however, that any such registrant may, upon application to the Department of Environmental Protection, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and collector/haulers registered with the Department of Environmental Protection and operating within Essex County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the Essex County District Solid Waste Management Plan. Any facility operator or collector/hauler who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department of Environmental Protection and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9, and 12 and all other applicable laws.

3. Types of Solid Waste Covered by the District Solid Waste Management Plans

The provisions of the Essex County District Solid Waste Management Plan shall apply to all solid waste defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. Also, all non-hazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6).

4. Certification to Proceed with the Implementation of Plan Amendment

This document shall serve as the certification of the commissioner of the Department of Environmental Protection to the Essex County Board of Chosen Freeholders and pursuant to N.J.S.A. 13:1E-24c. and f., the county shall proceed with the implementation of the approved amendment contained herein.

5. Definitions

For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those found at N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-1.4 and N.J.A.C. 7:26-2.13.

6. Effective Date of Amendment

The amendment to the Essex County District Solid Waste Management Plan contained herein shall take effect immediately.

7. Reservation of Authority
Nothing contained herein shall be construed as a limitation on any other action taken by the Department of Environmental Protection pursuant to its authority under the law. The Essex County District Solid Waste Management Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan.

E. Certification of Approval of the Amendment by the Commissioner of the Department of Environmental Protection

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq, I hereby approve the amendment as outlined in Section C. of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on June 3, 1987.

June 6, 1987
DATE

RICHARD T. DEWKING
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION
3(a) Plan Amendment to include RRIT Fund use and disbursement
Adopted:  August 17, 1988
Certified:  July 14, 1989
Resolution No.:  0-88-025

Public Notices:  (1st):  July 18, 1988
                (2nd):  

Public Hearing(s):  August 17, 1988
INTRODUCTION
Pursuant to Section 6.05(b) of the County Service Contract, Essex County must make payments to the Port Authority of New York and New Jersey at times and in amounts specified for its share in the cost of the Resource Recovery Plan now under construction. The first two payments are in the amount of $750,000 each and are due July 30, 1988 and January 30, 1989 respectively.

On May 18, 1988 the Board of Chosen Freeholders established under resolution R-88-0452 that revenues received from the Resource Recovery Investment Tax Fund be dedicated by rider under N.J.S.A. 13:1E-150. N.J.S.A. 13E:1E-150 is to reduce rates charged at a Resource Recovery Facility.

RECOMMENDATION
It is recommended that the Board of Chosen Freeholder expend these two payments of $750,000 each with the first payment due July 30, 1988 from the Resource Recovery Investment Tax Fund monies.

REASONS FOR RECOMMENDATION
The statute provides for specific use of the funds, to reduce rates charged at Resource Recovery Facilities. The County Division of Solid Waste has provided an amendment (attached) to its Solid Waste Plan for expending these payments. It is recommended that these payments be made from the R.R.I.T. Fund to satisfy or contractual and statutorial obligations.
SUBJECT: ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and
WHEREAS, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan amending Section IV(II)(A), Resource Recovery Investment Tax Fund; and
WHEREAS, said Plan amendment has been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory council; now, therefore, be it
ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended as follows:
   a. Section IV(II)(A), Resource Recovery Investment Tax Fund, subsection (c), Specific Uses for the District Fund Applicable to Essex County is hereby amended to renumber said subsection (c) as subsection c(1).
   b. There is hereby added to Section IV(II)(A) Resource Recovery Investment Tax Fund, subsection (c), a new subsection (c)(2) as attached hereto.
   c. Table XVI of the Plan entitled District Tax Fund Disbursement Schedule is hereby amended in accordance with the Table XVI – (2) attached hereto.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on August 17, 1988, 12:00 Noon in room #506, Hall of Records, Dr. Martin Luther King Jr. Blvd, Newark, NJ 07102.
(c) **Specific Uses for the District Fund Applicable to Essex County**

(1) (Same as present c)

(2) In addition to the uses set forth above, the County will utilize some of the monies in the District Fund to reduce the rates to be charged to all users of the resource recovery facility being developed as a joint venture by the County and The Port Authority of New York and New Jersey on Blanchard Street, Newark, New Jersey. The facility is scheduled to begin operation in 1991. Said reduction in rates will be achieved by using Fund monies to offset project costs which are projected to be approximately $300 million, which include County contributions of $18 million toward such project costs.

Because the project costs generally are to be reflected in and recouped through the solid waste disposal tipping fees to be paid by the users of the facility, a reduction of such costs through utilization of the Fund will effect a corresponding reduction in the facility tipping fees.

These contributions to the resource recovery project from the Fund will be in lieu of a portion of the County’s $18 million project financing contribution which would otherwise be incorporated into the project tipping fees calculations, by way of a County tipping fee surcharge. The County’s tipping fee surcharge will therefore be computed excluding these County contributions to the project from the fund.

Payments from the Fund to the resource recovery project are set forth in Table XVI – (2) attached hereto.
### TABLE XVI – (2)

Disbursement Schedule to Resource Recovery Project from Essex County Resource Recovery Investment Tax District Fund. (Funds accrued through July 31, 1987)

1. **County Contributions towards cost of Essex County-Port Authority Resource Recovery Project:**

<table>
<thead>
<tr>
<th>Date of Payment</th>
<th>Amount of Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 30, 1988</td>
<td>$750,000.00</td>
</tr>
<tr>
<td>January 30, 1989</td>
<td>$750,000.00</td>
</tr>
</tbody>
</table>

These payments shall be made payable to The Port Authority of New York and New Jersey (PA) or the PA’s escrow agent duly designated to receive and disburse resource recovery project funds on its behalf and on behalf of the project.

2. **Balance of Fund as of June 30, 1988.**

Money deposited by the Director, Division of Taxation, in the Department of Treasury, to the Essex County District recovery Investment Tax Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money deposited</td>
<td>$5,168,543.40</td>
</tr>
<tr>
<td>Investment on said Fund through June 30, 1988</td>
<td>4169,096.60</td>
</tr>
</tbody>
</table>

**Total Fund Assets** $5,337,640.10
3(b) DEPE Certification
July 14, 1989
A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) establishes a comprehensive system for the management of solid waste in New Jersey. The Act designates all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandates that the Boards of Chosen Freeholder and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts.

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for the ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum strategy, the plan must designate sufficient available suitable sites for the disposal of the district’s waste for the ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements.)

The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. Amendments to the Act found in N.J.S.A. 12:1E-136 et seq. require that, among other things, counties amend their district solid waste management plans to include an outline of the proposed use of the moneys in the District Resource Recovery Investment Tax Fund, as well as establish a schedule for disbursement of the moneys in that fund.

The provisions of the “McEnroe” legislation, N.J.S.A. 13:1E-136 et seq., which establish District Resource Recovery Investment Tax Fund accounts for the state’s 21 counties, set out a clear state policy objective to generate revenues in order to subsidize anticipated resource recovery tipping fees to a level which is competitive with disposal costs at landfills utilized by the counties. The subsidies created by this legislation also were designed as incentives to make the transition from landfill disposal to capital intensive resource recovery technologies. Thus, the purposes of the Act are to provide financial assistance to counties in order to expedite resource recovery technology implementation and to provide user benefits through a reduction in the tipping fees at resource recovery facilities.
Prior to disbursement from its District Resource Recovery Investment Tax Fund, however, a county must prepare a plan amendment which outlines the proposed uses of the money in its District Fund and establishes a disbursement schedule for those moneys in the fund. Thus, two tests must be met: an eligible use test, which uses are limited to those identified in N.J.S.A. 13:1E-150b and a disbursement schedule test, which test criteria are not specifically provided in the Act.

Eligible uses of the fund are provided in Attachment I, Part I, of this certification. In consideration of the intent and objectives of the Act outlined above and the specific limitations upon eligible uses of the fund provided in N.J.S.A. 13:1E-150, projects not formally identified in the approved district solid waste management plan shall not be funded with Resource Recovery Investment Tax Fund moneys. Therefore, in order to ensure user rate reduction and facilitate timely project implementation, disbursements from a District Resource Recovery Investment Tax Fund shall be made only to projects formally identified in the approved district solid waste management plan.

Pursuant to law, in order to provide safeguards as to how the investment tax funds are to be spend, a schedule for the disbursement of the money must be provided through the plan amendment process established under the New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.). In this way, a formal procedure for quantifying contributions to and withdrawals from the fund is established in order to maintain a running fund balance. Such a procedure may be followed using a variety of specific steps and methods of data presentation. In order to evaluate the adequacy of financial disbursement procedures, the Department has established criteria for disbursement schedules (see Attachment I, Part II).

The Essex County Board of Chosen Freeholders, on August 17, 1988, adopted an amendment to its approved District Solid Waste Management Plan to satisfy the requirements of N.J.S.A. 13:1E-150. The amendment proposed a plan for the use and disbursement of moneys in the Essex County District Resource Recovery Investment Tax Fund in the amount of $1.5 million for a portion of the County’s $18 million project financing contribution which will be used to reduce the tipping fees of the resource recovery facility.

The amendment was accepted by the Department of Environmental Protection on February 16, 1989 and copies were distributed to various state level agencies for review and comment, as required by law. The Department has reviewed this amendment, as well as the entire Essex County District Solid Waste Management Plan and has determined that the amendment adopted by the Essex County Board of Chosen Freeholders on August 17, 1988 is approved with modification as provided in N.J.S.A. 13:1E-24.

B. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1) and N.J.S.A. 13:1E-150, I, Christopher J. Deggett, Commissioner of the Department of Environmental Protection, have studied and reviewed the August 17, 1988 amendment to the Essex County District Solid Waste Management Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and N.J.S.A. 13:1E-150, and I find and conclude that this plan amendment is consistent as modified below with the Statewide Solid Waste Management Plan and N.J.S.A. 13:1E-150 in proposing an acceptable use and a disbursement schedule for moneys from the Essex County District Resource Recovery Investment Tax Fund.
In addition, the Division of Solid Waste Management circulated the plan amendment to sixteen review agencies and solicited their review and recommendations. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various agencies, bureaus, and divisions within the Department of Environmental Protection, as well as the Board of Public Utilities. Also among these agencies were the Department of Community Affairs, Department of the Public Advocate, the Department of Health, the Department of Agriculture, the Department of Transportation, and the New Jersey Turnpike Authority. Of these agencies, the following did not object to the proposed plan amendment: The New Jersey Department of Environmental Protection Division of Environmental Quality, Water Resources, Parks and Forestry, and Fish, Game and Wildlife, and the Green Acres Program; the State Department of Agriculture, and the New Jersey Turnpike Authority. The Environmental Protection Agency, the State Departments of the Public Advocate, Health, Transportation and Community Affairs, the New Jersey Department of Environmental Protection Divisions of Coastal Resources and Financial Management, Planning and General Services, and the New Jersey Advisory Council on Solid Waste Management. The Board of Public Utilities and the Division of Solid Waste Management submitted substantive comments which are further addressed below.

The Board of Public Utilities commented that the amendment appears not inconsistent with the plans and programs administered by the Board. However, the Board had the following specific comments:

1. This proposal states that the $1.5 million will be in lieu of a portion of the County’s $18 million project financing contribution. Does this constitute a direct dollar-for-dollar reduction of the $18 million, or some other portion?

2. Any funds applied to this project should be used for early retirement of the most expensive project debt (i.e., that incurring the highest debt) so as to maximize the long-term benefits to rate payers. There may be various bond issues at various interest rates in the financing. The nature of this financing scheme was not disclosed by the Port Authority (PA) during the McEnroe hearing process.

3. The benefit of these funds with regard to tipping-fee reduction should be applied to all county rate payers (i.e., to those who paid the investment fund taxes in the first place). Conditions should be included in this proposal to ensure that out-of-county users of the resource recovery facility (who will pay a separate, set gate fee under the service agreements) do not benefit from use of the County fund. See N.J.S.A. 13:1E-150b(1).

The Department shared the concerns of the BFU with Essex County and at the Department’s request, the County clarified the intent of the amendment as follows:

1. The proposed $1.5 payment would be a direct dollar-for-dollar reduction of the $18 million County funding obligation.

2. The funds will be used for present project construction costs pursuant to Sec. 6.05(b) of the County-PA Service contract. They would not be held for application against project debt. The reduction to the tipping fee comes about by virtue of the fact that the proposed funding contribution from Resource Recovery Investment Tax Fund moneys would not be added into the tipping fee by way of surcharge, as would be the case with the County’s other capital contributions.

3. Only County ratepayers will benefit from these project payments. The County’s tipping fee surcharge for its project contributions would be added only to the tipping fee established for
County solid waste generators under the Contract formula. Accordingly, the surcharge reduction resulting from the proposed use of Resource Recovery Investment Tax money would benefit only the County residents who will be paying the County Contract tipping fee. The non-County users will be paying the fluctuating market rate which will not be affected, one way or the other, by the County surcharge.

The Department is satisfied that the response provided by Essex County sufficiently address the concerns of the BPU and the Department.

The Division of Solid Waste Management commented that the amendment is not consistent with the plans and programs administered by the Division's Office of Recycling. The concern centers on Essex County's failure to submit the required modifications to its district recycling plan by January 10, 1988 in accordance with the Commissioner's certification of October 26, 1987 Plan Amendment. Since the time of this initial comment, the required district recycling plan modification have been submitted to the Department and a certification of that Plan Amendment was signed by the Commissioner on July 5, 1989.

The Division of Solid Waste Management also commented that since the disbursement schedule submitted by Essex County for a portion of the present fund balance did provide information such as fund balance, timing of disbursements, projected recipients of disbursements and other disbursement information, it did meet reasonable criteria for adequacy.

However, the schedule does not contain a fund projection, identify interest earnings, dates for disbursements, and fund balances for the entire Essex County Resource Recovery Investment Tax Fund.

The amendment, which is the subject of this certification, outlined the proposed use of $1.5 million of the available Fund balance in the District Resource Recovery Investment Tax Fund and provided a schedule for disbursement of that amount. The proposed amendment provided for the of the Fund to reduce rates charged to the users of the resource recovery to the Port Authority of New York and New Jersey in lieu of a portion of the County’s $18,000,000 resource recovery project financing contribution. The amendment proposed funds to be disbursed by making separate payments in the amount of $750,000 each, on July 30, 1988 and January 30, 1989 respectively. The disbursement schedule’s respective payment dates have been modified to reflect current payment schedule dates, as set forth in Section C. below.

C. Certification of Essex County District Solid Waste Management Plan Amendment

I, Christopher J. Daggett, Commissioner of the Department of Environmental Protection, in accordance with N.J.S.A. 13:1E-1 et seq., which establishes specific requirements regarding the contents of the district solid waste management plans, have reviewed the August 17, 1988 amendment to the approved Essex County District Solid Waste Management Plan and certify to the Essex County Board of Chosen Freeholder that the August 17, 1988 amendment is approved, as modified, as further specified below.

The proposed use outlined in the Essex County District Resource Recovery Investment Tax Fund Plan Amendment is in conformance with the requirements of N.J.S.A. 13:1E-150b(2) as they reduce the rates charged all user of the resource recovery facility serving the County. The ultimate demonstration of user rate reduction shall be the responsibility of the County. The proposed uses of the fund are hereby approved. All interest earnings on the fund balance shall be used only for the uses approved herein.
This approval is limited to authorization to disburse $1,500,000 during the third and fourth quarters of calendar year 1989 to the Port Authority of New York and New Jersey (PA) or the PA's escrow agent duly designated to receive and disburse resource recovery project funds on its behalf and on behalf of the project, as further described in Table XVI – (2) of the August 17, 1988 Amendment. The remaining balance in the Essex County Resource Recovery Investment Tax Fund, including accrued interest, shall not be disbursed unless and until the Department approves of a plan amendment which outlines balance, in accordance with N.J.S.A. 13:1E-150 and the criteria set forth in Attachment I. Should any disbursements from the Fund occur prior to authorization by the Department in violation of N.J.S.A. 13:1E-150b and this certification, the Department reserves the right to take appropriate enforcement action.

D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with the amendment to the Essex County District Solid Waste Management Plan herein certified, which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department of Environmental Protection and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the Essex County District Solid Waste Management Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment; provided, however, that any such registrant may, upon application to the Department of Environmental Protection, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and collector/haulers registered with the Department of Environmental Protection and operating within Essex County certified herein shall operate in compliance with this District Solid Waste Management Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department of Environmental Protection and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and 12 and all other applicable laws.

3. Types of Solid Wastes Covered by the District Solid Waste Management Plans

The provisions of the Essex County District Solid Waste Management Plan shall apply to all solid wastes defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. Also, all non-hazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6)

4. Certification to Proceed with the Implementation of Plan Amendment
This document shall serve as the certification of the Commissioner of the Department of Environmental Protection to the Essex County Board of Chosen Freeholders and pursuant to N.J.S.A. 13:1E-24c. and f., the County shall proceed with the implantation of the approved amendment contained herein.

5. Definitions

For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of term shall be the same as those found at N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-1.4 and N.J.A.C. 7:26-2.13.

6. Effective Date of Amendment

The amendment to the Essex County District Solid Waste Management Plan certified herein shall take effect immediately.

7. Audit Requirements

Essex County shall, by October 31 of each year in which moneys remain in its District Resource Recovery Investment Tax Fund, file an audit of the fund and any expenditures therefrom with the Local Finance Board in the Division of Local Government Services in the Department of Community Affairs. The audit shall be conducted by an independent public accountant.

8. Reservation of Authority

Nothing contained herein shall be construed as a limitation on any other action taken by the Department of Environmental Protection pursuant to its authority under the law. The Essex County District Solid Waste Management Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan with appendices which includes the Department’s planning guidelines, rules, regulations, orders of the Department, including the inter-district and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved.

E. Certification of Approval of the Amendment by the Commissioner of the Department of Environmental Protection

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq., I hereby approve the amendment as modified in Section C. of this certification to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on August 17, 1988.

July 14, 1989

DATE

CHRISTOPHER J. DAGGETT
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION
I. Proposed Uses

The money in the fund shall be disbursed only for the following purposes:

1. To reduce the rates charged for all users by a resource recovery facility serving the county in order to provide a gradual transition to resource recovery facility rates from sanitary landfill facility rates. A county may achieve reduction through the use of moneys in its district investment tax fund to pay directly part of the fees charged for disposal to all users of a resource recovery facility;

2. To design, finance, construct, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposing of those solid wastes which cannot be processed by a resource recovery facility or the waste products resulting from the operation of a resource recovery facility;

3. To design, finance, construct, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposal of those solid waste, on a long-term basis, if a county can demonstrate to the satisfaction of the fact that utilization of resource recovery facility is not feasible for disposal of the solid waste generated in that county;

4. To finance the closing costs for the proper closure of any terminated sanitary landfill facility located within a county whenever that county has made an investment tax rate adjustment for this purpose in accordance with the study conducted pursuant to N.J.S.A. 13:1E-146; and

5. To administer the investment tax fund, up to an amount not to exceed 2% of the total moneys appropriated to the fund during the fiscal year.

II. Disbursement Schedule

All disbursement schedules for District Resource Recovery Investment Tax Fund moneys shall be consistent with, but not be limited to, the following:

1. Narrative which outlines the purpose, background and legislative justification of and authorization for the use of the fund;
2. Narrative which provides the purpose, description and objective of the project proposed for receipt of fund moneys;
3. Narrative which provides specific project performance data, implementation schedules and project status;
4. A spread sheet or other tabular or budgetary format which provides at least the following information, over time (choice of the time interval is at the discretion of the county, but shall not be loner than annually):
   a. Initial fund balance;
   b. Additional deposits to fund based upon tax rates and projected waste generation and disposal figures, under various recycling/reduction assumptions and population/economic growth assumptions;
c. Interest accrued on fund balance, by year;
d. Recipients of fund moneys, by amount, by proposed use, by time interval;
e. Use of moneys by recipients, by amount, by time interval;
f. If available, a budget for fund disbursements.
4(a) Plan Amendment to include RRIT Fund use and disbursement

Adopted: October 26, 1988
Certified: December 30, 1988
Resolution No.: 0-88-0032

Public Notices: (1st): October 3, 1988
(2nd): October 10, 1988

Public Hearing(s): October 26, 1988
ORDINANCE NO.: 0-88-0032

Proposed by: County Executive

Sponsored by:

SUBJECT: ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and

WHEREAS, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan amending Section IV(II)(A), Resource Recovery Investment Tax Fund, by the addition thereof of Table XVI-(3); and

WHEREAS, said Plan amendment has been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory Council; now, therefore, be it

ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended as follows:

   Table XVI of the Plan entitled District Tax Fund Disbursement Schedule is hereby amended by the addition of Table XVI-(3) attached hereto.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on October 26, 1988 at 8:00 p.m., in the East Orange Town Hall, 44 City Hall Plaza, East Orange, NJ.

3. That the Clerk of this Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to be not less than ten days prior to the date set for hearing. Said notice shall state that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That a copy of this Ordinance and the Plan Amendment shall be submitted to the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Phillip Thigpen, Director, Department of Planning and Economic Development, Martin Lund, Director, Division of Solid Waste Management and one (1) certified copy to H. Curtis Meanor, Acting County Counsel, and one (1) certified copy to Martin Lund, Director, Division of Solid Waste Management.
Disbursement Schedule – Paid from Essex County Resource Recovery Investment Tax District Fund (Funds accrued through July 31, 1987).

1. Disbursements for site improvements operations, equipment and cost subsidy at the Essex County Regional Leaf Composting Facility.

   A. 1987(8) Composting Operations:
      a. Personnel $28,663.04
      b. Equipment $76,997.73
      c. Other $37,283.69
      Total A - $142,944.46

   B. 1988 Equipment Purchases:
      a. "Wildcat" Leaf Turner $109,583.00
      b. Track Loader "631B" $119,310.00
      Total B - $228,893.00

   C. 1988(9) Composting Operations
      a. Subsidy to Dedicated Operating Fund based on 10,000 tons delivered at $15.53 per ton $155,300.00
      Disbursement totals (A,B,C) $527,137.46

2. Fund balance as of August 31, 1988

   A. Monies deposited by the Director, Division of Taxation, in the Department of Treasury, to the Essex County District Resource Recovery Investment Tax Fund:
      $5,168,543.68

   B. Interest on said Fund through August 31, 1988
      $224,558.95
      Total Fund Assets $5,393,102.63
# TABLE A

Disbursement Schedule – Essex County Resource Recovery Investment Tax District Fund (Funds accrued through July 31, 1987).

1. Disbursement for site improvements, operations and equipment cost subsidy at the County Regional Leaf Compost Facility.

   A. 1987(8) Composting Operations:

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Total</th>
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<tr>
<td>(a) Personnel Supervisory</td>
<td>$ 3,150.92</td>
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<tr>
<td>Oper/Labors</td>
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<td>(b) Equipment Rent Loaders</td>
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<td>Repairs</td>
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<td>(c) Other Water</td>
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<tr>
<td>Fuel</td>
<td>$  4,429.55</td>
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<td>Supplies</td>
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<tr>
<td>Safety Equip</td>
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<tr>
<td>Permits</td>
<td>$     810.00</td>
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<tr>
<td>Rent Facility</td>
<td>$     225.00</td>
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<tr>
<td>Admin.</td>
<td>$  1,570.00</td>
<td>$  37,283.69</td>
</tr>
<tr>
<td>Total A.</td>
<td></td>
<td>$142,944.46</td>
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   B. 1988 Equipment Purchases:

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<th>Amount</th>
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<tr>
<td>(a) &quot;Wildcat&quot; leaf turner Attachment</td>
<td>$109,583.00</td>
<td></td>
</tr>
<tr>
<td>(b) Track Leader “631B”</td>
<td>$119,310.00</td>
<td></td>
</tr>
<tr>
<td>Total B.</td>
<td></td>
<td>$228,893.00</td>
</tr>
</tbody>
</table>

   C. 1988(9) Composting Operations:

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Subsidy to dedicated operating fund based on 10,000 tons delivered at $15.53 per ton</td>
<td>$155,300.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$527,137.46</td>
<td></td>
</tr>
</tbody>
</table>

2. Fund balance as of August 31, 1988

   A. Moneys Deposited by the Director, Division of Taxation, in the Department of treasury. To the Essex County District Resource Recovery Investment Tax Fund.

   $5,168,543.68

   B. Interest on said fund through August 31, 1988 $224,558.95

   Total Fund Assets $5,393,102.63
4(b) DEPE Certification
December 30, 1988
5(a) Plan Amendment to include Columbus Hospital incinerator
Adopted:  October 26, 1988
Certified:  September 1, 1989
Resolution No:  0-88-0031

Public Notices:  (1st):  October 3, 1988
(2nd):  October 10, 1988
Public Hearing(s):  October 26, 1988
SUBJECT: ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and

WHEREAS, Columbus Hospital, located at 495 No. 13th Street, Newark, New Jersey, has requested that the County approve by inclusion in the Plan its use and operation of an on-site incinerator for the incineration of pathological and infectious hospital waste generated by the hospital, to replace a old incinerator used for said purpose, which was and is included in Table IX(C) of said Plan; and

WHEREAS, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan to approve and include said incinerator; now, therefore, be it

ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That the Essex County Solid Waste Management Plan, as amended, is hereby amended to approve and include therein the incinerator to be used and operated by Columbus Hospital for incineration of pathological and infectious waste generated by said hospital. Capacity of said incinerator shall not exceed 435 lbs. per hour and there shall be no incineration of hospital waste which may be disposed of at the Essex County solid waste transfer stations. Waste not generated at Columbus Hospital may not be incinerated in said incinerator.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on October 26, 1988, at 8:00p.m. in the East Orange Town Hall, 44 City Hall Plaza, East Orange, N.J.

3. That the Clerk of this Board if hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to be not less than ten days prior to the date set for hearing. Said notice shall state that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That a copy of this Ordinance and the Plan amendment shall be submitted to the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Phillip Thigpen, Director, Department of Planning & Economic Development, Martin Lund, Director, Division of Solid Waste Management and H. Curtis Meanor, Acting County Counsel.
EXISTING SOLID WASTE FACILITIES
PROPOSED WASTE FLOWS*
5(b) DEPE Certification
September 1, 1989
A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state's counties, and Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Board of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department approved, with modifications, the Essex County District Solid Waste Management Plan.

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for the ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition, to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district's waste for the ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements.)

The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. The Essex County Board of Chosen Freeholder completed such a review and on October 26, 1988, adopted an amendment to its approved district solid waste management plan. The proposed amendment includes a replacement incinerator to burn medical waste generated at Columbus Hospital located in Newark, into the approved Essex County plan.

The amendment was received by the Department of Environmental Protection on April 11, 1989, and copies were distributed to various state level agencies for review and comment, as required by law. The Department has reviewed this amendment, as well as the entire Essex County District Solid Waste Management Plan, and has determined that the amendment adopted by the Essex County Board of Chosen Freeholders on October 26, 1988 is approved as provided in N.J.S.A. 13:1E-24. Continuing deficiencies in the district plan are outlined in Section C below.
B. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I, Christopher J. Daggett, Commissioner of the Department of Environmental Protection have studied and reviewed the October 26, 1988 amendment to the Essex County District Solid Waste Management Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that this plan amendment is consistent with the Statewide Solid Waste Management Plan.

In addition, the Division of Solid Waste Management circulated the plan amendment to fifteen review agencies and solicited their review and recommendations. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various agencies, bureaus, and divisions within the Department of Environmental Protection as well as the Board of Public Utilities. Also among these agencies were the Department of Community Affairs, the Department of Public Advocate, the Department of Health, the Department of Agriculture, the Department of Transportation and the New Jersey Turnpike Authority. Of these agencies, the following did not object to the proposed plan amendment: the N.J.D.E.P. Divisions of Environmental Quality, Water Resources, Fish, Game and Wildlife and Parks and Forestry; the State Departments of Agriculture, Community Affairs and Transportation; the Board of Public Utilities, the Green Acres Program and the New Jersey Advisory Council on Solid Waste Management. The following agencies failed to respond to our requests for comments: the N.J.D.E.P. Division of Coastal Resources, the Departments of Health and the Public Advocate, the New Jersey Turnpike Authority and the U.S. Environmental Protection Agency. The Division of Solid Waste Management submitted substantive comments which are addressed below.

The Division of Solid Waste Management commented that pursuant to the Comprehensive Regulated Medical Waste Management Act, N.J.S.A. 13:1E-48.14a, the existing Columbus Hospital incinerator is grandfathered within the Essex County District Solid Waste Management Plan since its operation predated the effective date of the Act. Specifically, this citation states that “Every existing incinerator or facility in operation as of the effective date of this act that accepts regulated medical waste for disposal shall be incorporated within the relevant district solid waste management plan required pursuant to the provisions of the Solid Waste Management Act, P.L. 1970, c. 39, without regard to the provisions of sections 11, 14 and 15 of P.L. 1975, c. 326.”

The Division also commented that although the Columbus Hospital intends to incinerate only pathological and infectious waste generated by the hospital, should the Columbus Hospital choose to operate in the future as a commercial incinerator, it will be required to obtain a tariff from the Board of Public Utilities. Specifically, the Comprehensive Regulated Medical Waste Management Act, N.J.S.A. 13:1E-48.12b, states “The Board of Public Utilities shall have jurisdiction over rates or charges for the disposal of regulated medical waste received by any commercial incinerator or commercial facility in this state that accepts regulated medical waste for disposal.”

C. Certification of Essex County District Solid Waste Management Plan Amendment

I, Christopher J. Daggett, Commissioner of the Department of Environmental Protection, in accordance with N.J.S.A. 13:1E-1 et seq. and N.J.S.A. 13:1E-21, which established specific requirements regarding the contents of the district solid waste management plans, have reviewed the October 26, 1988 amendment to the approved Essex County District Solid Waste Management Plan and certify to the Essex County Board of Chosen Freeholders that the October 26, 1988 amendment is approved as further below.
The inclusion into the district plan of the replacement incinerator at the Columbus Hospital, located at
495 North Thirteenth Street, Block 650, Lot 22, in the City of Newark, New Jersey, to incinerate medical
waste generated at the hospital is approved. Waste not generated at Columbus Hospital may not be
incinerated at the facility. The construction or operation of any solid waste facility shall be preceded by
the acquisition of all necessary permits and approvals pursuant to N.J.S.A. 13:1E-1 et seq., and all
applicable laws. The issuance of operating permits pursuant to the Solid Waste Management Act is
limited to those applicants found by the Department and the Attorney General to be deserving of
licensing pursuant to the provisions of N.J.S.A. 13:1E-126 et seq.

The Department has also reviewed the entire Essex County District Solid Waste Management Plan,
including this amendment, to determine whether the plan fulfills the requirements set forth in N.J.S.A.
13:1E-21. The results of that review is as follows:

N.J.S.A. 13:1E-21b.(1) requires the designation of a department, unit, or committee of county
Government…to supervise the implantation of the county’s Solid Waste Management Plan.

Although Essex County is implementing the construction of its resource recovery facility, there has been
no formal designation of an implementation agency to oversee the entire solid waste program.
Therefore, Essex County is hereby directed to submit to the Department a plan amendment designating
the solid waste management implementation agency for the district.

N.J.S.A. 13:1E-21b.(3) requires a site plan which shall include all existing solid waste disposal facilities
located within the Solid Waste Management District…and sufficient additional available suitable sites to
provide solid waste facilities to treat and dispose of the actual and projected amounts of solid waste
contained in the report accompanying the plan.

It is the Department’s understanding that Essex County has contracted with an out-of-state landfill to
accept residual and non-processible waste when the county’s resource recovery facility becomes
operational. This disposal arrangement is inconsistent with the Department’s policy that solid waste
Districts must be self-sufficient with regard to solid waste disposal by December 31, 1992. Therefore,
Essex County is directed to submit a plan amendment designating an in-state landfill site.

N.J.S.A. 13:1E-21b.(4) requires every solid waste management plan to include a survey of proposed
collection districts and transportation routes…to existing or available suitable sites for solid waste
facilities.

As Essex County has not specified routes to and from its disposal facilities, the solid waste
management plan is deficient in this respect.

As previously stated in the October 26, 1987, Certification of August 29, 1987 Plan Amendment, Essex
County was required to identify in a subsequent plan amendment, specific routes from certain
municipalities to its resource recovery facility. The municipalities requiring further route identification
were: Caldwell, Cedar Grove, Essex Fells, Fairfield, Montclair, North Caldwell, South Orange, Verona,
and West Caldwell. While the plan amendment was to be submitted following a public hearing to be
held within 45 days of the date of the certification, the plan amendment has not been received by the
Department to date. When Essex County addresses this requirement, they are advised that certain
solid waste vehicles are incapable of complying with federal weight limitations (Federal Bridge Formula)
set forth for interstate roadways. Accordingly, if interstate routes are to be utilized, haulers must
demonstrate their ability to comply with the weight limitations of the Federal Bridge Formula.
D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with the within amendment to the Essex County District Solid Waste Management Plan and which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department of Environmental Protection and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the Essex County District Solid Waste Management Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment; provided, however, that any such registrant may, upon application to the Department of Environmental Protection, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and collector/haulers registered with the Department of Environmental Protection and operating within Essex County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the Essex County District Solid Waste Management Plan.

Any facility operator or collector/hauler who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department of Environmental Protection and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9, and 12 and all other applicable laws.

3. Types of Solid Wastes Covered by the District Solid Waste Management Plans

The provisions of the Essex County District Solid Waste Management Plan shall apply to all solid wastes defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. Also, all non-hazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6).

4. Certification to Proceed with the Implementation of Plan Amendment

This document shall serve as the certification of the Commissioner of the Department of Environmental Protection to the Essex County Board of Chosen Freeholders and pursuant to N.J.S.A. 13:1E-24c. and f., the county shall proceed with the implementation of the approved amendment contained herein.

5. Definitions
For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of term shall be the same as those found at N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-1.4 and -2.13.

6. **Effective Date of Amendment**

The amendment to the Essex County District Solid Waste Management Plan contained herein shall take effect immediately.

7. **Reservation of Authority**

Nothing contained herein shall be construed as a limitation on any other action taken by the Department of Environmental Protection pursuant to its authority under the law. The Essex County District Solid Waste Management Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan with appendices which includes the Department’s planning guidelines and rules, regulations, and order of the Department, including the inter-district and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved.

E. **Certification of Approval of the Amendment and Notification of Deficiencies by the Commissioner of the Department of Environmental Protection**

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq, I hereby approve the amendment as outlined in Section C. of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on October 26, 1988. I further direct the Essex County Board of Chosen Freeholders, to remedy those deficiencies outlined in Section C. of this certification as soon as possible.

September 1, 1989
DATE

CHRISTOPHER J. DAGGETT
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION
6(a) Plan Amendment to include District Recycling Plan
Adopted: January 25, 1989
Certified: July 5, 1989
Resolution No: 0-88-0044

Public Notices: (1st): January 7, 1989
(2nd): January 14, 1989

Public Hearing(s): January 25, 1989
SUBJECT: ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and

WHEREAS, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan amending and superseding the Recycling Plan provisions thereof; and

WHEREAS, said Plan amendment has been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory Council; now, therefore, be it

ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended by the adoption of the attached amendment to the Essex County Solid Waste Management Plan entitled “Essex County Recycling Plan.”

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on January 25, 1989 at 8:00p.m., in the West Orange Town Hall, 66 Main St., West Orange.

3. That the Clerk of this Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to be not less than ten days prior to the date set for hearing. Said notice at the offices of every municipality within the County.

4. Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing hereon.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Phillip Thigpen, Director, Department of Planning & Economic Development, Martin Lund, Director, Division of Solid Waste Management and one (1) certified copy to H. Curtis Meanor, Acting County Counsel.
ESSEX COUNTY RECYCLING PLAN

(Ordinance No. 088-0044 Adopted 1-25-89 as an Amendment to Essex County’s Solid Waste Management Plan of April, 1987)

Prepared by
Essex County Department of Planning & Economic Development
Essex County Division of Solid Waste Management

This Recycling Plan supersedes and replaces all previous recycling provisions of the Essex County Solid Waste Management Plan
Acknowledgements

County Executive Nicholas Amato
County Administrator Cardell Cooper

Essex County Board of Chosen Freeholders
  Thomas P. Giblin, President
  Joseph C. Parlavecchio, Vice President
  Delores W. Battle
  Sara B. Bost
  Carmine Casciano
  James A. Cavanaugh
  Arthur L. Clay
  Leroy J. Jones Jr.
  Monroe Jay Lustbader

Essex County Department of Planning & Economic Development
  Phillip Thigpen, Director

Essex County Division of Solid Waste Management
  Martin Lund, Director
  Paul Petto, Recycling Coordinator

The Essex County Recycling Plan was prepared with the assistance of the Solid Waste Advisory County Recycling Committee.

Assemblyman Harry McEnroe, SWAC Chairman

Committee Members
  Robert Italiano, Chairman
  Carolyn Bourne
  Rocco Meola
  Jean Clark
  Carol McCurdy
  Dominick D’Altilio
  Nancy Pierson
  Joe D’Araco
  Frank Sudol
# ESSEX COUNTY RECYCLING PLAN
(Ordinance No. 088-0044 Adopted 1-25-89 as an Amendment to Essex County’s Solid Waste Management Plan of April, 1987)

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Background</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Statewide Mandatory Source Separation and Recycling Act Summary</td>
<td>1</td>
</tr>
<tr>
<td>1.2.1 County Responsibilities</td>
<td>1</td>
</tr>
<tr>
<td>1.2.2 Municipal Responsibilities</td>
<td>2</td>
</tr>
<tr>
<td>1.3 Previous Recycling Plans of Essex County Superseded</td>
<td>4</td>
</tr>
<tr>
<td>1.4 Modifications to the Recycling Plan</td>
<td>4</td>
</tr>
<tr>
<td>1.4.1 Major Modifications</td>
<td>4</td>
</tr>
<tr>
<td>1.4.2 Minor Modifications</td>
<td>5</td>
</tr>
<tr>
<td>1.5 Current Status of Municipal Recycling</td>
<td>5</td>
</tr>
<tr>
<td>2.0 Recycling Plan Elements</td>
<td>10</td>
</tr>
<tr>
<td>2.1 Designation of Recycling Coordinator</td>
<td>10</td>
</tr>
<tr>
<td>2.2 Materials to be Recycled and Waste Reduction Targets</td>
<td>12</td>
</tr>
<tr>
<td>2.2.1 Calculating the Recycling Rate</td>
<td>12</td>
</tr>
<tr>
<td>2.2.2 Designated Recyclables for Essex County</td>
<td>13</td>
</tr>
<tr>
<td>2.2.3 Waste Reduction Goals</td>
<td>16</td>
</tr>
<tr>
<td>2.2.4 Municipal Recycling Targets</td>
<td>16</td>
</tr>
<tr>
<td>2.3 Recycling Implementation Strategy</td>
<td>19</td>
</tr>
<tr>
<td>2.3.1 County and Municipal Responsibilities</td>
<td>19</td>
</tr>
<tr>
<td>2.3.1.1 Designation of a Recycling Coordinator</td>
<td>19</td>
</tr>
<tr>
<td>2.3.1.2 Identification of Markets</td>
<td>19</td>
</tr>
<tr>
<td>2.3.1.2.A Priority Consideration for Existing Recycling Businesses</td>
<td>19</td>
</tr>
<tr>
<td>2.3.1.2.B Market Availability</td>
<td>19</td>
</tr>
<tr>
<td>2.3.1.2.C Market Demand</td>
<td>20</td>
</tr>
<tr>
<td>2.3.1.2.D Marketing Exemptions</td>
<td>20</td>
</tr>
<tr>
<td>2.3.1.2.E Marketing Limitations</td>
<td>20</td>
</tr>
<tr>
<td>2.3.1.3 Identification of Processing Capacity for Each Designated Material</td>
<td>21</td>
</tr>
<tr>
<td>2.3.1.3.A Composting-Processing for Vegetative Wastes (Leaves)</td>
<td>21</td>
</tr>
<tr>
<td>2.3.1.3.B Prior Plan Approval for Compost Site Applications</td>
<td>24</td>
</tr>
<tr>
<td>2.3.1.4 Publicity and Education</td>
<td>24</td>
</tr>
<tr>
<td>2.3.1.5 Mandatory Source Separation and Anti-Scavenger Ordinances</td>
<td>26</td>
</tr>
<tr>
<td>2.3.1.5.A Exemptions to Mandatory Source Separation Ordinances</td>
<td>29</td>
</tr>
<tr>
<td>2.3.1.6 Enforcement</td>
<td>29</td>
</tr>
<tr>
<td>2.3.1.7 Collection/Accumulation of Designated Materials</td>
<td>30</td>
</tr>
<tr>
<td>2.3.1.7.A Commingling of Designated Recyclable Materials With Waste is Prohibited</td>
<td>32</td>
</tr>
<tr>
<td>2.3.1.8 Maintenance of Recycling Records</td>
<td>32</td>
</tr>
<tr>
<td>2.3.1.9 Incorporating Recycling in a Local Master Plan</td>
<td>34</td>
</tr>
<tr>
<td>2.3.1.10 Preferential Use of Compost</td>
<td>34</td>
</tr>
</tbody>
</table>
List of Tables

Tables                                                                 Page #
Table 1 – Municipal Recycling Totals and Rates                       6
Table 2 – Essex County Recycling Programs                           8
Table 2A – Essex County Residential Recycling Programs             8
Table 2B – Essex County Commercial Recycling Program               9
Table 3 – Municipal Recycling Coordinators                         10
Table 4 – Designated Recyclables for Essex County                 15
Table 5 – E.C. Waste Reduction and Recycling Goals                 17
Table 6 – Comparison of Current Rates to Goals                    18
Table 7 – Operating Permitted Composting Sites in Essex County     23
Table 8 – Municipal Recycling Ordinances                           28

Appendices

Appendix I – NJDEP recommendations for incorporating recycling in the Local Master Plan
1.0 BACKGROUND

1.1 INTRODUCTION

This Plan has been prepared in accordance with the directives of the Statewide Mandatory Source Separation & Recycling Act P.L. 1987 c 102. and in response to conditions of the October 27, 1987, New Jersey Department of Environmental Protection (DEP) Certification of the April 29, 1987 Amendment to the Essex County District Solid Waste Management Plan.

1.2 SUMMARY OF STATEWIDE MANDATORY SOURCE SEPARATION AND RECYCLING ACT

The Statewide Mandatory Source Separation and Recycling Act (P.L. 1987. c. 102), hereinafter “the Act,” is summarized below in terms of County and Municipal responsibilities. Section 1.2.1 and 1.2.2 are quotes from the Act.

1.2.1 COUNTY RESPONSIBILITIES

Section 3.a Each county shall, within six months of the effective date of this act and after consultation with each municipality, prepare and adopt a district recycling plan to implement the State Recycling Plan goals. Each plan shall be adopted as an amendment to the district solid waste management plan.

b. Each district recycling plan required pursuant to this section shall include, but need not be limited to:
   (1) Designation of a district recycling coordinator;
   (2) Designation of the recyclable materials to be source separated in each municipality which shall include, in addition to leaves, at least three other recyclable materials separated from the municipal solid waste stream;
   (3) Designation of the strategy for the collection, marketing and disposition of designated source separated recyclable materials in each municipality; and
   (4) Designation of recovery targets in each municipality to achieve the maximum feasible recovery of recyclable materials from the municipal solid waste stream which shall include, at a minimum, the following schedule:
      (a) The recycling of at least 15% of the prior year’s total municipal solid waste stream by the end of the first full year succeeding the adoption and approval by the department of the district recycling plan; and
      (b) The recycling of at least 25% of the second preceding year’s total municipal solid waste stream by the end of the second full year succeeding the approval by the department of the district recycling plan.

c. Each district recycling plan, shall accord priority consideration to persons engaging in the business of recycling or otherwise lawfully providing recycling services on behalf of a county or municipality on January 1, 1986, if that person continues to provide recycling services prior to the adoption of the plan and that person has not discontinued these services for a period of 90 days or more between January 1, 1986, and the date on which the plan is adopted.
Section 4. a. Each county shall, within six months of the adoption and approval by the department of the district recycling plan required pursuant to section 3 of this amendatory and supplementary act, solicit proposals from, review the qualifications of, and enter into contracts or agreements on behalf of municipalities with persons providing recycling services or operating recycling centers for the collection, storage, processing, and disposition of recyclable materials designated in the district recycling plan in those instances where these services are not otherwise provided by the municipality, interlocal service agreement or joint service program, or other private or public recycling program operator.

Section 13. Each district recycling plan shall identify the leaf composting facility or facilities to be utilized by each municipality within the county.

1.2.2 MUNICIPAL RESPONSIBILITIES

Section 6. Each municipality in this State shall, within 30 days of the effective date of this act, designate one or more persons as the municipal recycling coordinator. Each municipality shall establish and implement a municipal recycling program in accordance with the following requirements and schedule:

a. Within six months of the adoption by the county and approval by the department of the district recycling plan required pursuant to section 3 of this act, each municipality shall provide for a collection system for the recycling of the recyclable materials designated in the district recycling plan as may be necessary to achieve the designated recovery targets set forth in the plan in those instances where a recycling collection system is not otherwise provided for by the county, interlocal service agreement or joint service program, or other private or public recycling program operator.

b. The governing body of each municipality shall, within 30 days of the effective date of any contracts or agreements entered into by the county or other local government unit to market one or more of the specific designated recyclable market one or more of the specific designated recyclable materials as required pursuant to section 4 of this act, adopt an ordinance which requires persons generating municipal solid waste within its municipal boundaries to source separate, in addition to leaves, the specified recyclable materials for which markets have been secured and, unless recycling is otherwise provided for by the generator, place these specified recyclable materials for collection in the manner provided by the ordinance.

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

d. The revised master plan shall include provisions for the collection, disposition and recycling of recyclable materials designated in the municipal recycling ordinance adopted pursuant to subsection b. of this section, and for the collection, disposition and recycling of designated recyclable materials within any development proposal for the construction of 50 or more units of single family or 25 or more units of multi-family residential housing and any commercial or industrial development proposal for the utilization of 1,000 square feet or more of land.
e. The governing body of each municipality shall, on or before July 1, 1988 and on or before July 1 of each year thereafter, submit a recycling tonnage report to the New Jersey Office of Recycling in accordance with rules and regulations adopted by the department therefore.

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

Section 13.a. Within 12 months of the effective date of this act, all leaves collected by a municipality pursuant to the provisions of section 14 of this act shall be transported to a leaf composting facility. Each district recycling plan shall identify the leaf composting facility or facilities to be utilized by each municipality within the county.

b. No sanitary landfill facility in this State shall accept for final disposal truckloads composed primarily of leaves at any time, except that leaves source separated from solid waste may be accepted by a sanitary landfill facility in those instances where the facility has provided and maintains for that purpose separate leaf composting facilities, and the composted leaves are utilized as part of the final vegetative cover for the landfill, or for other uses as a soil conditioning material.

Section 14. Within 12 months of the effective date of this act, each municipality in this State shall, by a duly adopted ordinance of its governing body, provide for a collection system for leaves generated from residential premises, and require that persons occupying residential premises within its municipal boundaries shall, for the period from September 1 to December 31 of each year, source separate leaves from solid waste generated at those premises and, unless leaves are stored or recycled for composting or mulching by the generator, place the leaves for collection in the manner provided by the ordinance.

Section 15. All State and local agencies responsible for the maintenance of public lands in this State shall, to the maximum extent practicable and feasible, give due consideration and preference to the use of compost materials in all land maintenance activities which are to be paid for with public funds.

1.3 PREVIOUS RECYCLING PLANS OF ESSEX COUNTY SUPERSEDED

This Recycling Plan supersedes and replaces all previous recycling provisions of the District Solid Waste Management Plan.

1.4 MODIFICATIONS TO THE RECYCLING PLAN

1.4.1 MAJOR MODIFICATIONS

All major modifications/amendments to the County Recycling Plan as described below, should be carried out pursuant to the procedures contained in Section 23-24 of the N.J. Solid Waste Management Act (N.J.S.A. 13:1E, et. seq.).

For the purposes of this Plan the following will be considered major modifications/amendments to the County Recycling Plan.
a. The designation/incorporation of the specific recycling centers into the plan except composting facilities as provided for in Section 2.3.1.3.B.

b. Substantive changes in the quantitative recycling targets for County municipalities.

c. The identification of specific materials to be included or deleted from the list of “designated” materials to be recycled by all Essex County municipalities.

d. Any changes to the policies and recommendations regarding municipal and county enforcement and municipal and county recycling exemptions.

e. Substantive changes in the allocation of funds under the N.J. State Resource Recovery Investment Tax Fund pursuant o N.J. 13:1E-136, et. seq.) when these changes effect allocations for recycling purposes.

f. Any other modification/amendment to the County Recycling Plan which has a County-wide and/or long-term impact on recycling projects and programs in Essex County.

1.4.2 MINOR MODIFICATIONS

Minor modifications to the County Recycling Plan should be made by the Division of Solid Waste Management. Minor modifications to the adopted Recycling Plan include:

a. Incorporation of annual Recycling Collection and/or Marketing Plans submitted by municipalities or modification to these plans.

b. Incorporation of additional designated materials for individual municipalities pursuant to municipal requests.

c. Revisions to statistical tables or descriptive tables.

d. Other minor technical or administrative modifications as may be necessary.

1.5 CURRENT STATUS OF MUNICIPAL RECYCLING

As illustrated in the following table, in 1987 Essex County municipalities collectively achieved a 12% recycling rate when only designated materials are counted. When leaves, while goods auto scrap, wood waste, and all other recyclables are counted the estimated 1987 recycling rate in Essex County is 26%. Further detail on the targeted recovery goals by municipality are included in Section 2.2.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BELLEVILLE</td>
<td>1,916</td>
<td>2,659</td>
<td>1,897</td>
<td>2,630</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>BLOOMFIELD</td>
<td>4,511</td>
<td>4,371</td>
<td>4,163</td>
<td>3,766</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>CALDWELL</td>
<td>1,452</td>
<td>962</td>
<td>756</td>
<td>958</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>CEDAR GROVE</td>
<td>620</td>
<td>1,610</td>
<td>620</td>
<td>747</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>EAST ORANGE</td>
<td>3,125</td>
<td>4,691</td>
<td>71</td>
<td>1,218</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>ESSEX FELLS</td>
<td>241</td>
<td>2,342</td>
<td>131</td>
<td>199</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>FAIRFIELD</td>
<td>1,023</td>
<td>1,060</td>
<td>462</td>
<td>948</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>GLEN RIDGE</td>
<td>300</td>
<td>625</td>
<td>293</td>
<td>433</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>IRVINGTON</td>
<td>3,833</td>
<td>1,714</td>
<td>3,622</td>
<td>1,450</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>LIVINGSTON</td>
<td>1,703</td>
<td>8,833</td>
<td>1,404</td>
<td>7,072</td>
<td>5%</td>
<td>24%</td>
</tr>
<tr>
<td>MAPLEWOOD</td>
<td>3,264</td>
<td>3,914</td>
<td>1,002</td>
<td>1,490</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>MILLBURN</td>
<td>5,520</td>
<td>8,898</td>
<td>2,049</td>
<td>2,437</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>MONTCLAIR</td>
<td>4,307</td>
<td>8,184</td>
<td>4,707</td>
<td>5,668</td>
<td>17%</td>
<td>21%</td>
</tr>
<tr>
<td>NEWARK</td>
<td>60,340</td>
<td>86,112</td>
<td>25,962</td>
<td>33,685</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>NORTH CALDWELL</td>
<td>0</td>
<td>123</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>NUTLEY</td>
<td>3,024</td>
<td>3,781</td>
<td>2,793</td>
<td>2,872</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>ORANGE</td>
<td>0</td>
<td>295</td>
<td>0</td>
<td>56</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>ROSELAND</td>
<td>324</td>
<td>757</td>
<td>31</td>
<td>316</td>
<td>1%</td>
<td>9%</td>
</tr>
<tr>
<td>SOUTH ORANGE</td>
<td>1,127</td>
<td>3,122</td>
<td>1,094</td>
<td>1,277</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>VERONA</td>
<td>461</td>
<td>0</td>
<td>449</td>
<td>0</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>WEST CALDWELL</td>
<td>3,515</td>
<td>4,619</td>
<td>3,453</td>
<td>3,894</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>WEST ORANGE</td>
<td>6,089</td>
<td>8,118</td>
<td>3,272</td>
<td>4,106</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>107,199</td>
<td>156,838</td>
<td>58,230</td>
<td>75,222</td>
<td>10%</td>
<td>12%</td>
</tr>
</tbody>
</table>

**AVERAGES**

**FOOTNOTES:**

1. The Total Recycled includes all documented recycling tonnage for the 1986 Tonnage Grants and all submitted totals from 1987 applications. In 1986, Orange and North Caldwell did not apply for Tonnage Grants. Therefore, we have no verified records of recycling. In 1987 Verona did not apply and N. Caldwell only documented leaves composted.

2. The Total Recycled Designated Material includes documented (1986) and submitted (1987) recycling totals for all materials included in the Mandatory Recycling Act’s definition of “Designated recyclable materials” plus ferrous scrap, non-ferrous scrap, and white goods collected by municipalities.

3. The Percent of Total Waste recycled is calculated using only designated material tonnage. The amount of total waste is included in Table 5 (p. 17).

4. The 1987 recycling totals have not yet been audited by the NJ Office of Recycling (as of 12/86), and are therefore subject to modification.
The following is a brief description of the status, and plans for expanding the Essex County – Occupational Center (OC) Regional Curbside Collection Program.

This program has substantially exceeded its goals. While originally expected to serve the needs of six municipalities, the OC has collection contracts with 10 Essex County municipalities as of September 1, 1988. Details on collection are provided in Table 2A below.

The continued growth of this program is encountered by the County, however, growth is dependent on the ability of the County and the OC to provide resources and the willingness of municipalities to contract with the OC.

Tables 2A & 2B on the following pages illustrate the scope of municipally-arranged residential and commercial recycling programs.

In those municipalities without existing collection services, a collection system must be developed in accordance with Section 2.3.1.7 of this Plan. The Act calls for collection strategies to be implemented within six (6) months of Plan approval. This Recycling Plan calls for municipal submission of a compliance plan within 60 days of Plan approval if the municipality is not in compliance at that time (see Section 2.3.1.7).
## TABLE 2B: ESSEX COUNTY COMMERCIAL RECYCLING PROGRAMS

<table>
<thead>
<tr>
<th>TOWNS</th>
<th>COLLECTION AGENT</th>
<th>MATERIAL</th>
<th>SCHEDULE</th>
<th>DROP-OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALDWELL</td>
<td>MUNICIPAL</td>
<td>OCC, OP</td>
<td>-</td>
<td>YES</td>
</tr>
<tr>
<td>EAST ORANGE</td>
<td>CONTRACT</td>
<td>OCC</td>
<td>4m</td>
<td>NO</td>
</tr>
<tr>
<td>MONTCLAIR</td>
<td>MUNICIPAL</td>
<td>OCC, OP</td>
<td>4m</td>
<td>NO</td>
</tr>
<tr>
<td>SOUTH ORANGE</td>
<td>PRIVATE</td>
<td>OCC, OP</td>
<td>4m</td>
<td>NO, YES</td>
</tr>
</tbody>
</table>

**FOOTNOTES TO TABLES 2A & 2B**

- OCEC – Occupational Center of Essex County, provides service on contract to municipality.
- OC/MUNIC – One section or material by OCEC, another by municipal crews.
- CONTRACT – Private hauler/collector provides service on contract to town.
- PRIVATE – Private/collector provides services directly to generator.
- VOL – Volunteer group provides service.

- N – Newspaper  GL – Glass  AL – Aluminum  TN – Tin
- PE – Polyethyleneterephthalate (PET)  HD – High Density Polyethelyne
- OP – Office paper  OCC – Corrugated  FE – Ferrous/Non-Ferrous Scrap
- WG – White Goods

- *Materials in parenthesis () are set out mixed. (GL) AL means glass mixed, but aluminum separate. Double parenthesis (()) indicates marketing in mixed state, single parenthesis, therefore, assumes municipal sorting before marketing.

- **Frequency of collections is indicated per material.**
  - “1m” means once per month
  - “2m” means every other week or (1st, 3rd); (2nd, 4th) weeks
  - “4m” means every week
  - “same” means collections of N and containers on same day
  - “(same)” means collections of N and containers on same truck
  - “alt” means collections of N one week and containers next week

- +Means open for use by residents (or anyone) at least during regular working hours and weekends.
2.0 PLAN ELEMENTS

2.1 DESIGNATION OF RECYCLING COORDINATOR

The officially designated Recycling Coordinator for Essex County shall be the person employed in the Division of Solid Waste Management who has been so designated by the Director of the Department of Planning and Economic Development. The Recycling Coordinator, Paul Petto, can be reached at:

Essex County Division of Solid Waste Management
Hall of Records – Room 514
465 Dr. Martin Luther King Jr. Blvd.
Newark, New Jersey  07102
(201) 621-6588

The County maintains a list of Municipal Recycling Coordinators.
As of September 1, 1988 they are:

<table>
<thead>
<tr>
<th>MUNICIPAL RECYCLING COORDINATORS IN ESSEX COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph J. Scaperrotta, Jr.</td>
</tr>
<tr>
<td>Recycling Coordinator</td>
</tr>
<tr>
<td>152 Washington Avenue</td>
</tr>
<tr>
<td>Belleville, NJ  07109</td>
</tr>
<tr>
<td>201-450-3300</td>
</tr>
<tr>
<td>Cosimo Matarazzo</td>
</tr>
<tr>
<td>Town of Bloomfield</td>
</tr>
<tr>
<td>Municipal Plaza</td>
</tr>
<tr>
<td>Bloomfield, NJ  07003</td>
</tr>
<tr>
<td>201-680-4009</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Thomas Carracino</td>
</tr>
<tr>
<td>Town of Caldwell</td>
</tr>
<tr>
<td>1 Provost Square</td>
</tr>
<tr>
<td>Caldwell, NJ  07006</td>
</tr>
<tr>
<td>201-226-6100</td>
</tr>
<tr>
<td>Joseph D’Giacomo</td>
</tr>
<tr>
<td>Town of Cedar Grove</td>
</tr>
<tr>
<td>525 Pompton Avenue</td>
</tr>
<tr>
<td>Cedar Grove, NJ  07009</td>
</tr>
<tr>
<td>201-239-1410</td>
</tr>
<tr>
<td>Dominick D’Altilio</td>
</tr>
<tr>
<td>City of East Orange</td>
</tr>
<tr>
<td>44 City Hall Plaza</td>
</tr>
<tr>
<td>East Orange, NJ  07019</td>
</tr>
<tr>
<td>201-266-5337</td>
</tr>
</tbody>
</table>
Robert DiTommaso
Planning Director
Township of Essex Fells
P.O. Box 38
Essex Fells, NJ 07021
201-226-3400

Tom Tucci
Town of Fairfield
230 Fairfield Rd.
Fairfield, NJ 07006
201-882-2725

Vincent A. Belluscio, Jr.
Township of Glen Ridge
Municipal Building
Glen Ridge, NJ 07028
201-748-8400

Adam Samiec
Div. of Public Works
Municipal Building
Civic Square
Irvington, NJ 07111
201-399-6690

Russel A. Jones, Jr.
Recycling Coordinator
Township of Livingston
Livingston, NJ 07039
201-535-7973

Mike Bishop
Engineer of Maplewood
574 Valley Street
Maplewood, NJ 07040
201-762-1175

Planning Director
29 North Day Street
Orange, NJ 07040
201-266-4031

William Howard
Recycling Coordinator
140 Eagle Rock Avenue
Roseland, NJ 07068
201-403-6048

Kathleen DeHay
Recycling Coordinator
101 South Orange Avenue
South Orange, NJ 07079
201-762-6000

James Helb
Engineer
600 Bloomfield Avenue
Verona, NJ 07044
201-857-4803

Barbara Roemmele
Township of W. Caldwell
30 Clinton Road
West Caldwell, NJ 07006
201-226-2300

Gene Reilly
Recycling Coordinator
Town of West Orange
West Orange, NJ 07052
201-325-4159
The roles of the County and local coordinators are set forth in Section 2.3 RECYCLING IMPLEMENTATION STRATEGY

2.2 MATERIALS TO BE RECYCLED AND WASTE REDUCTION TARGETS

2.2.1 CALCULATING THE RECYCLING RATE

The Statewide Mandatory Recycling Act, P.L. 1987, c. 102, requires that municipalities reach a 15% and 25% reduction in the total municipal solid waste stream in the first and second years of Plan implementation, respectively. These goals must be met individually by each municipality. The “municipal solid waste stream” is defined in Section 2 of the Act to “mean all residential, commercial and institutional solid waste generated within the boundaries of any municipality.” In Guidelines for the Preparation and Submittal of County Recycling Plans, (Part B) the residential, commercial and institutional waste stream is described: “This shall include those items identified in NJAC 7:26-2.13 (d) 1 as waste type 10, ‘municipal’, and shall include residually generated leaves”. For the purposes of determining “total municipal solid waste” the type 10 waste disposed through the Essex County transfer stations is assumed to include any “residually generated leaves”.

In a formula, the method of calculating the recycling rate would look like this:

\[
\text{DESIGNATED TONS RECYCLED} \div \text{MUNICIPAL SOLID WASTE (TYPE 10) DISPOSED} + \text{DESIGNATED TONS RECYCLED} = \text{RECYCLING RATE}
\]

Since the passage of the Act, in April 1987, the State Office of Recycling has established addenda to its guidelines for Plan preparation. Among other things, these addenda limit the number and types of materials that can be counted towards the recovery targets. The addendum states: “the composting or mulching of leaves will not count towards the recovery targets mandated in section 3.b. (4a & b)…” Furthermore...“white goods and other ferrous and non-ferrous scrap...will count towards the mandated recovery targets only if the municipality provides (through municipal crews, depots or contract) for the collection of these materials.” Additionally, the Guidelines state that “Only those materials listed as ‘designated recyclable materials’ in the definitions section (section 2) will be counted toward recovery targets.” Section 2 lists “metal, glass, paper, or plastic containers, food waste, corrugated and other cardboard, newspaper, magazines, or high grade office paper”. Accordingly, Table 1 illustrates 1986 and 1987 recycling rates based on total designated type 10 disposed (for August 1, 1987 – July 31, 1988) plus total designated tons recycled (as documented by Tonnage Grant Audits and submitted for 1987 Tonnage Grant Applications) divided into total recycled tons of designated recyclables.

Municipalities should note that the list of designated recyclables in this Plan has been limited to reduce their collection burden.

2.2.2 DESIGNATED RECYCLABLES FOR ESSEX COUNTY

The Act guidelines (element B) call for the County to designate a minimum of three materials from the following list: “metal, glass, paper, or plastic containers, food waste, corrugated and other cardboard, newspaper, magazines or high grade office paper…The Plan may also include materials such as cement, asphalt and auto scrap, but the recycling of these items will not be counted toward the 15% and 25% recovery goals”. The State goes on to “strongly recommend that counties prepare their plans in anticipation of recycling residually generated glass, newspaper, aluminum and tin cans, as well as commercially/institutionally generated corrugated and high grade paper though this is not a requirement”. 
As indicated in Table 4 below the County accepted the recommendation of the State and has designated newspaper, glass food and beverage containers and aluminum beverage cans as the initial “designated recyclables” for all sectors. We have designated corrugated and office paper for the commercial and leaves and used motor oil which the Act and other state laws have banned from disposal and for which the State has prescribed recycling regulations. It is understood that these two materials cannot be counted toward recycling goals.

Finally, in recognition that these materials may not constitute 25% of the municipal solid waste stream in all municipalities and that less than complete recovery rates for these items may result in less than 25% reduction of the waste stream, and that some towns may wish to exceed the State goals, the County will consult with each municipality and determine additional materials which will be designated on a municipality-by-municipality basis to assure a Plan that realistically reflects the State and local goals. This will also allow a municipality that has or wishes to establish a recycling program for other materials to count those materials toward their state-mandated goals.

To add recyclable materials to the table of County-designated materials for that municipality for the purpose of counting said materials toward local recovery targets, municipalities shall request a minor plan modification via a municipal resolution and send such resolution to the County Recycling Coordinator. The resolution shall include a reference to the local ordinance which mandates the separation of said material(s), provides for collection and provides for penalties for non-compliance by a generator. A copy of said ordinance and a description of the collection methodology (collection agent, point of collection or drop-off, frequency of pickups or hours available for drop-off, market(s) to be used and any other relevant information must be attached to the resolution when submitted to the County Recycling Coordinator.

Proposals will be reviewed by the County Recycling Coordinator and if approved will be processed as a major plan amendment as provided for in Section 1.4.2 of this Recycling Plan.

The items designated for the commercial and institutional sector will not always require active, “door-to-door” collection by municipalities. These designations are meant to bring these sectors into compliance with the Act even if results will go beyond the Act’s goals. Achievement of the 15% or 25% goals will not relieve any municipality, resident, business, or institution from additional efforts required by this Plan.

Essex County officially designates the following materials to be recycled in the residential, commercial and institutional sectors. Non-compliance will subject violator to municipal and County enforcement procedures (see Section 2.3.1.6) unless an exemption is secured (see also section 2.3.1.2.D. Marketing Exemptions and 2.3.1.5.A. Exemptions to Ordinances).
<table>
<thead>
<tr>
<th>DESIGNATED RECYCLABLES FOR ESSEX COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESIDENTIAL: All homes, condominiums, townhouses, apartments, trailer parks, etc., including certain housing types considered institutional (i.e. senior citizen homes). Residential designations are applicable regardless of the amount (however small) generated.</td>
</tr>
<tr>
<td>Newspapers</td>
</tr>
<tr>
<td>Glass food and beverage containers</td>
</tr>
<tr>
<td>Aluminum beverage containers</td>
</tr>
<tr>
<td>Leaves</td>
</tr>
<tr>
<td>Used Motor Oil</td>
</tr>
<tr>
<td>COMERCIAL: All places of business (wholesale, retail, service, food, transportation, etc.)</td>
</tr>
<tr>
<td>Newspapers</td>
</tr>
<tr>
<td>Glass food and beverage containers</td>
</tr>
<tr>
<td>Aluminum beverage containers</td>
</tr>
<tr>
<td>Old corrugated containers (OCC)</td>
</tr>
<tr>
<td>Office paper (all marketable grades)</td>
</tr>
<tr>
<td>Used motor oil</td>
</tr>
<tr>
<td>Leaves</td>
</tr>
<tr>
<td>INSTITUTIONAL: All government building, schools, colleges, hospitals, clinics, etc.</td>
</tr>
<tr>
<td>Newspapers</td>
</tr>
<tr>
<td>Glass food and beverage containers</td>
</tr>
<tr>
<td>Aluminum beverage containers</td>
</tr>
<tr>
<td>Old corrugated containers (OCC)</td>
</tr>
<tr>
<td>Office paper (all marketable grades)</td>
</tr>
<tr>
<td>Used motor oil</td>
</tr>
<tr>
<td>Leaves</td>
</tr>
</tbody>
</table>
2.2.3 WASTE REDUCTION GOALS

Municipalities may increase their overall recycling rate by reducing the amount of material generated for disposal. This is known as source reduction and the County recommends that municipal publicity and education campaigns promote source reduction. The County will provide assistance in development promotion.

2.2.4 MUNICIPAL RECYCLING TARGETS

Table 5 reflects each municipality’s mandated waste reduction and recycling goals in tons. The base number for calculating the 15% and 25% goals is the total waste type 10 disposed for the year beginning December 1, 1987, and ending November 30, 1988, plus the total reported designated recycled tonnage in 1987. Waste disposed was determined from weight reports from the two Essex County transfer stations. See section 2.2.1 for further explanation of how the recycling rates and targets are calculated.

Table 6 compares the current recycling rates (taken from Table 1) to the recycling goals and indicates the percentage of the goals reached by each municipality.
### TABLE 5: ESSEX COUNTY WASTE REDUCTION AND RECYCLING GOALS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BELLEVILLE</td>
<td>22,766</td>
<td>2,630</td>
<td>25,396</td>
<td>3,809</td>
<td>6,349</td>
</tr>
<tr>
<td>BLOOMFIELD</td>
<td>26,225</td>
<td>3,766</td>
<td>29,99</td>
<td>4,499</td>
<td>7,498</td>
</tr>
<tr>
<td>CALDWELL</td>
<td>13,041</td>
<td>958</td>
<td>13,999</td>
<td>2,100</td>
<td>3,500</td>
</tr>
<tr>
<td>CEDAR GROVE</td>
<td>7,214</td>
<td>747</td>
<td>7,961</td>
<td>1,194</td>
<td>1,990</td>
</tr>
<tr>
<td>EAST ORANGE</td>
<td>58,388</td>
<td>1,218</td>
<td>59,606</td>
<td>8,941</td>
<td>14,902</td>
</tr>
<tr>
<td>ESSEX FELLS</td>
<td>1,633</td>
<td>199</td>
<td>1,832</td>
<td>275</td>
<td>458</td>
</tr>
<tr>
<td>FAIRFIELD</td>
<td>7,834</td>
<td>948</td>
<td>8,732</td>
<td>1,317</td>
<td>2,195</td>
</tr>
<tr>
<td>GLEN RIDGE</td>
<td>5,194</td>
<td>433</td>
<td>5,627</td>
<td>844</td>
<td>1,407</td>
</tr>
<tr>
<td>IRVINGTON</td>
<td>33,382</td>
<td>1,450</td>
<td>34,832</td>
<td>5,225</td>
<td>8,708</td>
</tr>
<tr>
<td>LIVINGSTON</td>
<td>22,828</td>
<td>7,072</td>
<td>29,900</td>
<td>4,485</td>
<td>7,475</td>
</tr>
<tr>
<td>MAPLEWOOD</td>
<td>12,423</td>
<td>1,490</td>
<td>13,913</td>
<td>2,087</td>
<td>3,478</td>
</tr>
<tr>
<td>MILLBURN</td>
<td>14,696</td>
<td>2,437</td>
<td>17,133</td>
<td>2,570</td>
<td>4,263</td>
</tr>
<tr>
<td>MONTCLAIR</td>
<td>21,251</td>
<td>5,668</td>
<td>26,919</td>
<td>4,038</td>
<td>6,730</td>
</tr>
<tr>
<td>NEWARK</td>
<td>175,764</td>
<td>33,685</td>
<td>209,449</td>
<td>31,417</td>
<td>52,362</td>
</tr>
<tr>
<td>NORTH CALDWELL</td>
<td>3,159</td>
<td>0</td>
<td>3,159</td>
<td>474</td>
<td>790</td>
</tr>
<tr>
<td>NUTLEY</td>
<td>16,286</td>
<td>2,872</td>
<td>19,156</td>
<td>2,874</td>
<td>4,790</td>
</tr>
<tr>
<td>ORANGE</td>
<td>24,730</td>
<td>56</td>
<td>24,786</td>
<td>3,718</td>
<td>6,196</td>
</tr>
<tr>
<td>ROSELAND</td>
<td>3,024</td>
<td>316</td>
<td>3,340</td>
<td>501</td>
<td>835</td>
</tr>
<tr>
<td>SOUTH ORANGE</td>
<td>12,627</td>
<td>1,277</td>
<td>13,904</td>
<td>2,086</td>
<td>3,476</td>
</tr>
<tr>
<td>VERONA</td>
<td>8,012</td>
<td>0</td>
<td>8,012</td>
<td>1,202</td>
<td>2,003</td>
</tr>
<tr>
<td>WEST CALDWELL</td>
<td>7,958</td>
<td>3,894</td>
<td>11,852</td>
<td>1,778</td>
<td>2,963</td>
</tr>
<tr>
<td>WEST ORANGE</td>
<td>31,388</td>
<td>4,106</td>
<td>35,494</td>
<td>5,324</td>
<td>8,874</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>529,823</strong></td>
<td><strong>75,222</strong></td>
<td><strong>605,045</strong></td>
<td><strong>90,757</strong></td>
<td><strong>151,261</strong></td>
</tr>
</tbody>
</table>

Note: The 1987 recycling totals have not yet been audited by the NJ Office of Recycling (as of 12/88), and are therefore subject to modification.
### TABLE 6: COMPARISON OF CURRENT RECYCLING RATES TO GOALS

<table>
<thead>
<tr>
<th>TOWNS</th>
<th>CURRENT RATE (1987)</th>
<th>PERCENT OF GOALS</th>
<th>FIRST YEAR</th>
<th>SECOND YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELLEVILLE</td>
<td>2,630</td>
<td>10%</td>
<td>69%</td>
<td>41%</td>
</tr>
<tr>
<td>BLOOMFIELD</td>
<td>3,766</td>
<td>13%</td>
<td>84%</td>
<td>50%</td>
</tr>
<tr>
<td>CALDWELL</td>
<td>958</td>
<td>7%</td>
<td>46%</td>
<td>27%</td>
</tr>
<tr>
<td>CEDAR GROVE</td>
<td>747</td>
<td>9%</td>
<td>63%</td>
<td>38%</td>
</tr>
<tr>
<td>EAST ORANGE</td>
<td>218</td>
<td>2%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>ESSEX FELLS</td>
<td>199</td>
<td>11%</td>
<td>73%</td>
<td>44%</td>
</tr>
<tr>
<td>FAIRFIELD</td>
<td>948</td>
<td>11%</td>
<td>72%</td>
<td>43%</td>
</tr>
<tr>
<td>GLEN RIDGE</td>
<td>433</td>
<td>8%</td>
<td>51%</td>
<td>31%</td>
</tr>
<tr>
<td>IRVINGTON</td>
<td>1,450</td>
<td>4%</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>LIVINGSTON</td>
<td>7,072</td>
<td>24%</td>
<td>158%</td>
<td>95%</td>
</tr>
<tr>
<td>MAPLEWOOD</td>
<td>1,490</td>
<td>11%</td>
<td>71%</td>
<td>43%</td>
</tr>
<tr>
<td>MILLBURN</td>
<td>2,437</td>
<td>14%</td>
<td>95%</td>
<td>57%</td>
</tr>
<tr>
<td>MONTCLAIR</td>
<td>5,668</td>
<td>21%</td>
<td>140%</td>
<td>84%</td>
</tr>
<tr>
<td>NEWARK</td>
<td>33,635</td>
<td>16%</td>
<td>107%</td>
<td>64%</td>
</tr>
<tr>
<td>NORTH CALDWELL</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>NUTLEY</td>
<td>2,872</td>
<td>15%</td>
<td>100%</td>
<td>60%</td>
</tr>
<tr>
<td>ORANGE</td>
<td>56</td>
<td>0%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>ROSELAND</td>
<td>316</td>
<td>9%</td>
<td>63%</td>
<td>38%</td>
</tr>
<tr>
<td>SOUTH ORANGE</td>
<td>1,277</td>
<td>9%</td>
<td>61%</td>
<td>37%</td>
</tr>
<tr>
<td>VERONA</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>WEST CALDWELL</td>
<td>3,894</td>
<td>33%</td>
<td>219%</td>
<td>131%</td>
</tr>
<tr>
<td>WEST ORANGE</td>
<td>4,106</td>
<td>12%</td>
<td>77%</td>
<td>46%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>75,222</strong></td>
<td><strong>12%</strong></td>
<td><strong>83%</strong></td>
<td><strong>50%</strong></td>
</tr>
</tbody>
</table>

**AVERAGES**

%North Caldwell applied only for leaf composting in their 1987 Tonnage Grant. Leaves do not count toward goals. Verona did not apply for Tonnage Grants for 1987.

Note: The 1987 recycling totals have not yet been audited by the NJ Office of Recycling (as of 12/88), and are therefore subject to modification.
2.3 RECYCLING IMPLEMENTATION STRATEGY

2.3.1 COUNTY AND MUNICIPAL RESPONSIBILITIES

2.3.1.1 Designation of Recycling Coordinator

The Statewide Mandatory Recycling Act, P.L. 1987, c. 102, required each municipality and each County to designate a Recycling Coordinator within 30 days of the Act’s passage. (April 20, 1987). Section 2.1 of this Plan identifies the person designated in and for Essex County. The subsections below describe the responsibilities of the Coordinators as described by State law or required of the Municipal Coordinators as described by State law or required of the Municipal Coordinator by the County through the powers granted to it by the Solid Waste Management Act (P.L. 1975 C.326).

2.3.1.2 Identification of Markets

2.3.1.2.A Priority Consideration for Existing Recycling Business

In accordance with the Act, this Plan provides for priority consideration of business already engaged in recycling services on behalf of municipalities or the County as of January 1, 1986. Municipalities must provide these businesses the opportunity to bid on services when requesting bids. Public notification of bids will suffice. When reviewing bids for such services in cases of equal bids and equal qualifications the municipality should give priority consideration to the bidder with the longest established business except that the municipality is not expected at any time to compromise their own best interest.

Because Section 32 of the Act exempts the sale or marketing of recyclable materials from the bid process, municipalities are not required to provide priority to markets existing before January 1, 1986 when negotiating contracts for the marketing of recyclable materials.

2.3.1.2.B Market Availability

Under the Act counties are obligated to identify market availability for designated materials but municipalities are free to determine their own marketing strategy in so far as the strategy is consistent with achieving the material recovery targets identified for that municipality (see Section 2.2.4). If they do not, the County is responsible to identify their markets.

The County’s identification of market availability was based on a survey of municipal marketing strategies and a review of long-standing marketing relationships for the designated materials from N.J. sources.

2.3.1.2.C Market Demand

Typically market demand is not stable, and may increase or decrease over time to levels that are unmatched by supply. The County as and will maintain a surveillance of market fluctuations and trends and keep Municipal Recycling Coordinators abreast of the marketing environment. However, the County is not responsible to foresee fluctuations in the different market demands and prices.

2.3.1.2.D Marketing Exemptions

If market demand for any material drops below supply and the County determines that materials cannot reasonably be collected and recycled for a cost lower than or equal to the cost of collection and disposal at Essex County’s prevailing disposal fee for that material, then municipalities and other generators may be
relieved of their obligation to separate and collect these materials. However, some circumstances may warrant that it is nevertheless desirable to maintain separate collection or otherwise keep materials from disposal. In that case, materials may be stockpiled or delivered to disposal alternatives approved by the County on a case by case basis.

Where the sale or disposition of a designated material is interrupted by factors beyond the control or the generator/recycler, exemptions to municipal requirements may be made. Any exemptions to the requirements of this Plan will be provided to municipalities in writing from the County. Commercial and institutional generators will be served notice of relief through public announcements or press releases and through other appropriate channels such as Chambers or Commerce and industry groups.

2.3.1.2.E  Marketing Limitations

In the interest of maximum waste reduction and minimum dependence on disposal, any generator wishing to collect and market any material or type of material that has been source separated for recycling purposes or source separated and commingled, may do so even if the costs to do so exceed the cost to collect and dispose of such material as waste. In no way does this Plan limit the number or type of materials municipalities or other generator may choose to recycle, except that the County and each municipality shall not permit removal of materials (whether municipal or commercial) if the intended use of such materials is for the incineration or the production of energy (except as provided in the Host Municipality Agreement between the City of Newark, the County of Essex and the Port Authority of NY and NJ), if such materials are Acceptable Waste which have been directed by the County to the Energy Recovery Facility.

2.3.1.3  Identification of Processing Capacity for Each Designated Material

The Recycling Element of the Essex County District Solid Waste Management Plan as submitted in April, 1987, called for the development of intermediate processing services for Essex County municipalities through a County bid process. The materials anticipated to be processed were “glass food and beverage containers, newspaper, corrugated cardboard and possibly mixed plastic containers”.

The Plan reflected a desire to utilize the private sector as facility operator through administration of public contract. The current Plan reflects a change. Since 1987, private sector investment in these services has developed in the immediate vicinity of the County eliminating the need for public funds or public administration of a procurement contract. While these new services are primarily for containers, the feasibility of marketing commingled paper types has also advanced in the private sector. The County will continue to seek expansion in this market, but no longer considers it advisable to invest public funds in that area.

In conclusion, the County now recommends that municipalities desiring such services negotiate with vendors for processing of commingled containers or commingled paper grades with technical assistance provided by the County. As of September 30, 1988, certain municipalities had already established contracts with vendors. Because higher levels of convenience generally lead to higher levels of per capita recovery the County continues to recommend commingled collection of glass food and beverage containers, aluminum and tin cans and, where feasible, plastic containers. However, collection and marketing choices remain with the municipalities.

2.3.1.3.A  Composting – Processing for Vegetative Wastes (Leaves)

According to the Statewide Mandatory Recycling Act, P.L. 1987. 102, the county must “identify the composting site or sites to be used by each municipality”. Nine (9) of the twenty two Essex County municipalities have
local DEP-approved leaf composting sites which serve to process their raw leaves into a reusable humus product. Those sites are listed below including lot and block numbers and addresses as required by NJDEP.

Additionally, Essex County operates two permitted regional sites (0715A and 0720C) to serve the needs of the remaining 13 municipalities. These sites are planned to be closed to municipalities in October, 1989.

It is the intention of the County to encourage the further development of privately owned and operated sites to serve the needs of Essex County municipalities by accepting overflow from municipalities with local composting sites as well as yard wastes from municipalities without sites of their own. Any municipality not having access to a permitted local regional or cooperative facility will be required to use one of the existing permitted private sites in New Jersey, or a farm or nursery which meets the NJDEP criteria for a non-permitted leaf mulching facility, to be in compliance with the law.

The County encourages municipalities with local sites to pursue rental or purchase of leaf processing equipment to maximize the volume they can process on a given site. The County will provide technical assistance in site operation and equipment choices and help coordinate purchase or rental contracts among municipalities. Additionally, the County may purchase equipment and make it available for municipal use. Aside from pursuit of local solutions, the County encourages cooperative arrangements between municipalities with sites and those without sites. Consistent with this recommendation, the County envisions “exporting” municipalities providing financial assistance or deliveries. The County will provide assistance by serving as liaison and technical advisor. Furthermore, we have determined through consultant investigation that the following sites are of years if the operations incorporated higher technology (Fairfield, Newark, Millburn (needs to renew permit), Roseland, West Caldwell and West Orange).

Pursuant to the Act, (Section 4a.), the “county shall within six months of approval of the Recycling Plan…solicit proposals from, review the qualifications of, and enter into contract’s or agreements on behalf of municipalities with persons…operating recycling centers for the…processing and disposition of (leaves) in those instances where these services are not otherwise provided by the municipality, interlocal service agreement or joint service program, or other private or public recycling program operators.”
<table>
<thead>
<tr>
<th>Municipality</th>
<th>DEP Permit #</th>
<th>Block/Lot</th>
<th>Street Address</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALDWELL</td>
<td>0721b</td>
<td>131/8</td>
<td>Pine Tree Pl.</td>
<td>1</td>
</tr>
<tr>
<td>ESSEX FELLS</td>
<td>0706A</td>
<td>8,1/46,50</td>
<td>Roseland Ave.</td>
<td>2</td>
</tr>
<tr>
<td>FAIRFIELD</td>
<td>0707C</td>
<td>6801/4</td>
<td>Marginal Road</td>
<td>5.3</td>
</tr>
<tr>
<td>MAPLEWOOD</td>
<td>0711A</td>
<td>343</td>
<td>Parker Ave. West</td>
<td>2.5</td>
</tr>
<tr>
<td>MILLBURN (County)</td>
<td>07120</td>
<td>5503/1</td>
<td>So. Orange Ave.</td>
<td>1</td>
</tr>
<tr>
<td>NEWARK (County)</td>
<td>07142</td>
<td>5056/16,20,30,80,84,84</td>
<td>Rutherford Street</td>
<td>7</td>
</tr>
<tr>
<td>NO. CALDWELL/VERONA (County)</td>
<td>0715A</td>
<td>NC 10/1;11/2</td>
<td>Sanitarium Road</td>
<td>23</td>
</tr>
<tr>
<td>ROSELAND</td>
<td>0718A</td>
<td>21/12</td>
<td>Roseland Boro</td>
<td>3.4</td>
</tr>
<tr>
<td>SOUTH ORANGE</td>
<td>0719A</td>
<td>115/80-103</td>
<td>Walton Avenue</td>
<td>3</td>
</tr>
<tr>
<td>VERONA (County)</td>
<td>0720C</td>
<td>28A/2,4</td>
<td>Sanitarium Road</td>
<td></td>
</tr>
<tr>
<td>W. CALDWELL</td>
<td>0721B</td>
<td>6/1903</td>
<td>Pine Tree Place</td>
<td>2</td>
</tr>
<tr>
<td>W. ORANGE</td>
<td>0722A</td>
<td>170/13</td>
<td>Mount Pleasant Ave.</td>
<td>35</td>
</tr>
</tbody>
</table>
2.3.1.3.B Prior Plan Approval for Compost Site Applications

Any publicly or privately operated compost facility is consistent with the approved Essex County District Plan and no further plan amendment is required to include the facility provided that:

1. The host municipality and the solid waste management district are notified in writing (by the applicant) of the proposed application to the DEP and each receive a full copy of the complete application submitted to the Department including all engineering designs, reports, maps, etc., which the Department requires of the applicant.

2. The applicant publishes two (2) notices of the proposed application once each week for two (2) consecutive weeks, in a newspaper of general circulation within the host municipality. The notice shall include a description of the facility location (address, lot and block), hours of operation, tipping fees, material(s) to be accepted, quantities expected to be accepted daily, owners name and address and any other relevant information. The notice shall inform the public that this is their only opportunity within the planning stage to raise comments to the proposal.

3. No substantive objections to the site location are raised by the host municipality, the solid waste management district or any other person; provided further, however, that if the county determines that substantive objections are raised, the proposed site and facility must be subject to the formal plan amendment process pursuant to N.J.S.A. 13:1E-23 and 24 including notice, public hearing, freeholder approval, and subsequent DEP approval of the plan amendment. Further, prior to construction and operation the applicant must obtain from the Department of Environmental Protection an Environmental impact Statement approval and obtain a solid waste facility permit pursuant to N.J.S.A. 13:1E-4 or 5.

2.3.1.4 Publicity and Education

The County will retain a Public Information Officer and the services of a public information firm to administer a comprehensive publicity and education campaign. Briefly, the County intends to provide for the following on an ongoing basis:

- quarterly newsletter
- meetings, technical assistance seminars for local coordinators
- development of promotional material
- financial assistance for mailing municipal promotion material
- annual awards dinner

Modifications to this campaign may be made over time.

Municipalities, according to the Statewide Mandatory Recycling Act, P.L. 1987, c. 102, Section 6f, “shall, within six months of the effective date of the ordinance...and at least once every six months thereafter, notify all persons occupying residential, commercial and institutional premises within its boundaries of local recycling opportunities, and the source separation requirements of the ordinance”. The legislation goes on to describe the minimal required municipal action:

In order to fulfill the notification requirements of this subsection, the governing body of a municipality may, in its discretion, place an advertisement in a newspaper circulating in the municipality, post a notice in public places where public notices are customarily posted, include a notice with other official notifications periodically mailed to residential taxpayers, or any combination thereof, as the municipality deems necessary and appropriate.
The County finds this requirement generally inadequate to accomplish an objective of clear public understanding and maximum participation in recycling. The minimum municipal effort required is as follows:

At 6 month intervals – all of the options described in legislation shall be utilized. Newspaper ads shall not be less than 15 square inches or run in less than 3 consecutive issues of the official newspaper. Where notices are to be mailed directly or provided with “other official notifications” a preference should be given for mail addressed to residents as opposed to “taxpayers” which may reside outside the municipality. Also, the most effective mailing method for reaching commercial and institutional sources should be utilized. Where municipalities do not have regular official mailings at 6 month intervals this requirement should be met by direct mail.

Ads and notices shall include the types of materials to be separated as per local ordinance, the method of preparing materials for recycling, the location and schedule of recycling opportunities and the name and phone number of the municipal recycling coordinator. Specifically, the State laws regarding the required recycling of used motor oil should be clearly stated. It is recommended, in addition, that annual notices include a summary of program status and accomplishments to date as well as a detailed schedule of collection dates throughout the following 12 month period.

It is recommended that municipalities promote backyard composting each Fall to help reduce the volume of leaves and garden waste generated for disposal. Helpful promotional brochures are available through the County.

It is recommended that municipalities support the use of the NJDEP recycling education curriculum and hold at least one school system promotion program per year.

The County encourages each municipality to utilize the resources of local cable access channels to promote recycling participation.

At least once annually municipalities shall provide all resident, commercial, institutional and industrial waste sources with a “Guide to Waste Reduction” as will be provided by the County.

2.3.1.5 Mandatory Source Separation and Anti-Scavenger Ordinances

As required by the Act, municipalities must establish mandatory source-separation ordinances that achieve the following objectives:

- requires all residential, commercial and institutional sources to separate designated materials from waste and to prepare, store and/or deliver or set out such materials for recycling in the manner described by regulations.

- establishes the agency or official responsible to develop regulations and directs such agency or person to develop regulations immediately.

- describes an enforcement strategy and provides resources for an official or agency to enforce the ordinance.

- provides penalties for non-compliance

- describes the mechanism for persons or business to receive exemptions (see 2.3.1.5.A Exemptions)
• describes the requirements, mechanism and schedule for commercial and institutional sources and scavengers to provide recycling documentation.

It is not necessary for all municipalities to include an anti-scavenger ordinance, however, the following guidelines are recommended:

• Where municipalities provide for curbside collection or where an established program is in place, scavenging should be prohibited on the regularly scheduled collection day. This is to allow the municipality or authorized collection agent to maintain a high level of efficiency – tonnage collected per day.

• Where no established curbside program is in place municipalities may wish to limit the days of the week in which scavenging is permitted to either coincide with or avoid conflict with trash pickup.

• Scavenging at drop-off centers should always be prohibited and discouraged by promulgation of fines.

• Finally, record of tonnage collected by scavengers will be great value to the municipality in terms of demonstrating compliance with Act as well as in regard to State Tonnage Grants. It is recommended that municipalities require scavengers to register their name, anticipated collection schedule, targeted material, a description of their collection vehicle and to provide semiannual and annual records of tonnage marketed as a condition to continue scavenging. All ordinances regardless of how flexible or restrictive in terms of scavenger collection should provide for records submission as a condition to continue scavenging.

Table 8 describes the scope of municipal ordinances and indicates whether or not current ordinances are in compliance with this Plan. Most municipalities are out of compliance at this time only because corrugated and office paper have not been incorporated into their ordinances. The reason these items are not included is because this Plan had not required inclusion at the time ordinances were reviewed (7/88). As required by the Act, Municipalities will have 30 days from approval of this Plan to adopt ordinances that comply with this Plan.
<table>
<thead>
<tr>
<th>TOWN</th>
<th>ORDINANCE/EFFECTIVE</th>
<th>DATE</th>
<th>MATERIALS DESIGNATED</th>
<th>IN COMPLIANCE</th>
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<tbody>
<tr>
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<td>1982</td>
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<td>NO</td>
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<tr>
<td>ESSEX FELLS</td>
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<td>--</td>
<td>NP GL AL PE HD OCC OP LV</td>
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<td>GLEN RIDGE</td>
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<td>NP GL AL TN</td>
<td>NO</td>
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<td>IRVINGTON</td>
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<td>1978</td>
<td>NP</td>
<td>NO</td>
</tr>
<tr>
<td>LIVINGSTON</td>
<td>YES</td>
<td>1985</td>
<td>NP LV</td>
<td>NO</td>
</tr>
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<td>1984</td>
<td>NP GL AL</td>
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<td>MILLBURN</td>
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<td>1974</td>
<td>NP OCC</td>
<td>NO</td>
</tr>
<tr>
<td>MONTCLAIR</td>
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<td>1980</td>
<td>NP GL AL OCC WG LV</td>
<td>NO</td>
</tr>
<tr>
<td>NEWARK</td>
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<td>1982</td>
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<tr>
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</tr>
<tr>
<td>NUTLEY</td>
<td>YES</td>
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<td>NO</td>
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<td>ORANGE</td>
<td>NO</td>
<td>--</td>
<td>NONE</td>
<td>NO</td>
</tr>
<tr>
<td>ROSELAND</td>
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<td>NP GL AL</td>
<td>NO</td>
</tr>
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<td>NP GL AL OCC OP WG LV</td>
<td>YES</td>
</tr>
<tr>
<td>VERONA</td>
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<td>1987</td>
<td>NP GL AL TN LV MO</td>
<td>NO</td>
</tr>
<tr>
<td>WEST CALDWELL</td>
<td>YES</td>
<td>1983</td>
<td>NP GL AL</td>
<td>NO</td>
</tr>
<tr>
<td>WEST ORANGE</td>
<td>YES</td>
<td>1987</td>
<td>NP GL OP</td>
<td>NO</td>
</tr>
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</table>

NP=Newspaper, GL=Glass, AL=Aluminum, LV=Leaves, OCC=Old Corrugated Containers, OP=Office Paper, MO=Motor Oil, WG=White Goods, FW=Food Waste, TN=Tin
2.3.1.5.A Exemptions to Mandatory Source Separation Ordinances

Persons (residential generators) may get an exemption from the municipal source separation requirement only if the person is physically handicapped or otherwise unable to perform the separation activity. A written letter of request should be accompanied by some medical documentation of the incapacitation.

Business (Commercial and Institutional generators) may get an exemption from the requirement to source separate only if the nature of the business is such that the designated recyclables are contaminated and unfit for recycling. In this case, the business shall request an exemption in writing describing the reasons for the request, the nature of the business, and the type of contamination expected. Any designated recyclable that is not contaminated shall be source separated and recycled.

Requests for exemptions shall be sent to the Municipal Recycling Coordinator with a copy to the County Recycling Coordinator. The Municipal recycling Coordinator shall be responsible to investigate each exemption request and verify that there are sound reasons for the exemption. Exemptions will be granted in writing by the Municipal Recycling Coordinator with a copy being provided to the County Recycling Coordinator.

2.3.1.6 Enforcement

Municipal
As described above, municipalities must provide regulations for compliance with mandatory recycling ordinances and establish penalties for non-compliance. Additionally, municipalities should provide for enforcement by:

- conducting random unannounced searches of trash set out at residential, commercial and institutional sources.
- serving warnings to any source not complying with regulations, explaining how to comply and describing penalties for repeated non-compliance.
- serving summonses to repeat offenders.
- Promulgating rules that reflect an enforcement strategy and identify the person or agency responsible.

County
The County will enforce the implementation of the District Recycling Plan by focusing on:

- the development of municipal ordinances and regulations
- the development of municipal collection programs
- the development of municipal education programs
- the efforts of municipalities regarding enforcement
- the efforts of municipalities regarding composting
- the percentage of total waste recycled
- inspection of waste delivered to county disposal facilities

The County will randomly inspect waste deliveries for designated recyclables. The County will bar any waste hauler (municipal or private) from any solid waste disposal facility on a load by load basis if a load has more than negligible amounts (defined as 5% of the load by volume) of designated recyclables. The entire load will be reloaded and the hauler will remove it at the hauler’s expense. This same policy is used at the transfer
stations for infectious and hazardous waste violations. Deliveries of any more than negligible amounts (5% of load by volume) of designated recyclables will be considered a violation of this Plan. Violations noted at that point will be forwarded to the municipality and private hauler for enforcement at the source. Offenders may be subject to penalties including:

a. restricted access to County Composting site or equipment
b. withholding of Program Planning and Education Grants for municipal violations
c. imposing fines

Anything aforesaid notwithstanding, violations of this Plan will subject violator to fines up to a maximum of $500 for each violation by summons issued by Essex County Police.

See the following section on collection requirements for further discussion on County enforcement mechanisms against municipalities not meeting state-mandated goals.

2.3.1.7 Collection/Accumulation of Designated Materials

The Act places responsibility for collection of designated materials on municipalities unless source separation, collection and marketing are “otherwise provided for by the generator or by the county, interlocal service agreement or joint service program, or other private or public recycling program operator”. Collection systems must be in place within six months of Plan approval. This Plan requires the following of municipalities regarding collection of designated materials from the three generating sectors. Generally, these are meant to reflect realistic methods that will result in the achievement of State-mandated goals.

Residential
Designated: Newspaper, glass food and beverage containers, aluminum beverage cans, motor oil.

At a minimum each municipality must provide a drop off area for these materials. If this is insufficient to achieve the specified municipal recycling goals, some higher level of service will be required.

All municipalities must provide a collection point for used motor oil generated by residents. Additionally, the municipality must identify all used oil collection centers (service stations) within their borders. All used oil generated or recovered by the municipality shall be collected and recycled by a waste oil dealer that has been licensed and approved by the State.

Commercial/Institutional
Designated: Old corrugated containers, office paper, newspaper, glass food and beverage containers, aluminum beverage cans, motor oil.

Municipalities not providing for collection at the source must provide at a minimum for the drop-off of flattened, bundled corrugated containers and for boxes or bags of office paper to be marketed by the municipality or a designated agent. Alternatively, municipalities must identify a local market or buy-back center willing to pick up or accept deliveries directly from commercial and institutional sources. Municipalities should secure this commitment in writing and file it with the County if they choose to take this approach.

A drop-off system is necessary to allow many small generators to comply with the law if they are unable to interest a paper dealer or their waste hauler in picking up the source separated cardboard or office paper at the source. Ability to comply with regard to the residential types of materials can be provided by the drop-off described above.
As an institutional source, all municipal government offices shall provide for the recovery of corrugated, office paper and residential-type recyclables.

Municipalities not meeting these minimum requirements at the effective date of the Plan, will have 60 days to submit a plan to the County describing an implementation schedule for complying with the law. This plan must include specific steps which will be taken to provide the collection strategy described above and include a schedule for implementation within the 6 months allowed by law. Drop-off locations must be described by address, lot and block, the type of containers or bins to be utilized, the hours of accessibility, the materials to be accepted and the markets to be utilized. Plans for curbside collection must include a description of the collection agent, collection vehicles, collection schedule, material to be collected and the marketing strategy. All plans must be supported by documentation (correspondence, purchase requisitions, resolutions, contracts, etc.) which demonstrates that compliance is being actively pursued.

Progress will be reviewed at 6 month intervals. Upon determination by the County that municipal efforts are insufficient to meet the municipal recycling goals, the County will prescribe measures for the municipality to implement. Such measures shall be instituted within 60 days of notice to the municipality. These measures may include a requirement to:

- increase promotional activity
- increase enforcement activity
- increase collection services
- increase collection frequency

2.3.1.7.A Commingling of Designated Recyclable Materials with Waste is Prohibited

Residential and commercial/institutional recycling responsibilities must be met by means of source separation of the designated recyclable materials or by source separation and commingling of designated recyclable materials. Commingling of any designated recyclable materials with waste is prohibited. Similarly, collection and delivery of designated recyclable materials mixed with waste to so called “recycling facilities” for separation of designated recyclable materials does not comply with this plan and is prohibited.

2.3.1.8 Maintenance of Recycling Records

According to the Act, municipalities are required to maintain records of recycling tonnage and submit annual Tonnage reports to the NJDEP before July 1 of each year in accordance with prescribed regulations which are made available each year in Tonnage Grant Applications.

In order to facilitate this reporting process, municipalities must maintain accurate and documented records of all municipal recycling activities. Additionally, municipalities must provide a mechanism for obtaining documentation from commercial and institutional recycling programs, scavengers collecting from various sources and buy back operations taking material directly from the public. This must be done by ordinance.

Accordingly, businesses and institutions are hereby required to maintain documentation of all recycling activity in order to demonstrate compliance with municipal ordinances and State law. A business or agency unable or unwilling to provide documentation for the sale or disposition of designated recyclables will be considered to have violated the source separation ordinance unless they can otherwise demonstrate that they do not generate any of the designated recyclable material. However, no business agency or person will receive an exemption from the ordinance for this reason because the list of designated materials or the waste stream of the generator may change. Furthermore, documentation from scavengers should be acquired according to the recommendations made in Section 2.3.1.5 on Ordinances.
The County makes the following recommendations to assist in collection of documentation.

- Adopt municipal ordinances prohibiting scavenging of recyclables from any source without a permit from the municipality.

- Require quarterly or semiannual documentation of tonnage recovered (by source) as a condition of the permit. (Note: This would have to affect haulers and paper dealers collecting source separated corrugated and high grade paper as well).

- Solicit the cooperation of businesses through the Chambers of Commerce.

- Solicit the cooperation of markets in the immediate area regarding door trade.

- Solicit the cooperation of markets or others providing direct pickup at multi-family residences, business, etc.

Any municipality not meeting the State-mandated goals of waste reduction as determined by Table 1 of this Plan (or Table 1 as amended periodically) will be required to provide satisfactory quarterly reports to the County Recycling Coordinator beginning in March, 1989, until such time as two consecutive reports demonstrate a recycling rate in compliance with the states goals and in accordance with the recycling goals described (in tons) for that municipality. At that time the municipality will receive a written notice from the County relieving them of reporting requirements. Annual reporting requirements to the State will remain in effect.

Additionally, in order to maintain current records of recycling activity, all Essex County municipalities are hereby required to submit copies of their Tonnage Grant Applications to the Essex County Recycling Coordinator by July 1, each year.

Under current Legislation, Counties are also eligible to receive Tonnage Grants for materials collected and marketed directly by the County. In this regard Essex County will implement a mechanism to maintain records and documentation for its recycling activities including office paper and newspaper recovery, used oil recycling, food waste recycling and composting.

2.3.1.9 Incorporation of Recycling in the Local Master Plan

According to the Act, Section 6c:

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

The revised master plan shall include provisions for the collection, disposition and recycling of recyclable materials designated in the municipal recycling ordinance adopted pursuant to subsection b. of this section, and for the collection, disposition and recycling of designated recyclable materials within any development proposal for the construction of 50 or more units of single-family residential housing of
25 or more units of multi-family residential housing and any commercial or industrial development proposal for the utilization of 1,000 square feet or more of land.

The State’s specific recommendations for incorporating recycling into the Local Master Plan are hereby adopted for this Plan and included in the appendix.

In addition to the requirements of the Act, municipalities shall revise local ordinances to include a provision that any person seeking a building permit for new construction or permit for demolition must provide prior verification of waste disposal arrangements that are consistent with the County Plan and existing waste flow directives.

2.3.1.10 Preferential Use of Compost

Section 15 of the Act requires that “all State and local agencies responsible for the maintenance of public lands...shall, to the maximum extent practicable and feasible, give due consideration and preference to the use of compost materials in all land maintenance activities which are to be paid for with public funds”.

The County agrees to and hereby directs municipalities and other government agencies to adhere to this requirement. Additionally, the County encourages the State to enforce this requirement at in-state landfills (both public and private) inasmuch as the maintenance of those landfills are paid for with public funds and whereas it is in the best interest of the State to find large outlets or markets for composted material. The County will further seek the cooperation of the regional Soil Conservation Service in monitoring and encouraging compliance.
The New Jersey Statewide Mandatory Source Separation and Recycling Act, P.O. 1987, c. 102 states that within 30 days of the passage of the municipal recycling ordinance, the municipal master plan must be revised to include a recycling plan element (Sections 25-29).

1. Section 25 of P.L. 1987, c. 102 amends The Municipal Land Use Law, P.L. 1975, c. 291 (C.40:55D-2), Section 2 to read as follows: The Purpose of the act is..."to promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling plan goals and to complement municipal recycling program".

2. Section 26 of P.L. 1987, c. 102 amends Section 19.b of P.L. 1975, c. 291 (C.40:55D-28) to read as follows: The master plan shall generally comprise a report or statement and lend use and development proposals, with maps, diagrams and text, presenting, at least the following elements: “A recycling plan element which incorporates the State Recycling Plan goals, including provisions for the collection, disposition and recycling of recyclable materials designated in the municipal recycling ordinance, and for the collection, disposition and recycling of recyclable materials within any development proposal for the construction of 50 or more units of residential housing and any commercial or industrial development proposal for the utilization of 1,000 square feet or more of land". Section 19.d shall be amended. The Master Plan shall include a specific policy statement indicating the relationship of the proposed development to “the district solid waste management plan required pursuant to the provisions of the Solid Waste Management Act, P.L. 1970, c. 39 of the county in which the municipality is located”.

3. Section 27 of P.L. 1987, c. 102 amends Section 29 of P.L. 1975, c. 291 (C.40:55D-38) to read as follows: An ordinance requiring site plan review and approval pursuant to article shall include..."recycling of designated recyclable materials".

4. Section 28 of P.L. 1987, c. 102 amends Section 29.3 of P.L. 1975, c. 291 (C.40:55D-41) to read as follows” An ordinance requiring site plan review and approval pursuant to article shall include..."recycling of designated recyclable materials".

5. Section 29 of P.L. 1987, c. 102 amends Section 76 of P.L. 1975 c. 291 (C.40:55D-89) to read as follows: The governing body shall, at least every six years, provide for a general reexamination of its master plan by the planning board. The next reexamination shall be completed by August 1, 1988. The reexamination shall state: The extend to which there have been significant changes in the policies with regard to..."collection, disposition, and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives".
TO AMEND LOCAL MASTER PLAN TO INCLUDE RECYCLING, A RECYCLING PLAN ELEMENT MUST BE WRITTEN AND INTEGRATED INTO THE MASTER PLAN AS A SEPARATE SECTION FOLLOWING THE “ENERGY CONSERVATION PLAN ELEMENT”

The recycling plan element must include the State recycling goals, the district recycling plans and goals, and a statement of how site plans and subdivision applications must conform with the municipal recycling ordinance. The element covers development proposals for 50 or more units of single-family housing or 25 or more units of multi-family housing and any commercial or industrial development which uses 1,000 square feet or more of land. The element must name materials to be collected and detail how collection will take place. The materials to be collected are designated by each County Plan. Each municipality will mandate the source separation of these designated materials, and determine how they will be collected from the residential, commercial and institutional sector.
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The developer has several options for collection, storage and transportation of these materials. The choice of options will be determined by the municipal program. The following questions should be addressed by the recycling plans submitted by the developer. Planning Board members doing site plan reviews should be sure they have been adequately answered.

What materials will be collected?
Where will materials be stored?
Where will materials be picked up?
Who will pick up the materials?
How often will the materials be picked up?
How much material will be generated?
How much storage area is required for each material?

The following information will assist in providing answers to these questions, both for the developers and for Planning Board members. PLEASE BE AWARE THAT THESE FIGURES ARE APPROXIMATIONS AND SHOULD ONLY BE USED FOR PLANNING PURPOSES

AVERAGE GENERATION RATES

<table>
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<tr>
<th>Material</th>
<th>Rate</th>
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<tr>
<td>Newspaper</td>
<td>8-10 lbs. per person per month</td>
</tr>
<tr>
<td>Glass</td>
<td>5-7 lbs. per person per month</td>
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<tr>
<td>Aluminum</td>
<td>0.4 lbs. per person per month</td>
</tr>
<tr>
<td>Tin Cans</td>
<td>6 lbs. per person per month</td>
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<tr>
<td>Plastic Containers</td>
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</tr>
<tr>
<td>PET</td>
<td>.4 lbs. per person per month</td>
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<tr>
<td>HDPE</td>
<td>.4 lbs. per person per month</td>
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<tr>
<td>Corrugated</td>
<td>Depends on the level of commercial activity</td>
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<tr>
<td>Hi-grade Office Paper</td>
<td>15 lbs. per office worker per month</td>
</tr>
<tr>
<td>Mixed Office Paper</td>
<td>30 lbs. per office worker per month</td>
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AVERAGE DENSITIES OF MATERIALS

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<tr>
<td>Aluminum Cans (Whole)</td>
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<td>Glass (Whole Bottles)</td>
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<td>Mixed Office Paper</td>
<td>1 grocery bag = 16 lbs.</td>
</tr>
</tbody>
</table>
Tin Cans  
1 grocery bag = 1.5 lbs.  
1 cubic yard = 150 lbs.  
12 cans = 1 lb.

Plastic Containers  
(Approximately 50% Flattened)  
PET  
1 cubic yard = 45 lbs.  
HDPE  
1 cubic yard = 25 lbs.

The following guidelines will assist developers and planning board members in setting up specifications to include in subdivision applications.

SINGLE FAMILY HOMES

Space should be allowed in the kitchen, laundry room, basement or the garage for storage of recyclables. Approximately three square feet of floor area will adequately hold a week’s accumulation of recyclables. This is enough space to hold either a three tier unit or three or four 5 gallon buckets.

CONDOMINIUMS/TOWNHOUSES/APARTMENT BUILDINGS

Each individual unit should be designed to accommodate a week’s accumulation of paper, glass and metals. This can be accomplished by allowing space under the sink area or in a closet for a three tier stacking unit or for five gallon buckets. This would occupy only about 3 square feet of floor area and would give residents a convenient area for storing their recyclables.

A central location should be provided so that residents can drop off their source separated recyclables for storage until collection occurs. A suggested location for these sites would be near the refuse receptacle units. These could be outdoor recycling bins located near the refuse units or in a common area of the condominium units, for example, near the laundry room. In a multi-story building, a space provided on each floor will produce the highest participation rates. The bins should be clearly labeled so it is obvious they are for recyclables and not trash.

COMMERCIAL ESTABLISHMENTS

Developers of commercial establishments generating a homogenous waste stream must have a plan for recycling these materials. The most likely materials will be office paper, corrugated containers, glass, tin cans or food waste (if the establishment is located in the southern or central part of the State). In order to determine the amount of space required for storage, cubic yard equivalents have been given for the number of bottles or cans.

OFFICE PAPER – The average office worker generates ¾ pounds of office paper per week. The loading dock area should be designed for interim storage of Gaylord containers or hampers. These containers are approximately 4’ x 4’ x 4’ and hold approximately 500 lbs. of paper. The size of the storage area required will be dependent on the number of workers in the buildings and the frequency with which the vendor picks up the materials.

CORRUGATED CONTAINERS – Because corrugated is a particularly bulky item for disposal, it needs to be flattened and baled, compacted or tied in bundles. Space will be required for storage of materials prior to pickup by either a paper vendor or a recycling contractor. The amount of space required for storage will depend on the amount of material generated by the establishment, and whether the material is baled, tied in bundles or stored in a compactor.
GLASS – The simplest method for storing glass in commercial establishments is by purchasing or leasing a glass crusher. This will obviously allow more glass to be stored in a smaller space. If this is not available, glass will need to be stored in either 55 gallon drums or in small dumpsters. There are approximately 3 12 oz. bottles in a pound, and 1 cubic yard of whole bottles weights 600 pounds or approximately 900 12 oz. bottles.

TIN CANS – A commercial establishment generating ferrous (tin-plated steel) cans, which are used for food storage, in large quantities may be required to recycle them. There are approximately 12 cans in a pound, and approximately 1800 cans in a cubic yard.

FOOD WASTE – Food waste is any edible waste material resulting from the handling, preparation, processing, cooking, or consumption of food. In the southern areas of N.J., municipalities may want to include food waste recycling in their planning. In that case, they should consult “A Guide to Food Waste Recycling for the New Jersey Food Industry” published by Cook College and the Office of Recycling.
6(b) DEPE Certification
July 5, 1989
A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Board of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department approved, with modifications, the Essex County District Solid Waste Management Plan.

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for the ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district’s waste for the ten-year period; which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements).

Amendments to the Act found in N.J.S.A. 13:1E-1 et seq., specifically N.J.S.A. 13:1E-99.11 et seq., require that counties amend their district solid waste management plans to include a district recycling plan. The Essex County Board of Chosen Freeholders adopted an amendment to the approved district solid waste management plan on January 25, 1989, which addressed the modification required pursuant to the October 27, 1987 certification. The January 25, 1989 amendment was distributed for state level review to the N.J.D.E.P. Green Acres Program and Division of Solid Waste Management, the two state level review agencies which commented, along with the Office of Recycling, on the April 29, 1987 district recycling plan, necessitating the January 25, 1989 plan amendment.

The amendment proposes to incorporate modifications to the district recycling plan into the approved district solid management plan as per the requirements of the New Jersey Statewide Mandatory Source Separation and Recycling Act N.J.S.A. 13:1E-99.11 et seq., (herein referred to as the "Recycling Act").
The amendment was received by the Department of Environmental Protection on June 6, 1989. The Department has reviewed this amendment and has determined that the amendment adopted by the Essex County Board of Chosen Freeholders on January 25, 1989 is approved with the modifications herein included, as provided in N.J.S.A. 13:1E-24.

B. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24.f and N.J.S.A. 13:1E-99.13, I, Christopher J. Daggett, Commissioner of the Department of Environmental Protection have studied and reviewed the January 25, 1989 amendment to Essex County District Solid Waste Management Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and N.J.S.A. 13:1E-99.11 et seq., and I find and conclude that this plan amendment is consistent as modified herein with these requirements.

The Division of Solid Waste Management commented that a review of the Essex County district recycling plan and the Division's Facility directory dated May 26, 1989, shows some inconsistencies which require correction. The Directory lists Cedar Grove Township Compost Facility #0704B located on Ridge Road as an operating facility. However, the district recycling plan does not list this site. The County site on South Orange Avenue, Millburn, is shown as #0712C in the Director, while Essex County identifies it as #07120. The Directory also lists West Caldwell Compost #1, Bloomfield Avenue, as operating under facility #0721A, but the County does not list this site. A review of the Essex County composting facilities shall be undertaken and a corrected list forwarded to the Department within 30 days of the date of this certification.

The Green Acres Program found the Essex County recycling plan to be inconsistent with the plans and programs administered by their agency. Specifically, Green Acres commented that "one existing albeit approved leaf composting site is on land which is encumbered by Green Acres contract and restricted to outdoor recreation and conservation uses". The composting facility in question is #0719A, located on Walton Avenue in South Orange. It was included in the district solid waste management plan on January 30, 1985. Essex County is advised that the Division of Solid Waste Management will evaluate the impact of this comment on the facility's current permit.

The Office of Recycling commented on the district recycling plan as follows:

1. Section 2.3.1.3 of the Essex County district recycling plan amendment of January 25, 1989, indicates that due to an increase of private sector involvement in recycling services, Essex County no longer considers it advisable to invest public funds in this area. This section continues, stating that "the County now recommends that municipalities desiring such services negotiate with vendors for processing of commingles containers...with technical assistance provided by the County". However, the plan fails to identify these providers of recycling services. All recycling centers shall be included in the Essex County district recycling plan as per N.J.S.A. 13:1E-99.13 (b) (3).

2. Section 2.3.1.5.A., detailing exemptions to mandatory source separation ordinances, states that "Persons (residential generators) may get an exemption from the municipal source separation requirement only if the person is physically handicapped or otherwise unable to perform the separation activity". The Office of Recycling understands Essex County's concerns of placing and undue burden on the handicapped. Please be advised, however, that the municipality is required to provide collection services for all residents, including the handicapped. In such instances, the
municipality shall provide an alternative method of collection (e.g. the recycling collector could pick up recyclables from the doorstep of the handicapped, mirroring arrangements made for solid waste collection in many cases). This section continues, stating “Businesses (commercial and institutional generators) may get an exemption from the requirement to source separate only if the nature of the business is such that the designated recyclables are contaminated and unfit for recycling”. This section of the Essex County district recycling plan does not comply with N.J.S.A. 13:1E-99.16(d), which provides an exemption for the commercial and institutional sectors only “if those persons have otherwise provided for the recycling of the recyclable materials designated in the district recycling plan from solid waste generated at those premises. To be eligible for an exemption pursuant to this subsection, a commercial or institutional solid waste generator annually shall provide written documentation to the municipality of the total number of tons recycled”. The Essex County district recycling plan is amended to comply with N.J.S.A. 13:1E-99.16(d).

3. Section 1.4.2 of the plan lists those recycling plan changes considered to be minor modifications to the recycling plan. Later, in section 2.2.2 of the plan, the procedure for municipal application to mandate additional materials in a municipality is detailed. This section states that a municipality which wished “to add recyclable materials to the table of County-designated materials for that municipality…shall request a minor plan modification via a municipal resolution and send such resolution to the County Recycling Coordinator. The resolution shall include a reference to the local ordinance which mandates the separation of said material(s), provides for collection and provides for penalties for non-compliance by a generator. A copy of said ordinance and a description of the collection methodology (collecting agent, point of collection or drop-off, frequency of pickup or hours available for drop-off, market(s) to be used, and any other relevant information) must be attached to the resolution when submitted to the County Recycling Coordinator…Proposals will be reviewed by the County Recycling Coordinator and if approved will be processed as a minor plan amendment as provided for in Section 1.4.2 of this Recycling Plan”. To add clarity to this language as it appears in the Essex County district recycling plan, the Office of Recycling recommends that the final sentence quoted above be modified to read “Proposals will be reviewed by the County Recycling coordinator based on the above criteria and if approved will be processed as a minor plan amendment as provided for in Section 1.4.2 of this Recycling Plan”.

In addition, it is not specified in the Essex County district recycling plan whether this is the procedure of all minor plan amendments, or only for this particular type of minor plan amendment (i.e. inclusion of additional recyclable materials by a municipality to the list of county designated recyclable materials). This point shall be clarified to the Department in a subsequent submission by Essex County. Aside from the resolution of this request, however, minor plan amendments such as a change in the marketing agreements for designated recyclable materials, change in the provider(s) of curbside collection service, and change in the operation of recycling depots (e.g. hours etc.) shall be included in the plan upon satisfaction of the following requirements: recommendation of the Essex County Solid Waste Advisory Council at a meeting for which a public notice has been published at least once in a newspaper of general circulation, no less than ten days prior to the meeting, and upon affirmative resolution of the Essex County Board of Chosen Freeholders. Essex County is advised that the plan is amended to include the above requirement.

4. Section 2.3.1.2.A of the Essex County district recycling plan includes responses to comments made by the Office of Recycling in the October 27, 1987 certification of the district recycling plan regarding priority consideration for recycling businesses, per N.J.S.A. 13:1E-99.13(c). Essex County states that “because Section 32 of the Act exempts the sale or marketing of recyclable materials for the bid process, municipalities are not required to provide priority to markets existing before January 1, 1986 when negotiating contract for the marketing of recyclable materials”. Please be advised that
the Department does not agree with this statement. Priority consideration and exemption of the sale or marketing of recyclable materials from the bid process are two distinct provisions of the Recycling Act. Essex County’s citation of the exemption provision is correct. This provision, however, has no bearing on the separate issue of priority consideration, and should not be interpreted as superceding the priority consideration requirement of N.J.S.A. 13:1E-99.13(c). Essex County is required therefore, to delete these errant statements from the district recycling plan.

5. In addition to the comments of the Division of Solid Waste, and the Green Acres Program, regarding the Essex County leaf composting arrangements for the district, the Office of Recycling has additional comments to offer in this regard:

In the process of reviewing the N.J.D.E.P. permit for the composting site on Walton Avenue in South Orange (#0719A), a discrepancy has been found regarding the capacity of this site as detailed in Table 7 of the district recycling plan. The Essex County district recycling plan lists the acreage of this site as being “3 to 4 acres”. However, the permit allows for composting on this site only within a 150 foot by 200 foot area (roughly 2/3 of an acre). This discrepancy shall be addressed by the county in the report, detailing the Essex County composting facilities required above.

In addition, section 2.3.1.3.A of the Essex County district recycling plan states that “Essex County operates two permitted regional sites (0715A and 0720C) to serve the needs of the remaining 13 municipalities. These sites are planned to be closed to municipalities in October 1989.”

The ambiguity of the information submitted detailing composting capacity in Essex County prevents a thorough review by the Department. Therefore, Essex County shall, within thirty days of the date of the certification of this amendment, prepare and submit a report which shall include the following:

A. A list setting forth the leaf composting facilities, vegetative waste composting facilities, or leaf composting operations to be utilized by each Essex County municipality, including the thirteen municipalities presently utilizing the two regional composting sites to be closed in October, 1989.

It should be noted that the new rules established at N.J.A.C. 7:26-1.7 and 7:26-1.11 exempt leaf composting facilities from solid waste facility permitting if the owner or operator of the facility adheres to the requirements of either of the above rules. It should also be noted that, pursuant to new rule N.J.A.C. 7:26-1.12, leaf composting facilities that engage in leaf mulching operations on agricultural or horticultural lands are exempt from the Department’s solid waste facility permitting process if the specific standards under the rule are met.

B. A copy of the contract to be used by the county to execute services on behalf of municipalities for the proper collection and transportation of source separated leaves to permitted or authorized leaf composting facilities, vegetative waste composting facilities, or to leaf composting facilities that engage in leaf mulching operations on agricultural or horticultural lands, during the mandatory leaf collection period of September 1 to December 31 of each year as required by N.J.S.A. 13:1E-99.22.

C. An indication of the steps to be taken (with a timeline setting forth the dates associated with those identified steps) to execute B above, with an execution date to be indicated no later than September 1, 1989.

D. Inspection procedures to be performed at the county transfer stations and the future resource recovery facility between September 1 and December 31 of each year to determine compliance
with the provisions of N.J.S.A. 13:1E-99.21, as well as facility operator or county actions to be taken if a municipality is found to be noncompliant.
C. Certification of Essex County District Solid Waste Management Plan Amendment

I, Christopher J. Daggett, Commissioner of the Department of Environmental Protection, in accordance with N.J.S.A. 13:1E.1 et seq., and N.J.S.A. 13:1E-21, which established specific requirements regarding the contents of the district solid waste management plans, have reviewed the January 25, 1989 amendment to the approved Essex County District Solid Waste Management Plan and certify to the Essex County Board of Chosen Freeholders that the January 25, 1989 amendment is approved with the modifications identified in Section B of this certification.

D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with this amendment to the Essex County District Solid Waste Management Plan and which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department of Environmental Protection and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the Essex County District Solid Waste Management Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment; provided, however, that any such registrant may, upon application to the Department of Environmental Protection, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and collector/haulers registered with the Department of Environmental Protection and operating within Essex County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the Essex County District Solid Waste Management Plan. Any solid waste facility operator or collector/hauler who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 12:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department of Environmental Protection and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9, and 12 and all other applicable laws.

3. Types of Solid Waste Covered by the District Solid Waste Management Plans

The provisions of the Essex County District Solid Waste Management Plan shall apply to all solid waste defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. Also, all non-hazardous materials separated at the point of generation for recycling or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6).

4. Certification to Proceed with the Implementation of Plan Amendment
This document shall serve as the certification of the Commissioner of the Department of Environmental Protection to the Essex County Board of Chosen Freeholders and pursuant to N.J.S.A. 13:1E-24C and f, the county shall proceed with the implementation of the approved amendment contained herein.

5. Definitions

For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those found at N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-1.4 and N.J.A.C. 7:26-2.13 and N.J.S.A. 13:1E-99.12.

6. Effective Date of Amendment

The Amendment to the Essex County District Solid Waste Management Plan contained herein shall take effect immediately.

7. Reservation of Authority

Nothing contained herein shall be construed as a limitation on any other action taken by the Department of Environmental Protection pursuant to its authority under the law. The Essex County District Solid Waste Management Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan with appendices which includes the Department’s planning guidelines and rules, regulations, and orders of the Department, including the inter-district and intradistrict waste flow rules, and also include the compilation of individual district plans and amendments as they are approved.

E. Certification of Approval of the Amendment by the Commissioner of the Department of Environmental Protection

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq., I hereby approve with modification the amendment as outlined in Section C of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on January 25, 1989.

July 5, 1989
DATE

CHRISTOPHER J. DAGGETT
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION
7(a) Plan Amendment to include RRIT Fund use and disbursement
Adopted: September 12, 1990
Certified: January 17, 1992
Resolution No.: 0-90-0019

Public Notices:  (1st):  August 3, 1990
                (2nd):  August 10, 1990

Public Hearing(s):  September 12, 1990
TO: Jerome C. Harris
    County Administrator

THRU: Phillip Thigpen, Director

FROM: Martin Lund, director

DATE: May 1, 1990


INTRODUCTION

Essex County has received from the State of New Jersey payments to the Resource Recovery Investment Tax fund totaling $6.2 million under provisions of N.J.S.A. 13:1E-150. The Board of Chosen Freeholders established on May 18, 1988, via Resolution R-88-0452, that these funds received be Dedicated by Rider. The use of these funds is limited by statute to specified purposes. Included in the County’s amended Solid Waste Management Plan of April 1987, were two (2) General Disbursement Proposals: (1) Development of an intermediate solid waste processing facility (ie Resource Recovery); and (2) Operation of a Regional Composting Facility (at Hilltop). The New Jersey Department of Environmental Protection approved this spending plan and prior amendments. The detailed spending plan attached hereto for ordinance approval represents the fourth (4th) revision and must be submitted for D.E.P. approval.

RECOMMENDATION

For the year ending December 31, 1990, it is recommended that the Board of Chosen Freeholders vote to pass an ordinance consistent with the above and attachments thereto which will authorize: (1) Payments to the New York Port Authority for the Resource Recovery Facility; (2) Expenditures for the Leaf Composting Facility; and (3) Allowable Administrative Expenses up to 2% of State Appropriations received.

REASON FOR RECOMMENDATION

The Resource Recovery Investment Tax Fun under N.J.S.A. 13:1E-150 allows expenditures for limited purposes consistent with our certified Solid Waste Management Plan which includes operating a leaf composting facility and development of an interim Solid Waste Disposal Facility. The detailed spending plan for these two (2) operations during the current year ending December 31, 1989 and continuing until December 31, 1992 would eliminate the possible existence of unauthorized expenditures without required approval. This spending plan would be incorporated by ordinance to amend the Essex County Solid Waste Management Plan. Essex County under Resolution R-88-0452 cannot spend monies from the Resource Recovery Investment Tax Fund without such prior approval from the Board of Chosen Freeholders.

BUDGET IMPACT

Adoption of this Ordinance will eliminate the need to spend money from the current and subsequent years’ operating budget of the County. Monies for the operation of the Leaf Composting Facility were not included in the 1989 County Operating Budget nor will funds be proposed for the 1990 Budget. Monies for payments to the New York Port Authority under our present payout schedule were not included in the 1989 Operating Budget. It is anticipated that monies for future payments due through December 1992, will not be included as part of the County Budget as well.
ORDIANCE OF THE BOARD OF FREEHOLDERS
COUNTY OF ESSEX

Ordinance No.: 0-90-0019  Statutory Authority for Ordinance N.J.S.A. 40:41A-3
Proposed by:  County Executive  Authority for Action N.J.S.A. 13:1E-23
Sponsored by:

SUBJECT: ORDINANCE TO AMENDING THE ESSEX COUNTY SOLID WASTE MANAGEMENT
PLAN AMENDING TABLE XVI

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by
Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste
Management Plan; and
WHEREAS, the County Executive, through the Department of Planning and Economic
Development, has prepared, and has requested Board of Freeholder approval for an amendment to said
Solid Waste Management Plan amending and superseding the Recycling Plan provisions thereof; and
WHEREAS, said Plan amendment Table XVI district Tax Disbursement Schedule; and
ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. The County Ordinance 00220 adopting the Essex County Solid Waste Management
Plan, is amended as follows:

   a. Table XVI of the Plan entitled District Tax Fund Disbursement Schedule is
      hereby amended and replaced by amended Table XVI – (4) attached hereto.
      This Disbursement Schedule replaces any previous Tables.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-
   23, on September 12, 1990, at 3:00 p.m., in Room #506, Hall of Records, Dr. Martin
   Luther King, Jr., Blvd., Newark, NJ 07102.

3. That the Clerk of this Board is hereby directed to send notice of said hearing and copies
   of this Ordinance and Plan amendment to the Mayor of each municipality within the
   County, and to publish notice of said hearing once each week for two consecutive
   weeks, the last publication to be not less than ten days prior to the date set for hearing.
   Said notice shall state that said Plan amendment can be inspected at the offices of every
   municipality within the County.

4. That the Clerk of Board, upon adoption, shall forward a certified copy of this Ordinance
   and the Plan amendment to the Commissioner of Environmental Protection pursuant to
   N.J.S.A. 13:1E-23 and 24, together with a copy of the transcripts of the public hearing
   thereon and proof of publication of notice of public hearing.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward (2) certified copies of this Ordinance and
   transmitting letter to the Commissioner of Environmental Protection, to Phillip Thigpen,
   Director, Department of Planning & Economic Development and one (1) certified copy to
   H. Curtis Meanor, County Counsel.
TABLE XVI – 4

DISTRICT TAX FUND DISBURSEMENT SCHEDULE

Disbursement Schedule – From Essex County District Resource Recovery Investment Tax Fund
(Funds accrued through December 31, 1989)

I. County Contributions towards the cost of the Essex County – Port Authority Resource Recovery Facility

A. Previously Approved Expenditures: (Ord# 0-88-0025)

<table>
<thead>
<tr>
<th>PAYMENT NUMBER</th>
<th>PAYMENT DATE</th>
<th>PAYMENT AMOUNT</th>
<th>TOTAL AMOUNT</th>
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<tr>
<td>1</td>
<td>July 30, 1988</td>
<td>$750,000.00</td>
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<td>Jan 30, 1989</td>
<td>$750,000.00</td>
<td></td>
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<td>3</td>
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B. Additional Contributions:

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<td>9</td>
<td>July 30, 1992</td>
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<td>$3,705,882.20</td>
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Total Contributions to the Resource Recovery Project $6,705,882.20

Disbursements for site improvements, operations, equipment, and cost subsidy at the Essex County Regional Leaf Composting Facility.

A. Previously approved expenditures: (Ord# 0-88-0032)

1. 1987(8) Composting Operations:

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<td>B. Equipment</td>
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<tr>
<td>C. Other Costs</td>
<td>$37,283.69</td>
<td>$142,944.46</td>
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2. 1988 Equipment Purchase:

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<tbody>
<tr>
<td>A. Leaf Turner</td>
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<td>$109,583.00</td>
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<tr>
<td>B. Track Loader</td>
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<td>$119,310.00</td>
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3. 1988(9) Composting Operations:

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<tr>
<td>A. Operating Subsidy</td>
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<td>$155,300.00</td>
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<td>Based on 10,000 Tons at $15.53 Per Ton</td>
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Total Prior Approved Expenditures – Leaf Composting $527,137.46

B. Additional Expenditures – Leaf Composting:

1. 1989(90) Composting Operations:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PAYMENT</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Equipment Rental</td>
<td></td>
<td>$40,000.00</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>B. Other Costs</td>
<td></td>
<td>$20,000.00</td>
<td>$60,000.00</td>
</tr>
</tbody>
</table>

Total Additional Expenditures – Leaf Composting $60,000.00

Total Payments for the Leaf Composting Facility $587,137.46

Disbursements for Administrative Expenses Allowable at 2% of Funds Appropriated by the State of N.J.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>YEAR</th>
<th>ENTITLEMENT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Admin. Expenses</td>
<td>1987</td>
<td>$39,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>$64,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1989</td>
<td>$20,000</td>
<td>$123,000</td>
</tr>
</tbody>
</table>

Total amount previously expended $3,527,137.46
Total approved this revision $3,888,882.20
Total spending plan disbursements $7,416,019.66
TABLE XVI – 4

IV Balance of Fund as of December 31, 1989 $4,196,293.45

Monies deposited by the Director, Division of Taxation in the Department of Treasury, to the Essex County District Resource Recovery Investment Tax Fund.

Funds are currently invested in money market certificates. Generating interest income which is added to the fund balance at the end of each month.
TABLE XVI – 4

DISTRICT TAX FUND DISBURSEMENT SCHEDULE

DISBURSEMENT SCHEDULE - From Essex County District Resource Recovery Investment Tax Fund (Funds accrued through December 31, 1989)

I. County Contributions towards the cost of the Essex County – Port Authority Resource Recovery Facility

A. Previously Approved Expenditures: (Ord# 0-88-0025)

<table>
<thead>
<tr>
<th>PAYMENT NUMBER</th>
<th>PAYMENT DATE</th>
<th>PAYMENT AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>July 30, 1988</td>
<td>$750,000.00</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Jan 30, 1989</td>
<td>$750,000.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>July 30, 1989</td>
<td>$750,000.00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Jan 30, 1990</td>
<td>$750,000.00</td>
<td>$3,000,000.00</td>
</tr>
</tbody>
</table>

B. Additional Contributions: (To be approved by this revision)

<table>
<thead>
<tr>
<th>PAYMENT NUMBER</th>
<th>PAYMENT DATE</th>
<th>PAYMENT AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>July 30, 1990</td>
<td>$750,000.00</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Jan 30, 1991</td>
<td>$750,000.00</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>July 30, 1991</td>
<td>$750,000.00</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Jan 30, 1992</td>
<td>$750,000.00</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>July 30, 1992</td>
<td>$705,882.20</td>
<td>$3,705,882.20</td>
</tr>
</tbody>
</table>

Total Contributions to the Resource Recovery Project $6,705,882.20

Disbursements for site improvements, operations, equipment, and cost subsidy at the Essex County Regional Leaf Composting Facility.

A. Previously approved expenditures: (Ord# 0-88-0032)

1. 1987(8) Composting Operations:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Personnel</td>
<td>$28,663.04</td>
<td></td>
</tr>
<tr>
<td>B. Equipment</td>
<td>$76,997.73</td>
<td></td>
</tr>
<tr>
<td>C. Other Costs</td>
<td>$37,283.69</td>
<td>$142,944.46</td>
</tr>
</tbody>
</table>
2. 1988 Equipment Purchase:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PAYMENT AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Leaf Turner</td>
<td>$109,583.00</td>
<td></td>
</tr>
<tr>
<td>B. Track Loader</td>
<td>$119,310.00</td>
<td>$228,893.00</td>
</tr>
</tbody>
</table>

3. 1988(9) Composting Operations:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PAYMENT AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Operating Subsidy</td>
<td>$155,300.00</td>
<td>$155,300.00</td>
</tr>
</tbody>
</table>

Total Prior Approved Expenditures – Leaf Composting $527,137.46

B. Additional Expenditures – Leaf Composting: (To be approved by this revision)

1. 1989(90) Composting Operations:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PAYMENT AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
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Total Payments for the Leaf Composting Facility $587,137.46

Disbursements for Administrative Expenses Allowable at 2% of Funds Appropriated by the State of N.J: (To be approved by this revision)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>YEAR</th>
<th>ENTITLEMENT</th>
<th>TOTAL</th>
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<td></td>
<td>1989</td>
<td>$20,000</td>
<td>$123,000</td>
</tr>
</tbody>
</table>

Total amount previously expended $3,527,137.46
Total approved this revision $3,888,882.20
Total spending plan disbursements $7,416,019.66
<table>
<thead>
<tr>
<th></th>
<th>Balance of Fund as of December 31, 1989</th>
<th>$4,196,293.45</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Monies deposited by the Director, Division of Taxation in the Department of Treasury, to the Essex County District Resource Recovery Investment Tax Fund.

Funds are currently invested in money market certificates. Generating interest income which is added to the fund balance at the end of each month.
7(b) DEPE Certification
January 17, 1992
(IN THE MATTER OF CERTAIN AMENDMENTS)
(TO THE ADOPTED AND APPROVED SOLID)
(WASTE MANAGEMENT PLAN OF THE)
(ESSEX COUNTY SOLID WASTE)
(MANAGEMENT DISTRICT)

BY ORDER OF THE COMMISSIONER:

A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state's counties, and Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Board of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department of Environmental Protection approved, with modifications, the Essex County District Solid Waste Management Plan (County Plan).

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for a ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district's waste for a ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements).

The Act further provides that a district may review the plan at any time and, if found inadequate, a new plan must be adopted. The Essex County Board of Chosen Freeholders (County Freeholders) completed such a review and on September 12, 1990 adopted an amendment to its approved county plan. However, while this amendment was adopted on September 12, 1990, it was not submitted to the Department in its entirety until August 26, 1991. The amendment proposes the uses and disbursement of Essex County's Resource Recovery Investment Tax (RRIT) Fund through July 30, 1992. Specifically, the amendment proposes payments of $3,705,882.20 to the Port Authority of New York and New Jersey as debt payment toward the County's resource recovery incinerator, $123,000.00 for administrative expenses and $60,000.00 towards County leaf composting operations.

The Amendment was received by the Department of Environmental Protection and Energy (Department or DEPE) on August 25, 1991 and copies were distributed to various administrative review agencies for
review and comment, as required by law. The Department has reviewed this amendment as well as the entire County Plan, and has determined that the amendment adopted by the County Freeholders on September 17, 1990 is approved as provided in N.J.S.A. 13:1E-24. While the immediate plan amendment has been approved, deficiencies in the County Plan have been identified within Section C of this certification.

Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I have studied and reviewed the September 12, 1990 amendment to the County Plan according to the objectives, criteria, and standards developed in the statewide Solid Waste Management Plan and I find and conclude that this plan amendment is consistent with the Statewide Solid Waste Management Plan.

In conjunction with the review of the amendment, the Department circulated copies to sixteen administrative review agencies and solicited their review and comment. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various bureaus, divisions, and agencies within the Department. These agencies are the following:

Division of Environmental Quality, DEPE
Water Supply Element, DEPE
Wastewater Quality Element, DEPE
Division of Coastal Resources, DEPE
Division of Parks and Forestry, DEPE
Division of Fish, Game and Wildlife, DEPE
Division of Solid Waste Management, DEPE
Green Acres Program, DEPE
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Health
Department of Transportation
Department of Community Affairs
Department of the Public Advocate
U.S. Environmental Protection Agency

1. Agency Participation in the Review of the September 12, 1990 Amendment

The following agencies did not object to the proposed plan amendment:

Division of Environmental Quality, DEPE
Water Supply Element, DEPE
Wastewater Quality Element, DEPE
Division of Parks and Forestry, DEPE
Green Acres Program, DEPE
New Jersey Turnpike Authority
Department of Agriculture
Department of Health
Department of Transportation
Department of Community Affairs
U.S. Environmental Protection Agency
The following agencies did not respond to the Department’s requests for comments:

Division of Coastal Resources, DEPE
Division of Fish, Game and Wildlife, DEPE
New Jersey Advisory Council on Solid Waste Management
Department of Health
Department of the Public Advocate

The following agencies submitted substantive comments which are further addressed below:

Division of Solid Waste Management, DEPE

2. Issues of Concern Regarding the September 12, 1990 Amendment

Issue: RRIT Fund Use and Disbursement

The provisions of the “McEnroe” legislation (N.J.S.A. 13:1E-136 et seq.) which establish RRIT Fund accounts for the state’s twenty-one counties, set out a clear policy objective to generate revenue in order to subsidize anticipated resource recovery tipping fees to a level which is competitive with disposal costs at landfills utilized by the counties.

Prior to disbursement from its RRIT Fund, however, a county must prepare a plan amendment which outlines the proposed uses of the moneys in its district fund and establishes a disbursement schedule for those moneys in the Fund. Thus, two tests must be met: an eligible use test, which uses are limited to those identified in N.J.S.A. 13:1E-150b, and a disbursement schedule test, which test criteria are not specifically provided in the Act.

Eligible uses of the fund are provided to Attachment I, Part I, of this certification. In consideration of the intent and objectives of the Act outlined above, and the specific limitations upon eligible uses of the fund provided in N.J.S.A. 13:1E-150b., projects not formally identified in the approved district solid waste management plan shall not be funded with RRIT Fund moneys. Therefore, in order to ensure users rate reduction and facilitate timely project implementation, disbursements from a RRIT Fund shall be made only to projects formally identified in the approved district solid waste management plan.

Pursuant to law, in order to provide safeguards as to how the investment tax funds are to be spent, a schedule for the disbursement of the moneys must be provided through the plan amendment process established under the New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.). In this way, a formal procedure for quantifying contributions to and withdrawals from the fund is established in order to maintain a running fund balance. Such a procedure may be followed using a variety of specific steps and methods of data presentation. In order to evaluate the adequacy of the disbursement schedule, the Department has established criteria (see Attachment I, Part II).

On September 12, 1990, the Essex County Board of Chosen Freeholders adopted an amendment to its approved County Plan which proposed uses of and a disbursement schedule for RRIT Fund revenues totaling $7,416,019.66 through July 30, 1992. The proposed plan calls for expenditures for payments to the Port Authority of New York and New Jersey for the County’s resource recovery incinerator; toward leaf composting operations and for administrative expenses (allowable at 2% of RRIT Funds appropriated by the state).
Although the uses and disbursements are approved in section C, two areas of concern have been identified. First, of the $5,772,196.04 identified as having already been spent as of December 31, 1991, Essex County only had previous approval to spend $2,027,137.46 which was for fiscal year 1986 and part of fiscal year 1987. The County received RRIT distributions from the State for fiscal years 1986, 1987, 1988 and 1989 and spent $3,745,058.58 more than its disbursement schedule provided for under a previously approved plan amendment. Secondly, Essex County is receiving a smaller share of RRIT Funds each year because waste which is sent to the Essex County incinerator is not subject to the tax. There appears to be enough money in the County’s RRIT Fund to cover expenses identified in the subject plan amendment through July 30, 1992. However, RRIT revenues beyond this date may not be sufficient to match Essex County’s planned (projected) payments to the Port Authority.

It is noted that the premature disbursements of $3,745,058.58 was for expenditures within the limits of approvable uses and only lacked a disbursement schedule. However, Essex County is hereby cautioned not to make premature disbursements in the future. In addition, the proposed revised disbursement schedule for distributions of moneys from the Essex County RRIT Fund through July 30, 1992 is consistent with the requirements of N.J.S.A. 13:1E-150b. Finally, because of decreasing RRIT revenues, it is recommended that Essex County reasons their RRIT revenue beyond July 30, 1992, until the program terminates on January 1, 1996, in order to identify alternate funding sources to cover future payments to the Port Authority for the Essex County RRF.

Certification of the Essex County District Solid Waste Management Plan Amendment

I, Scott A. Weiner, Commissioner of the Department, in accordance with N.J.S.A. 13:1E-1 et seq., specifically N.J.S.A. 13:1E-21, which establishes specific requirements regarding the contents of the district solid waste management plans, have reviewed the September 12, 1990 amendment to the approved County Plan and certify to the County Freeholders that the September 12, 1990 amendment is approved as further specified below.

1. September 12, 1990 Amendment

The Essex County Resource Recovery Investment Tax Fund, uses and disbursements, totaling $7,416,019.66 through July 30, 1992, are in conformance with the requirements of N.J.S.A. 13:1E-150b and are approved. As noted in Section B, $5,772,190.04 has already been spent, therefore, leaving a balance of $1,643,823.62. The remaining funds, are allocated to the Port Authority of New York and New Jersey as service contract payments for the County’s resource recovery incinerator; leaf composting operations; and for administrative expenses.

2. Essex County District Solid Waste Management Plan Deficiencies

I have reviewed the entire County Plan, including this amendment, to determine whether the plan fulfills the requirements set forth in N.J.S.A. 13:1E-21. The result of that review is as follows:

a. N.J.S.A. 13:1E-21(b)1 requires the designation of a Department unit, or committee of county government…to supervise the implementation of the County’s solid waste management plan.

Although Essex County has developed its resource recovery incinerator facility, there has been no formal designation of an implementation agency to oversee the entire solid waste program. Therefore, Essex County is hereby directed to submit to the Department a subsequent plan amendment within 180 days of the date of this certification designating the solid waste management implementation agency for the district.
b. N.J.S.A. 13:1E-21b(3) requires a site plan which shall include all existing solid waste disposal facilities located within the Solid Waste Management District…and sufficient additional available suitable sites to provide solid waste facilities to treat and dispose of the actual and projected amounts of solid waste contained in the report accompanying the plan.

Currently, Essex County has contracted with an out-of-state landfill to accept residual and nonprocessible waste from the County’s resource recovery facility. This disposal arrangement is inconsistent with the Department’s policy that solid waste districts must be self-sufficient with regard to solid waste disposal. Therefore, Essex County is directed to actively pursue in-state landfill arrangements through facility siting or the negotiation of an inter-district agreement.

c. N.J.S.A. 13:1E-21b(4) requires every solid waste management plan to include a survey of proposed collection districts and transportation routes…to existing or available suitable sites for solid waste disposal facilities.

As Essex County has not specified routes to and from its disposal facilities, the solid waste management plan is deficient in this respect. As previously stated in the October 26, 1987 Certification of the April 29, 1987 plan amendment, Essex County was required to identify in a subsequent plan amendment, specific routes from certain municipalities to its resource recovery incinerator. The municipalities requiring further route identification were: Caldwell, Cedar Grove, Essex Fells, Fairfield, Montclair, North Caldwell, South Orange, Verona, and West Caldwell. In this regard, Essex County is hereby directed to submit to the Department a subsequent plan amendment within 180 days of the date of this certification which identifies specific routes from the aforementioned communities to the Essex County resource recovery incinerator. When Essex County addresses this requirement, they are advised that certain solid waste vehicles are incapable of complying with federal weight limitations (Federal Bridge Formula) set forth for interstate roadways. Accordingly, if interstate routes are to be utilized, haulers must demonstrate their ability to comply with the weight limitations of the Federal Bridge Formula.

3. Essex County Response to Solid Waste Task Force Final Reports

Finally, I have also reviewed the County Plan to determine whether the plan fulfills the recommendations of the Emergency Solid Waste Assessment Task Force Final Report accepted by the Governor on November 16, 1990. Following this review, the County is hereby directed to submit a subsequent plan amendment within 180 days of this certification to address the following provisions of source reduction, recycling and regionalization:

a. **Source Reduction:** The County shall determine what source reduction measures can be taken at the County level to eliminate the trend of increased per capita solid waste generation. For each noted source reduction measure, the County shall estimate its potential impact upon total solid waste generation with the district.

b. **Recycling:** The County shall determine what measures will be taken by the district to achieve at least a 50% recycling rate for the municipal waste stream, including yard waste, and a 60% recycling rate for the total waste stream by December 31, 1995. This determination shall address, at a minimum, what additional facilities will be needed within the district; what sites already exist or under what procedure the district will select necessary sites; and under what schedule the district feels that each necessary facility can be brought into operation.
Also, for each component of the recycling strategy, the district shall outline estimate of the tonnage which can be recycled in a mass balance format taking into consideration the total projected solid waste generation in the district. Further, based upon the minimum 50% and 60% recycling rates, the district must outline the amount of solid waste still requiring disposal. Finally, the County must consider the establishment of blanket facility inclusion and plan modification procedures to enable the expedited development of needed capacity and approvals for yard waste composting facilities, recycling centers, materials markets, and minor program policies.

c. Regionalization: On May 1, 1991, Essex County, American Ref-Fuel, the Port Authority of New York and New Jersey and the Bergen County Utilities Authority entered into a regional agreement for redirection of 250,000 tons per year of processible solid waste types 10 and 23 generated within Bergen County to the Essex County resource recovery facility. Because this agreement only extends through March 1, 1994 as it currently exists, Essex County shall determine the extent to which it can undertake long-term regionalization of its resource recovery facility that may be necessary after this date in order to provide regional solutions to solid waste management. Moreover, any such agreement shall be made a component of the Essex County District Solid Waste Management Plan. Finally, consideration should also be given to regional plans for materials processing, recycling, transfer and disposal facilities.

Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with this amendment to the County Plan and which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the County Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment, provided, however, that any such registrant may, upon application to the Department, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and transporters registered with the Department and operating within the County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the County Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and all other applicable laws.

3. Types of Solid Waste Covered by the District Solid Waste Management Plan

The provisions of the County Plan shall apply to all solid waste defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. All nonhazardous materials separated at the point of generation for sale or reuse are excluded from the

4. **Certification to Proceed with the Implementation of the Plan Amendment**

This document shall serve as the certification of the commissioner of the Department to the County Freeholders and pursuant to N.J.S.A. 13:1E-24c and f, the County shall proceed with the implementation of the approved amendment certified herein.
5. **Definitions**

For the purpose of this statement and unless the context clearly requires a different meaning, the definitions of term shall be the same as those found at N.J.S.A. 13:1E-3 and 99.12 and N.J.A.C. 7:26-1.4 and 2.13.

6. **Effective Date of the Amendment**

The amendment to the County Plan contained herein shall take effect immediately.

7. **Reservation of Authority**

Nothing contained herein shall be construed as a limitation on any other action taken by the Department pursuant to its authority under the law. The County Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan, with appendices, which includes the Department's planning guidelines, rules, regulations, orders of the Department, inter-district and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved.

Certification of Approval of the Amendment and Notification of Deficiencies by the Commissioner of the Department of Environmental Protection and Energy

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq., I hereby approve the amendment, as outlined in Section C of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on September 12, 1990. I hereby also require, as noted in Section C, the Essex County Board of Chosen Freeholders to address the noted deficiencies within the timeframe specified.

January 21, 1989  
DATE

SCOTT A. WEINER  
COMMISSIONER  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AND ENERGY
ATTACHMENT 2


I. Proposed Fees

The money in the fund shall be disbursed only for the following purposes:

1. To reduce the rates charged to all users by a resource recovery facility serving the county in order to provide a gradual transition to resource recovery facility rates from sanitary landfill facility rates. A county may achieve reductions through the use of moneys in its district investment tax fund to pay directly part of the fees charged for disposal to all users of a resource recovery facility;

2. To design, finance, construct, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposing of those solid waste which cannot be processed by a resource recovery facility or the waste products resulting from the operation of a resource recovery facility;

3. To design, finance, construction, operate or maintain environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposal of solid waste, on a long-term basis, if a county can demonstrate to the satisfaction of the department that utilization of a resource recovery facility is not feasible for disposal of the solid waste generated in that county;

4. To finance the closing costs for the proper closure of any terminated sanitary landfill facility located within a county whenever that county has made an investment tax rate adjustment for this purpose in accordance with the study conducted pursuant to N.J.S.A. 13:1E-146; and

5. To administer the investment tax fund, up to an amount not to exceed 2% of the total moneys appropriated to the fund during the fiscal year.

II. Disbursement Schedule

All disbursement schedules for District Resource Recovery Investment Tax Fund moneys shall be consistent with, but not be limited to, the following:

1. Narrative which outlines the purpose, background and legislative justification of and authorization for the use of the funds;

2. Narrative which provides the purpose, description and objectives of the project proposed for receipt of fund moneys;

3. Narrative which provides specific project performance data, implementation schedules and project status;

A spreadsheet or other tabular or budgetary format which provides at least the following information, the activities over time (choice of the time interval is at the discretion of the county, but shall not be longer than annually):
a) Initial fund balance

b) Additional deposits to fund based upon tax rates and projected waste generation and disposal figures, under various recycling or other reduction assumptions and population and/or economic growth assumptions;

c) Interest accrued on fund balance, by year

d) Recipients of fund moneys, by amount, by proposed, by time intervals;

e) Use of moneys by recipients, by amount, by time interval;

f) A budget for fund disbursements
8(a) Plan Amendment to include provision for Inter-district Agreement and acceptance of Out-of-county waste at RRF
Adopted: June 27, 1990
Certified: March 16, 1992
Resolution No.: 

Public Notices: (1st): May 14, 1990
(2nd): May 21, 1990

Public Hearing(s): June 6, 1990
WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and
WHEREAS, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan; and
WHEREAS, said Plan amendment has been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory Council; now, therefore, be it
ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended by the adoption of the attached amendment to Section IV: A. Acceptance of Waste From Outside Essex County.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on June 27, 1990 at 10:00a.m., in Room #506, Hall of Records, Dr. Martin Luther King, Jr. Blvd., Newark, NJ 07102.

3. That the Clerk of this Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to be not less than ten days prior to the date set for hearing. Said notice shall state that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That the Clerk of the Board, upon adoption, shall forward a certified copy of this Ordinance and the Plan amendment to the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon, and proof of publication of notice of public hearing.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Phillip Thigpen, Director, Department of Planning & Economic Development, Martin Lund, Director, Division of Solid Waste Management and H. Curtis Meanor, County Counsel.
SUBJECT: ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN TO INCORPORATE EASTERN WASTE INCINERATOR ASH CONTRACT

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and

WHEREAS, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan; and

WHEREAS, said Plan amendment has been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory Council; now, therefore, be it

ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended by the adoption of the attached amendment to Section IV: A. Acceptance of Waste From Outside Essex County.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on June 27, 1990 at 10:00a.m., in Room #506, Hall of Records, Dr. Martin Luther King, Jr. Blvd., Newark, NJ 07102.

3. That the Clerk of this Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to be not less than ten days prior to the date set for hearing. Said notice shall state that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That the Clerk of the Board, upon adoption, shall forward a certified copy of this Ordinance and the Plan amendment to the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon, and proof of publication of notice of public hearing.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Phillip Thigpen, Director, Department of Planning & Economic Development, Martin Lund, Director, Division of Solid Waste Management and H. Curtis Meanor, County Counsel.
8(b) DEPE Certification
March 16, 1992
A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Boards of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department of Environmental Protection approved, with modifications, the Essex County District Solid Waste Management Plan (County Plan).

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for a ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district’s waste for a ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements).

The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. The Essex County Board of Chosen Freeholders (County Freeholders) completed such a review and on June 27, 1990 adopted an amendment to its approved County Plan.

As proposed, the amendment incorporated the County Freeholders’ former contract with Eastern Waste, Inc. for out-of-state ash disposal services for the first seven years of the County resource recovery incinerator (County incinerator) operation. Further, the amendment includes the County’s portion of a “blanket” inter-district agreement to acquire out-of-county processible waste for the incinerator and authorization to American Ref-Fuel, the operator of the incinerator, to enter into arrangements for the delivery of processible waste from out-of-state sources.

The amendment was initially received by the Department of Environmental Protection and Energy (Department or DEPE) on August 3, 1990. However, at that time the plan amendment was deemed
administratively incomplete due to the lack of inclusion of the required public hearing transcripts. Subsequently, after waiting for the missing component, on November 2, 1990 the County was notified in writing by the Department that the plan amendment remained incomplete and would not be distributed for administrative review until the missing component was received. Another deficiency reminder was sent by the Department to the County on December 19, 1990. Although the County finally submitted the outstanding transcripts to the Department on July 1, 1991, the County also reported to the Department on July 17, 1991 that the subject plan amendment no longer represented an amendment that the County desired to pursue due to changes in their solid waste management planning system. Specifically, the County reported that they were directly negotiating an inter-district agreement with Bergen County and the Bergen County Utilities Authority (BCUA) to direct Bergen County’s processible waste to the County incinerator and to provide for ash removal and disposal under contract of the BCUA.

As a result, the Division of Solid Waste Management consulted with the Division of Law to determine the procedure for a county to withdraw a plan amendment. Accordingly, the Department notified the County on October 11, 1991 that, unless the Department received a resolution to rescind the amendment, the Department would have no alternative but to proceed with the administrative review and certification process. Subsequently, no resolution was received and, on October 21, 1991, the County plan amendment of June 27, 1990 was determined administratively complete and was distributed to various administrative review agencies for review and comment, as required by law. The Department has reviewed this amendment, as well as the entire County Plan, and has determined that the amendment adopted by the County Freeholders on June 27, 1990 is approved with modification in part and remanded for modification in part as provided in N.J.S.A. 13:1E-24. Furthermore, deficiencies in the County Plan have been identified within Section C of this certification.

B. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I have studied and reviewed the June 27, 1990 amendment to the County Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that this plan amendment is inconsistent with the Statewide Solid Waste Management Plan.

In conjunction with the review of the amendment, the Department circulated copies to sixteen administrative review agencies and solicited their review and comment. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various bureaus, divisions, and agencies within the Department. These agencies are the following:

- Division of Environmental Quality, DEPE
- Division of Coastal Resources, DEPE
- Division of Parks and Forestry, DEPE
- Division of Fish, Game and Wildlife, DEPE
- Division of Solid Waste Management, DEPE
- Green Acres Program, DEPE
- Groundwater Quality Management Element, DEPE
- Wastewater Facilities Regulation Element, DEPE
- New Jersey Turnpike Authority
- New Jersey Advisory Council on Solid Waste Management
- Department of Agriculture
- Department of Health
1. **Agency Participation in the Review of the June 27, 1900 Amendment**

The following agencies did not object to the proposed plan amendment:

- Division of Environmental Quality, DEPE
- Division of Parks and Forestry, DEPE
- Division of Fish, Game and Wildlife, DEPE
- Green Acres Program, DEPE
- New Jersey Turnpike Authority
- New Jersey Advisory Council on Solid Waste Management
- Department of Agriculture
- Department of Transportation
- Department of Community Affairs
- U.S. Environmental Protection Agency

The following agencies did not respond to the Department’s requests for comments:

- Division of Coastal Resources, DEPE
- Groundwater Quality Management Element, DEPE
- Wastewater Facilities Regulation Element, DEPE
- Department of Health
- Department of Public Advocate

The following agency submitted substantive comments with are further addressed below:

- Division of Solid Waste Management, DEPE

2. **Issues of Concern Regarding the June 27, 1990 Amendment**

**Issue: Eastern Waste, Inc. and Ash Management Contract**

The Eastern Waste, Inc. agreement with the County was to be in effect for the first seven years of operation of the County incinerator. However, pursuant to a May 1, 1991 Memorandum of Understanding (MOU) between Essex and Bergen Counties, Bergen County is currently coordinating the disposal of the residue from the County incinerator for the term of the MOU which expires March 1, 1994. In this regard, the Essex County Division of Solid Waste Management indicated to the Department by letter dated July 17, 1991, that the Eastern Waste, Inc. contract with the County is currently a matter of litigation and, as such, has never been executed. Therefore, in consideration of the current disposal arrangements in Essex County and pending final resolution of this matter in litigation, Section C of this certification requires Essex County to amend its plan to reflect its intended disposal arrangements. Also, since this issue will significantly affect the Essex County waste management system, it is considered to be a major modification to the County plan and subject to public notice and hearing prior to freeholder adoption.

**Issue: Acceptance of Waste from Outside Essex County**
This plan amendment includes the County’s portion of an inter-district agreement and authorizes American Ref-Fuel to enter into arrangements for the delivery of waste from out-of-state sources. Furthermore, this “blanket” provision provides that another solid waste district may enter into arrangements with American Ref-Fuel for delivery of waste from out-of-county spot markets that may be in effect for as short as one day.

This proposed amendment which authorizes solid waste districts to enter into arrangements with American Ref-Fuel is inconsistent with the Department’s policy that provides that the planning and management of solid waste, including waste flows is a county responsibility requiring state review and approval.

Also, with regard to the acceptance of out-of-state waste at the Essex Incinerator, the Department remain concerned that a significant portion of New Jersey’s solid waste is still being exported to out-of-state disposal facilities. Therefore, Essex County must make every effort to secure in-state waste disposal toward achievement of New Jersey’s goal of becoming self-sufficient.

C. Certification of the Essex County District Solid Waste Management Plan Amendment

In accordance with N.J.S.A. 13:1E-1 et seq., specifically N.J.S.A. 13:1E-21, which establishes specific requirements regarding the contents of the district solid waste management plans, I have reviewed the June 27, 1990 amendment to the approved County Plan and certify to the County Freeholders that the June 7, 1990, amendment is remanded for modification in part and rejected in part as further specified below.

1. June 27, 1990 Amendment

Eastern Waste, Inc. and Ash Management Contract:

The inclusion of the contract with Eastern Waste, Inc. for out-of-state incinerator ash disposal services for a period of seven years must be modified by the County. As specified in Section B, the County stated in a letter to the Department on July 17, 1991 that ash from the incinerator is currently being disposed of pursuant to a Memorandum of Understanding with Bergen County through March 1, 1994. Furthermore, the plan amendment only includes reference to the Eastern Waste, Inc. and Essex County agreement, but does not identify specific details. Also, the Eastern Waste Contract is currently in litigation. Therefore, the Department remands for modification this component of the plan amendment. Specifically, Essex County is required to submit a subsequent amendment within 90 days to reflect its intended resource recovery incinerator ash disposal arrangements. Also, since this issue will significantly affect the Essex County waste management system, it is considered to be a major modification to the County plan and subject to public notice and hearing prior to freeholder adoption.

Acceptance of Waste from Outside Essex County:

The inclusion in the plan of the overall concept to include the County’s portion of an inter-district agreement to acquire out-of-county processible waste for the County incinerator and authorization to American Ref-Fuel to enter into arrangements for the delivery of merchant and spot market waste from in-states and out-of-state sources is rejected. As noted in Section B, this proposed amendment which authorizes solid waste districts to enter into arrangements with American Ref-Fuel is inconsistent with the Department’s policy that provides that the planning and management of solid waste, including waste flows, is a county responsibility requiring state review and approval.
2. Essex County District Solid Waste Management Plan Deficiencies

The entire County Plan has been reviewed to determine whether the plan fulfills the requirements set forth in N.J.S.A. 13:1E-21 as well as the recommendations of the Emergency Solid Waste Assessment Task Force Final Report accepted by the Governor on November 16, 1990. In this regard, the County is reminded that the January 22, 1992 certification of its September 12, 1990 plan amendment addressed detailed deficiencies which the County was required to address within 90 days, or by July 21, 1992, in a subsequent plan amendment.

D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with this amendment to the County Plan and which was executed prior to this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of on year, shall immediately be renegotiated in order to bring same into conformance with the term and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the County Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment provided, however, that any such registrant may, upon application to the Department, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and transporters registered with the Department and operating within the County and affected by the amendment contained herein shall operate in compliance with this amendment and all other provisions of the County Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and 12 and all other applicable laws.

3. Types of Solid Wastes Covered by the District Solid Waste Management Plan

The provisions of the County Plan shall apply to all solid waste defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. All nonhazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules set forth at N.J.A.C. 7:26-6, but are subject to regulation in accordance with N.J.A.C. 7:26-1 et seq.

4. Certification to Proceed with the Implementation of the Plan Amendment

This document shall serve as the certification of the Commissioner of the Department to the County Freeholders and pursuant to N.J.S.A. 13:1E-24c and f, the County shall proceed with the remand for modification portion of this amendment certified herein.

5. Definitions
For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those found at N.J.S.A. 13:1E-3 and 99.12 and N.J.A.C. 7:26-1.4 and 2.13, and N.J.A.C. 7:26A-1.3.

6. **Effective Date of the Amendment**

The remand for modification in part and rejection in part of this amendment to the County Plan contained herein shall take effect immediately.

7. **Reservation of Authority**

Nothing contained herein shall be construed as a limitation on any other action taken by the Department pursuant to its authority under the law. The County Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan, with appendices, which includes the Department’s planning guidelines, rules, regulations, orders of the Department, inter-district and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved.

E. **Certification of Remand for Modification in Part and Rejection in Part of the Amendment and Notification of Deficiencies by the Commissioner of the Department of Environmental Protection and Energy**

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq., I hereby remand for modification in part and reject in part the amendment, as outlined in Section C of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on June 27, 1990. I hereby also remind the Essex County Board of Chosen Freeholders to address the deficiencies noted in Section C within the timeframes previously specified. This certification memorializes the determinations made by me on or before March 8, 1992.

______________________________
DATE

______________________________
SCOTT A. WEINER
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

January 21, 1989
9(a) Plan Amendment to include Advanced Enterprises Recycling Center
Adopted: February 13, 1990
Certified: February 22, 1993
Resolution No.:

(2nd): January 28, 1991
Public Hearing(s): February 13, 1991
TO: Stephen Edeistein
COUNTY ADMINISTRATOR

Department: Planning & Economic Development
Division: Solid Waste Management

THRU: Phillip Thigpen, Director – DPED

FROM: Martin Lund, Director – DSWM

DATE: January 16, 1991

SUBJ: Amendment to the Essex County Solid Waste Management Plan Ordinance to Include Advanced Recycling Enterprises Inc. as an Inventoried Recycling Facility

Introduction

This amendment would amend the Essex County Solid Waste Management Plan Ordinance to include the Advanced Recycling Enterprises, Inc. waste wood recycling facility located at 640 Doremus Avenue, Newark, N.J. in the inventory of recycling facilities. The Division of Solid Waste Management has been advised by the NJDEP Office of Recycling that they have conducted a technical review of the facility and have drafted a permit for the facility. This permit is contingent upon inclusion in the Essex County Solid Waste Management Plan., The Division of Solid Waste Management has not provided a technical review of the facility, nor is it the Division’s responsibility to provide such a technical review. Enforcement of environmental, operational and safety elements of the permit is the responsibility of the NJDEP.

Recommendation

The Department of Planning & Economic Development and the Division of Solid Waste Management recommend that this ordinance be adopted by the Board of Chosen Freeholders as an Amendment to the Essex County Solid Waste Management Plan.

Reason for Recommendation

The Essex County Solid Waste Advisory Counsel has reviewed Advanced Recycling Enterprises, Inc. and has passed a resolution to recommend that the Board of Chosen Freeholders include this wood recycling facility in the plan. Also the NJDEP has already issued a permit contingent upon inclusion in the Plan.

Fiscal Impact

There will be a minimal impact as the County budget.

Alternative

Failure to approve this ordinance amendment will prevent Advanced Recycling Enterprises Inc.’s wood recycling facility from receiving an NJDEP permit to operate.

Attachment

ML/ks
SUBJECT: ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN TO INCLUDE ADVANCED ENTERPRISES RECYCLING, INC. WITHIN THE INVENTORY OF RECYCLING FACILITIES

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and
WHEREAS, Advance Enterprises Recycling, Inc. and has requested inclusion in the County of Solid Waste Management Plan as a recycling facility and the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for such an amendment to said Solid Waste Management Plan; and
WHEREAS, said Plan amendment has been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory Council; now, therefore, be it
ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended by the adoption of the attached amendment to Table XIV, Essex County Markets for Recyclable Materials, page 1.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on February 13, 1991 at 3:00p.m., in Room #506, Hall of Records, Dr. Martin Luther King, Jr. Blvd., Newark, NJ 07102.

3. That the Clerk of this Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to be not less than ten days prior to the date set for hearing. Said notice shall state that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That the Clerk of the Board, upon adoption, shall forward a certified copy of this Ordinance and the Plan amendment to the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon, and proof of publication of notice of public hearing.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Phillip Thigpen, Director, Department of Planning & Economic Development, Martin Lund, Director, Division of Solid Waste Management and Stephen J. Edelstein, Acting County Counsel.
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<th>Company Name</th>
<th>Address</th>
<th>Contact</th>
<th>Phone</th>
<th>Paper Stock</th>
<th>Glass Stock</th>
<th>Metals Stock</th>
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<td>Advanced Recycling Enterprises, Inc.</td>
<td>640 Doremus Avenue, Newark, NJ 07105</td>
<td>Anthony Peterpaul</td>
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<td>A-P Paper Stock Inc.</td>
<td>48-54 south 20th Street, Irvington, NJ 07111</td>
<td>Pat Bastardo</td>
<td>374-1750 or 1751</td>
<td>HG</td>
<td>HP</td>
<td>CO</td>
<td>GS</td>
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<td>Bast-Ardo Recycling Corp.</td>
<td>48-54 South 20th Street, Irvington, NJ 07111</td>
<td>Pat Bastardo</td>
<td>374-1750 or 1751</td>
<td>HG</td>
<td>NP</td>
<td>MP</td>
<td>GS</td>
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<td>Arrow Paper Co. Inc.</td>
<td>81 Wesey Street, Newark, NJ 07105</td>
<td>John Capriglione</td>
<td>201-589-4665</td>
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<td>Alomel Smelting Corporation</td>
<td>104 East Peddic Street, Newark, NJ 07114</td>
<td>Barney Scholmy</td>
<td>204-242-4950</td>
<td>HG</td>
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<td>Cassone Recycling Fibres Corp.</td>
<td>382-384 Franklin Ave., Nutley, NJ 07110</td>
<td>Anthony Cassone</td>
<td>201-235-0900</td>
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<td>Fred M. Reis Metals Co.</td>
<td>357 Wilson Ave., Newark, NJ 07102</td>
<td>Irwin Reis</td>
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<td>Goldmet Corporation</td>
<td>325 Frelinghuysen Avenue, Newark, NJ 07102</td>
<td>Alan Goldstein</td>
<td>201-242-1818</td>
<td>AC</td>
<td>TC</td>
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<td>Hirsch and Moscowitz Corp.</td>
<td>435 Frelinghuysen Ave, Newark, NJ 07114</td>
<td>Alan Moscowitz</td>
<td>201-824-4300</td>
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<td>Industrial Scrap Hauling Inc.</td>
<td>217 Poinier Street, Newark, NJ 07102</td>
<td>Frank</td>
<td>201-642-5057</td>
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<td>Joseph B. Zamelsky</td>
<td>315 Frelinghuysen Ave., Newark, NJ 07114</td>
<td>M. Schulman</td>
<td>201-242-7800</td>
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9 (B) Plan Amendment to include Milburn Compost Facility
Adopted: July 24, 1991
Certified: February 22, 1993
IN THE MATTER OF CERTAIN AMENDMENTS CERTIFICATION  
TO THE ADOPTED AND APPROVED SOLID OF THESEPTEMBER 9, 1992  
WASTE MANAGEMENT PLAN OF THE AMENDMENT TO THEESSEX COUNTY  
ESSEX COUNTY SOLID WASTE DISTRICT SOLID WASTE MANAGEMENT PLAN  
MANAGEMENT DISTRICT

BY ORDER OF THE COMMISSIONER:

1. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Boards of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department of Environmental Protection approved, with modifications, the Essex County District Solid Waste Management Plan (County Plan).

The Act requires all district plans to be based on and accomplished by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for a ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district’s waste for a ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements.)
The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. The Essex County Board of Chosen Freeholders (County Freeholders) completed such a review and on September 9, 1992, adopted an amendment to its approved County Plan. As adopted, the amendment proposed the County Plan inclusion of the Regional Recycling Corporation transfer station/materials recovery facility located at 295 Frelinghuysen Avenue, Newark, New Jersey.

The amendment was received by the Department of Environmental Protection and Energy (Department of DEPE) on December 9, 1992, and copies were distributed to various administrative agencies for review and comment, as required for law. The Department has reviewed this amendment, as well as the entire County Plan, and has determined that the amendment adopted by the County Freeholders on September 9, 1992 is approved as provided in N.J.S.A. 13:1E-24. While the immediate plan amendment has been approved, serious deficiencies in the County Plan have been identified within Section C. of this certification.

2. Finding and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I have studied and reviewed the September 9, 1992 amendment to the County Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that this plan amendment is consistent with the Statewide Solid Waste Management Plan. In this regard, the County Freeholders and the applicant are notified of the issues of concern relative to the September 9, 1992 amendment which are included below.

In conjunction with the review of the amendment, the Department circulated copies to sixteen administrative review agencies and solicited their review and comment. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various bureaus, divisions, and agencies within the Department. These agencies are the following:

Office of Energy, DEPE
Land Use Regulation Element, DEPE
Groundwater Quality Management Element, DEPE
Wastewater Facilities Regulation Element, DEPE
Division of Parks and Forestry, DEPE
Division of Fish, Game and Wildlife, DEPE
Division of Solid Waste Management, DEPE
Green Acres Program, DEPE
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Health
Department of Transportation
Department of Community Affairs
Department of the Public Advocate
U.S. Environmental Protection Agency
A. 

Agency Participation in the Review of the September 9, 1992 Amendment

The following agencies did not object to the proposed plan amendment:

Land Use Regulation Element, DEPE  
Division of Parks and Forestry, DEPE  
Green Acres Program, DEPE  
New Jersey Turnpike Authority  
New Jersey Advisory Council on Solid Waste Management  
Department of Agriculture  
Department of Transportation

The following agencies did not respond to the Department’s requests for comments:

Groundwater Quality Management Element, DEPE  
Division of Fish, Game and Wildlife, DEPE  
Department of Health  
Department of Community Affairs  
Department of the Public Advocate  
U.S. Environmental Protection Agency

The following agencies submitted substantive comments which are further addressed below:

Office of Energy, DEPE  
Division of Solid Waste Management, DEPE  
Wastewater Facilities Regulation Element, DEPE

B. 

Issues of Concern Relative to the September 9, 1992 Amendment

Issue: Permit Requirements

Transfer stations/materials recovery facilities are subject to the provisions of N.J.A.C. 7:27-5, Prohibition of Air Pollution.” This regulation prohibits odors and other air contaminants which interfere with the enjoyment of life or property. Further, transfer stations/materials recovery facilities are also subject to N.J.A.C. 7:27-8.2(a)16 which requires air pollution control permits for any equipment with vents a solid waste facility directly or indirectly into the outdoor atmosphere. Such vents may require devices to control odors and other air contaminants. Finally, if the proposed operation will discharge pollutants as defined at N.J.A.C. 7:14A-1.9, said operation must secure a New Jersey Pollution Discharge Elimination System (NJPDES) permit and/or a treatment works approval for pollutant discharges prior to operation.

The construction or operation of any solid waste facility shall be preceded by the acquisition of all necessary permits and approvals pursuant to N.J.S.A. 12:1E-1 et seq., and all other applicable laws.

Issue: County Plan Inclusion

The regional Recycling Corporation transfer station/materials recovery facility is presently operating without a solid waste facility permit. Therefore, inclusion of this facility in the County Plan will correct an historical planning deficiency and allow the applicant to apply for a solid waste facility permit.
Issue: County Plan Implementation Agency

The County has previously designated the Essex County Division of Solid Waste Management as the solid waste implementation agency. On February 9, 1993, the County informed the DEPE that the Essex County Utilities Authority (ECUA) will become the implementation agency while solid waste administrative matters will be handled by the Essex County Department of Planning and Economic Development. The County must adopt and submit to the DEPE an amendment which specifically indicates the duties of all County agencies which will function as a solid waste implementation agency.

Issue: Facility Waste Flow

The amendment did not indicate whether the transfer station was to be assigned a waste flow commensurate with its specific type of operation. For example, if the facility is to operate as a sole source transfer station/materials recovery facility, the assignment of a waste flow to the facility is not necessary. Also, if the facility is to operate as a commercial transfer station which accepts waste from other countries in conformance with the DEPE’s “Pereira Policy,” the assignment of a waste flow is not necessary. If, however, the facility is not to operate as a sole source of so noted commercial facility, the County must first assign a waste flow to the facility through a subsequent plan amendment followed by DEPE approval pursuant to N.J.A.C. 1:26-6.6.

C. Certification of the Essex County District Solid Waste Management Plan Amendment

In accordance with N.J.S.A. 13:1E-1 et seq., specifically N.J.S.A. 12:1E-21, which establishes specific requirements regarding the contents of the district solid waste management plans, I have reviewed the September 9, 1992 amendment to the approved County Plan and certify to the County Freeholders that the September 9, 1992 amendment is approved as further specified below.

a. September 9, 1992 Amendment

The County Plan inclusion of the Regional Recycling Corporation transfer station/materials recovery facility located at 295 Frelinghuysen Avenue, Block 3538, Lot 22, Newark, New Jersey, is approved. The facility has been operating without a solid waste facility permit and, therefore, County Plan inclusion will correct a historical planning deficiency.

While a facility capacity has not been specified in the plan amendment, Essex County has indicated by letter that it will concur with whatever capacity the Department finds appropriate in its permit review. Such an application is acceptable to the DEPE in the limited circumstances of this case due to the unique history of the Regional Recycling facility particularly with respect to the record of litigation and delay surrounding inclusion within the Essex County Plan.

The construction of operations of any solid waste facility shall be preceded by the acquisition of all other applicable laws. The issuance of operating permits pursuant to the Solid Waste Management Act is limited to those applicants found by the Department and the Attorney General of the State of New Jersey to be deserving of licensing under the provisions of N.J.S.A. 12:1E-126. Finally, although County Plan inclusion will allow the applicant to apply for a solid waste facility permit, this certification shall not be construed as an expression of the Department’s intent to issue a solid waste facility permit.

b. Essex County District Solid Waste Management Plan Deficiencies

a. County Plan Overview
I have reviewed the entire County Plan to determine whether it fulfills the requirements set forth in N.J.S.A. 12:1E-21, as well as the recommendations of the Emergency Solid Waste Assessment Task Force (Task Force) Final Report accepted by the Governor on November 16, 1990. In this regard, the County is reminded that the Department’s January 22, 1992 certification of the County’s September 12, 1990 plan amendment noted detailed deficiencies which the County was required to address in a subsequent plan amendment submission by July 21, 1992. Specifically, the certification required the County’s pursuit of in-state landfill arrangement, the identification of specific truck routes to the County incinerator, and the submission of a plan amendment addressing the provisions of the Task Force Final report with recommendations including source reduction, achievement of at least a 50% recycling rate for the municipal waste stream and a 60% recycling rate for the total waste stream, and a plan for long-term regionalization of the County’s incinerator. Further, consideration was also to be given to regional plans for materials processing, recycling, transfer and disposal facilities. To date, the Department has not received the required amendment.

Additionally, since it is currently unclear to the DEPE what role the ECUA has in terms of serving as an implementation agency, the County must adopt and submit to the DEPE an amendment which specifically indicates the duties of all County agencies which will function as a solid waste implementation agency.

The outstanding areas notes about represent serious plan deficiencies which must be addressed immediately. At this point in time, Essex County is one of several remaining counties which have not submitted any formal plan to advance statewide goals in the critical areas of source reduction, expanded recycling agreement for the acceptance and processing of Bergen County solid waste, this arrangement is short-term in nature, expiring on March 1, 1994. No specific long-term regional partnership has been formalized at this time. Finally, even with current incinerator operations, approximately 358,000 tons per year of the County’s nonprocessible, bypass and residual solid waste is being exported for out-of-state disposal contrary to the DEPE’s self-sufficiency objectives. Therefore, the County is directed to submit the required amendment as soon as possible but no event later than November 1, 1993 to address these and the other noted deficiencies. Please be advised that the failure of the County to comply with this directive may result in the withholding and relocation of the County’s Solid Waste Services Tax moneys, the withholding of the County’s Resources Recovery Investment Tax moneys and/or initiating appropriate enforcement action.

b. Expanded Materials Separation Prior to Incineration
The Department has also reviewed the entire County Plan focusing upon the existing incinerator operations and the need to remove additional constituents from the incoming waste stream to ensure a reduction in facility emissions; in particular mercury. The Department is committed to the use of best available air pollution controls at existing facilities, as well as the application of the most stringent standards within permits. The Department is currently working as part of the “Task Force on Mercury Emissions Standard Setting (Mercury Task Force)” toward development of a statewide mercury emission standard for municipal solid waste incinerators, involving both air quality control technologies and identification and implementation of specific measures to reduce the content of mercury in the solid waste stream. The mercury task force completed its preliminary report, which includes an evaluation of both environmental and health issues and technical and regulatory issues, in August 1992 and distributed this document for public comment through November 1992. A public hearing on the preliminary report was held on October 26, 1992. The Department recently published the findings and recommendations of the Mercury Task Force in the interim report on proposed mercury emission standards in December 1992. The Department will continue to work closely to implement use of best available control technology.
The County planning process must complement the future installation of more advanced air pollution control equipment and intended permit modifications to ensure necessary reductions in mercury and other metals from the soil waste stream. As a result of the efforts of the Mercury Task Force and the referenced public hearing process, the Department is considering implementation of an interim and final mercury emission standard of 65 and 28 mg/dscm. From the task force’s technical research, available air pollution control equipment can result in significant reductions (up to 80%) of mercury based upon current emission levels. A portion of this emission standard will be achieved though source reduction programs as manufacturer’s redesign their products to eliminate or minimize mercury content. Source separation programs will also remove mercury from the processible waste stream. Therefore, in order to fully achieve interim and final standards of 65 and 28 mg/dscm, it will be necessary for counties with incinerators to develop plans and schedules for the removal of sources of mercury from the waste stream.

Toward the above goal, the County is hereby ordered to submit a report to the Department within 120 days of this certification which outlines plane and specific timetables from the removal of materials of concern from the incoming solid waste stream. At a minimum, the plan must address:

- Efforts already being used by the County for removal of toxic materials from the waste stream, particularly mercury;
- Specific plans and timeframes for the removal and separate management of consumer batteries, fluorescent light bulbs, thermometers, and thermostats, all of which contain mercury and other heavy metals;
- An inventory of potential generators of the above materials, such as jewelers, hospitals and large commercial/institutional/industrial buildings and plans for education and separate collection/drop-off of these materials;
- Specific plans and timeframes for the removal of wallboard, grass and other yard wastes from the incoming waste stream toward further reducing sulfur dioxide (SO2) and nitrogen oxide (NOX) emissions;
- An inventory of large generators of wallboard and plans for education and separate collection/drop-off and disposal (nonincineration) of this material;
- Plans for implementing a combination of grass, cut-it and leave-it programs, backyard composting and/or compost facility development or expansion plans to include management of grass clippings. This must include an inventory of existing facilities which accept grass for composting, as well as a listing of all landscapers operating within the County;
- Specific plans and timeframes for developing comprehensive recycling and waste diversion programs which support the prohibition from acceptance at the incinerator of paints, tires, electronics and vehicular materials, such as batteries, from the residential, commercial, institutional and industrial sectors to further reduce the potential for toxic materials entering the facility; and
• Specific plans and schedules for expanding existing household hazardous waste collection programs and/or the development of a permanent household hazardous waste collection facility and management program for the County.

This report must be submitted within 120 days of this certification and is not required to be submitted in plan amendment form. Department staff within the Division of Solid Waster Management and the Policy and Planning Program will be available at any time to assist the County.

D. Other Provisions Affecting the Plan Amendment

A. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with this amendment to the County Plan and which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be negotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the County Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment provided, however, that any such registrant may, upon application to the Department, and for good cause shown, obtain an extension of time to complete such renegotiation.

B. Compliance

All solid waste facility operators and transporters registered with the Department and operating within the County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the County Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 12:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued there under by the department and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and 12 and all other applicable laws.

C. Types of Solid Waste Covered by the District Solid Waste Management Plan

The provisions of the County Plan shall apply to all solid wastes defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. All nonhazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules set forth at N.J.A.C. 7:26-6, but are subject to regulation in accordance with N.J.A.C. 7:26A-1 et seq.

D. Certification to Proceed with the Implementation of the Plan Amendment

This document shall serve as the certification of the Commissioner of the Department to the County Freeholders and pursuant to N.J.S.A. 13:1E-24c and f, the County shall proceed with the implantation of the approved amendment certified herein.
E. Definitions

For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those found at N.J.S.A. 13:1E-3 and -99.12, N.J.A.C. 7:26-1.4 and -2.13, and N.J.A.C. 7:26A-1.3.

F. Effective Date of the Amendment

The amendment to the County Plan contained herein shall take effect immediately.

G. Reservation of Authority

Nothing contained herein shall be construed as a limitation on any other action taken by the Department pursuant to its authority under the law. The County Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan, with appendices, which includes the Department’s planning guidelines, rules, regulations, orders of the Department, inter-district and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved.

E. Certification of Approval of the Amendment and Notification of Deficiencies by the Commissioner of the Department of Environmental Protection and Energy

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq., I hereby approve the amendment, as outlined in Section C. of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Chosen Freeholders on September 9, 1992. I hereby also require, as noted in Section C., the Essex County Board of Chosen Freeholders to address the noted deficiencies within the timeframe specified. This certification memorializes the determinations made by me on or before May 7, 1993.

5-7-93

DATE

SCOTT A. WEINER
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
9( c ) DEPE Certification
February 22, 1993
IN THE MATTER OF CERTAIN AMENDMENTS TO THE ADOPTED AND APPROVED SOLID WASTE MANAGEMENT PLAN OF THE ESSEX COUNTY SOLID WASTE MANAGEMENT DISTRICT

BY ORDER OF THE COMMISSIONER:

1. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Boards of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department of Environmental Protection approved, with modifications, the Essex County District Solid Waste Management Plan (County Plan).

The Act requires that all district plans be based on and accompanies by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for a ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this the disposal of the district’s waste for a ten-year period, which sites may be in the district or, if none are available, in other district. (The Act provides procedures for reaching any necessary inter-district agreements.)

The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. The Essex County Board of Chosen Freeholders (County Freeholders) completed such a review and on February 13, 1991 and July 24, 1991 adopted amendments to its approved County Plan.

As adopted, the February 13, 1991 amendment proposes plan inclusion of Advanced Enterprises Recycling, Inc. located at 540 Doremus Avenue, Block 5070, Lot 43 and part of
Lot 25, in Newark, Essex County, as a recycling facility for Class B materials. The July 24, 1991 amendment proposes plan inclusion of the Milburn Compost Facility, located on Block 5401, Lot 1, in the Township of Millburn, Essex County, as the Township’s municipally owned and operated leaf composting facility.

The February 13, 1991 and July 24, 1991 amendments were not received by the Department of Environmental Protection and Energy (Department or DEPE) until November 18, 1992 and October 5, 1992, respectively. At that time, copies were distributed to various administrative review agencies for review and comment, as required by law. The Department has reviewed these amendments, as well as the entire County Plan, and has determined that the amendments adopted by the County Freeholders on February 13, 1991 and July 24, 1991 are approved as provided in N.J.S.A. 13:1E-24. While the immediate plan amendments have been approved, serious deficiencies in the County Plan have been identified within Section C. of this certification.

2. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendments

Pursuant to N.J.S.A. 13:1E-24a(1), I have studied and reviewed the February 13, 1991 and July 24, 1991 amendments to the County Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that these plan amendments are consistent with the Statewide Solid Waste Management Plan. In this regard, however, the County Freeholders and the applicant are notified of the issues of concern relative to the February 13, 1991 and July 24, 1991 amendments which are included below.

In conjunction with the review of these amendments, the Department circulated copies to sixteen administrative review agencies and solicited their review and comment. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various bureaus, divisions, and agencies within the Department. These agencies are the following:

Office of Energy, DEPE
Division of Parks and Forestry, DEPE
Division of Fish, Game and Wildlife, DEPE
Division of Solid Waste Management, DEPE
Green Acres Program, DEPE
Land Use Regulation Element, DEPE
Groundwater Quality Management Element, DEPE
Wastewater Facilities Regulation Element, DEPE
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Health
Department of Transportation
Department of Community Affairs
Department of Public Advocate
U.S. Environmental Protection Agency

1. Agency Participation in the Review of the February 13, 1991 Amendment
The following agencies did not object to the proposed plan amendment:
Division of Solid Waste Management, DEPE
Green Acres Program, DEPE
New Jersey Turnpike Authority
Department of Agriculture
Department of Transportation

The following agencies did not respond to the Department’s requests for comments:
Office of Energy, DEPE
Land Use Regulation Element, DEPE
Groundwater Quality Management Element, DEPE
Wastewater Facilities Regulation Element, DEPE
Division of Parks and Forestry, DEPE
New Jersey Advisory Council on Solid Waste Management
Department of Health
Department of Community Affairs
Department of Public Advocate
U.S. Environmental Protection Agency

The following agency submitted substantive comments which are further addressed below:
Division of Solid Waste Management, DEPE

2. Agency Participation in the Review of the July 24, 1991 Amendment

The Following agencies did not object to the proposed plan amendment:
Green Acres Program, DEPE
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Health
Department of Transportation
Division of Parks and Forestry, DEPE

The following agencies did not respond to the Department’s requests for comments:
Groundwater Quality Management Element, DEPE
Wastewater Facilities Regulation Element, DEPE
Department of Health
Department of Community Affairs
Department of Public Advocate
U.S. Environmental Protection Agency

The following agencies submitted substantive comments which are further addressed below:
Office of Energy, DEPE
Division of Fish. Game and Wildlife, DEPE
Division of Solid Waste Management, DEPE
Land Use Regulation Element, DEPE
3. **Issues of Concern Relative to the February 13, 1991 Amendment**

**Issue: Permit Requirements**

Recycling centers are subject to the provisions of N.J.A.C. 7:27-5, “Prohibition of Air pollution,” which prohibits odors and other air contaminants which interfere with the enjoyment of life or property. Further, recycling centers are subject to N.J.A.C. 7:27-8.2(a)16 which requires air pollution control permits for any equipment with vents a solid waste facility directly or indirectly into the outdoor atmosphere. Also, stationary conveying equipment which cause fugitive emissions of air contaminants are subject to the provisions of N.J.A.C. 7:27-8.2(a)11. Further, if access onto a State Highway is required, an Access Application and possibly a Drainage Application must be filed.

Additionally, because the proposed recycling center will be handling Class B recyclable materials, as defined at N.J.A.C. 7:26A-1.3, it must obtain a recycling center approval from the Department pursuant to N.J.A.C. 7:26A-3 prior to operation. Also, pursuant to N.J.A.C. 7:27A-4.1 (a) i.iii, Class B recyclable materials may be commingled only with other Class B recyclable materials and only to the extent authorized in the general approval.

**Issue: Siting**

While the plan amendment submission included only Lot 43 of Block 5070 as the facility site, the administrative review disclosed that a section of a storage building and the facility’s ingress and egress routes are located on Lot 25, which is contiguous with Lot 43. The omission of Lot 25 from the plan amendment was an oversight which has been resolved through conversations which the application and the County. The inclusion of Lot 25 within the County plan at this time is considered a minor Departmental modification and requires no further action by the Essex County Freeholders except that the additional lot be acknowledged in a subsequent plan amendment submission.

4. **Issues of Concern Relative to the July 24, 1991 Amendment**

**Issue: Permit Requirements**

Composting facilities are subject to the provisions of N.J.A.C. 7:27-5, “Prohibition of Air Pollution.” As noted above, this regulation prohibits odors and emissions of air contaminants which interfere with the enjoyment of life or property. Additionally, air pollution control permits are required for equipment used to vent a solid waste facility to the ambient atmosphere in accordance with N.J.A.C. 7:27-8.2(a)16. Further, stationary conveying equipment which cause fugitive emissions of air contaminants require air pollution control permits pursuant to the provisions of N.J.A.C. 7:27-8.2(a)11.

A compost facility permit shall only be granted where the applicant has submitted an administratively complete application, as per N.J.A.C. 7:26-3.5, where all substantive criteria for approval set forth in N.J.A.C. 7:26-3.2, 3.3 and 3.4 are satisfied, where a fee as been paid in accordance with N.J.A.C. 7:26-2, and where none of the criteria for denial of a compost facility approval have been met, as per N.J.A.C. 7:26-11 and 12.
Issue: Siting

In the event that this facility is located in the Canoe Brook floodplain and associated wetlands, it may potentially exacerbate wetland impacts and/or the displacement of composted materials during flood events. Prior to site implementation, it should be determined that the facility is not in the floodplain and does not contain any freshwater wetlands. This issue will be addressed during the technical engineering review phase of the proposal.

C. Certification of the Essex County District Solid Waste Management Plan Amendments

In accordance with N.J.S.A. 13:1E-1 et seq., specifically N.J.S.A. 13:1E-21, which establishes specific requirements regarding the contents of the district solid waste management plans, I have reviewed the February 13, 1991 and July 24, 1991 amendments to the approved County Plan and certify to the County Freeholders that the February 13, 1991 and July 24, 1991 amendments are approved as further specified below.

A. February 13, 1991 Amendment

The inclusion within the County Plan of Advanced Enterprises Recycling, Inc., located at 540 Doremus Avenue, Block 5070, Lot 43 and part of Lot 25, in Newark, Essex County, as a recycling facility to process Class B Materials (wood) is approved. Also, while the plan amendment submission included only Lot 43 of Block 50700 as the facility site, the administrative review disclosed that a section of a storage building and the facility’s ingress and egress routes are located on Lot 25, which is contiguous which Lot 43. The omission of Lot 25 from the plan amendment was an oversight which has been resolved through conversations with the applicant and the County. The inclusion of Lot 25 within the County plan at this time is considered a minor Departmental modification and requires no further action by the Essex County Freeholders except that the additional lot be acknowledged in a subsequent plan amendment submission.

Additionally, because the proposed recycling center will be handling Class B recyclable materials, as defined at N.J.A.C. 7.26A-1.3, it must obtain a recycling center approval from the Department pursuant to N.J.A.C. 7.26A-3, prior to operation. Also, pursuant N.J.A.C. 7.26A-4.1 (a) l.iii., Class B recyclable materials may be commingled only with other Class B recyclable materials and only to the extent authorized in the general approval.

This certification shall not be construed as an expression of the Department’s intent to issue a recycling center approval to any recycling center from Class B recyclable materials. A recycling center approval shall only be granted where the applicant has submitted an administratively complete application, as per N.J.A.C. 7.26A-3.5, where all substantive criteria for approval set forth in N.J.A.C. 7.26A-3.2, 3.3 and 3.4 are satisfied, where a fee has been paid in accordance with N.J.A.C. 7.26A-2, and where none of the criteria for denial of a recycling center approval are met, as per N.J.A.C. 7.26A-11 and 12.

B. July 24, 1991 Amendment

The inclusion within the County Plan of the Millburn Compost Facility located on Block 5401, Lot 1, Township of Millburn, Essex County, as the Township’s municipally owned and operated leaf compost facility is approved.
The construction or operation of any solid waste facility shall be preceded by the acquisition of all necessary permits and approvals pursuant to N.J.S.A. 12:1E-1 et seq., and all other applicable laws. The issuance of operating permits pursuant to the Solid Waste Management Act is limited to those applicants found by the Department and the Attorney General of the State of New Jersey to be deserving of licensing under the provisions of N.J.S.A. 13:1E-126.

C. Essex County District Solid Waste Management Plan Deficiencies

I have reviewed the entire Essex County Plan to determine whether the Plan fulfills the requirements set forth in N.J.S.A. 13:1E-21, as well as the recommendations of the Emergency Solid Waste Assessment Task Force Final Report accepted by the Governor on November 16, 1990. In this regard, the County is reminded that the Department's January 22, 1992 certification of the County's September 12, 1990 plan amendment noted detailed deficiencies which the County was required to address in a subsequent plan amendment by July 21, 1992. In this regard, the Department has not received the required amendment to date. Specifically, the certification required the County's pursuit of in-state landfill arrangement; the identification of specific truck routes to the County incinerator; and the submission of a plan amendment addressing the provisions of the Task Force Final Report and recommendations including source reduction, achievement of at least a 50% recycling rate for the municipal waste stream and a 60% recycling rate for the total waste stream, and a plan for long-term regionalization of the County's incinerator. Further, consideration must also be given to regional plans for material processing, recycling, transfer and disposal facilities. Additionally, if it is the intent of the County to utilize the Essex County Utilities Authority (ECUA) as the County's implementation agency, then the County must formally designate the ECUA as its implantation agency to oversee the entire County Plan in a subsequent plan amendment submission.

Certain outstanding areas noted above represent serious plan deficiencies which must be addressed immediately. At this point in time, Essex is on of several remaining counties which have not submitted any formal plan to advance statewide goals in the critical areas of source reduction, expanded recycling and system regionalization. Further, while the County has a regional agreement for the acceptance and processing of Bergen County solid waste, this arrangement is short-term in nature, expiring on March 1, 1994. No specific long-term regional partnership has been formalized at this time. Finally, even with current incinerator operations, approximately 358,000 tons per year of the County’s nonprocessable, bypass and residual solid waste is being exported for out-of-state disposal contrary to the DEPE’s self-sufficiency objectives. Therefore, the County is directed to submit the required amendment as soon as possible to address these and other noted deficiencies. Please be advised that the failure of the County to comply with this directive may result in the withholding and reallocation of the County's Solid Waste Services Tax moneys and the withholding of the County’s Resource Recovery Investment Tax moneys.

D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with these amendments to the County Plan and which was executed prior to the approval of these amendments and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be
renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department and operating pursuant to a contract as herein described, shall be deemed to be in violation of these amendments and of the County Plan if such renegotiation is not completed within ninety (90) days of the effective date of these amendments provided, however, that any such registrant may, upon application to the Department, and for good cause show, obtain an extension of time to complete such renegotiation.

2. **Compliance**

All solid waste facility operators and transporters registered with the Department and operating within the County and affected by the amendments contained herein shall operate in compliance with these amendments and all other approved provisions of the County Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7.26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and 12 and all other applicable laws.

3. **Types of Solid Waste Covered by the District Solid Waste Management Plan**

The provisions of the County Plan shall apply to all solid wastes defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7.26-2.13 and shall not apply to liquid wastes, sewage sludge, Septage, and hazardous wastes. All nonhazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules set forth at N.J.A.C. 7.26-6, but are subject to regulation in accordance with N.J.A.C. 7.26-1 et seq.

4. **Certification to Proceed with the Implementation of the Plan Amendments**

This document shall serve as the certification of the Commissioner of the Department to the County Freeholders and pursuant to in N.J.S.A. 13:1E-24c and f, the County shall proceed with the implementation of the approved amendments certified herein.

5. **Definitions**

For the purpose of these amendments and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those found at in N.J.S.A. 13:1E-3 and -99.12, N.J.A.C. 7.2-1.4 and -2.13, and N.J.A.C. 7.26A-1.3.

6. **Effective Date of the Amendments**

These amendments to the County Plan contained herein shall take effect immediately.

7. **Reservation of Authority**

Nothing contained herein shall be construed as a limitation on any other action taken by the Department pursuant to its authority under the law. The County Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan, with appendices, which
includes the Department's planning guideline, rules, regulations, orders of the Department, inter-district and intadistrict waste flow rules, and also includes the compilation of individual plans and amendments as they are approved.

E. Certification of Approval of the Amendments and Notification of Deficiencies by the Commissioner of the Department of Environmental Protection and Energy

In accordance with the requirements of the N.J.S.A. 13:1E-1 et seq., I hereby approve these amendments, as outlined in Section C. of this certification, to the Essex County District Solid Waste Management Plan which were adopted by the Essex County Board of Chosen Freeholders on February 13, 1991 and July 24, 1991. I hereby also require, as noted in Section C., the Essex County Board of Chosen Freeholders to address the noted deficiencies as soon as possible.

Feb 22 1993
DATE
SCOTT A. WEINER
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

# 1896
10(a) Plan Amendment to include Regional Recycling Transfer Station/MRF
  Adopted: September 9, 1992
  Certified: May 7, 1993
  Resolution No.:
AMENDMENT

To this

ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN

Prepared By

Essex County Department of Planning & Economic Development
Essex County Division of Solid Waste Management
INTRODUCTION

Table IX of the Solid Waste Management Plan of April, 1987, as amended, lists the existing solid waste facilities within Essex County. Said list also includes the facility location, status of the application at the New Jersey Department of Environmental Protection and Energy and other relevant information.

AMENDMENT

Table IX of the Essex County Solid Waste Management Plan is hereby amended to include Regional Recycling Corporation located at 295 Frelinghuysen Avenue, City of Newark (Lot 22, Block 3538), such inclusion to be in the form attached hereto.
Table IX

EXISTING SOLID WASTE FACILITIES

PROPOSED WASTE FLOWS

Facility Type Transfer Stations

<table>
<thead>
<tr>
<th>Facility DEPE #</th>
<th>Location (Municipality/ Street)</th>
<th>States See Below</th>
<th>Waste Flow a. by waste type and munici. b. if sole source: indicate same</th>
<th>Is waste flow consistent with Approved plan Yes/no</th>
<th>Capacity: Landfills: (Remaining Capacity in tons) Others: tons per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Applic. Recycling pending Corp.</td>
<td>Newark (Frelinghuysen Avenue)</td>
<td>2</td>
<td>To be established by DEPE</td>
<td>Yes</td>
<td>To be soLab. By DEPE</td>
</tr>
</tbody>
</table>

Facility Status Categories
1) Operating - with approved engineering plan
2) Operating – no approved engineering plan
3) Closed – with approved closure plan
4) Closed – no approved closure plan
5) Terminated
IN THE MATTER OF CERTAIN AMENDMENTS CERTIFICATION TO THE ADOPTED AND APPROVED SOLID OF THE SEPTEMBER 9, 1992 WASTE MANAGEMENT PLAN OF THE AMENDMENT TO THE ESSEX COUNTY ESSEX COUNTY SOLID WASTE DISTRICT SOLID WASTE MANAGEMENT PLAN MANAGEMENT DISTRICT

BY ORDER OF THE COMMISSIONER:

A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state’s counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Boards of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department of Environmental Protection approved, with modifications, the Essex County District Solid Waste Management Plan (County Plan).

The Act requires that all district plans be based on and accompanies by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for a ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district’s waste for a ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary inter-district agreements.)

The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. The Essex County Board of Chosen Freeholders (County Freeholders) completed such a review and on September 9, 1992, adopted an amendment to its approved County Plan. As adopted, the amendment proposed the County Plan inclusion of the Regional Recycling Corporation transfer station/materials recovery facility located at 295 Frelinghuysen Avenue, Newark, New Jersey.

The amendment was received by the Department of Environmental Protection and Energy (Department or DEPE) on December 9, 1992, and copies were distributed to various administrative review agencies for review and comment, as required by law. The Department has reviewed this amendment, as well as the entire County Plan, and has determined that the amendment adopted by the County Freeholders on
September 9, 1992 is approved as provided in N.J.S.A. 13:1E-24. While the immediate plan amendment has been approved, serious deficiencies in the County Plan have been identified within Section C. of this certification.

B. Findings and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I have studied and reviewed the September 9, 1992 amendment to the County Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that this plan amendment is consistent with the Statewide Solid Waste Management Plan. In this regard, the County Freeholders and the applicant are notified of the issues of concern relative to the September 9, 1992 amendment which are included below.

In conjunction with the review of the amendment, the Department circulated copies to sixteen administrative review agencies and solicited their review and comment. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various bureaus, divisions, and agencies within the Department. These agencies are the following:

Office of Energy, DEPE
Land Use Regulation Element, DEPE
Groundwater Quality Management Element, DEPE
Wastewater Facilities Regulation Element, DEPE
Division of Parks and Forestry, DEPE
Division of Fish, Game and Wildlife, DEPE
Division of Solid Waste Management, DEPE
Green Acres Program, DEPE
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Health
Department of Transportation
Department of Community Affairs
Department of the Public Advocate
U.S. Environmental Protection Agency

1. Agency Participation in the Review of the September 9, 1991 Amendment

The following agencies did not object to the proposed plan amendment:

Land Use Regulation Element, DEPE
Division of Parks and Forestry, DEPE
Green Acres Program, DEPE
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Transportation

The following agencies did not respond to the Department’s requests for comments:

Groundwater Quality Management Element, DEPE
Division of Parks and Forestry, DEPE
Department of Health
Department of Community Affairs
Department of the Public Advocate
U.S. Environmental Protection Agency

The following agencies submitted substantive comments which are further addressed below:

Office of Energy, DEPE
Division of Solid Waste Management, DEPE
Wastewater Facilities Regulation Element, DEPE

2. **Issues of Concern Relative to the September 9, 1992 Amendment**

**Issue: Permit Requirements**

Transfer stations/materials recovery facilities are subject to the provisions of N.J.A.C. 7:27-5, “Prohibition of Air Pollutions.” This regulation prohibits odors and other air contaminants which interfere with the enjoyment of life or property. Further, transfer stations/materials recovery facilities are also subject to N.J.A.C. 7:27-8.2(a)16 which requires air pollution permits for any equipment which vents a solid waste facility directly or indirectly into the outdoor atmosphere.

Such vents may require devices to control odors and other air containments. Finally, if the proposed operation will discharge pollutants as defined at N.J.A.C. 7:14A-1.9, said operation must secure a New Jersey Pollution Discharge Elimination System (NJPDES) permit and/or a treatment works approval for pollutant discharges prior to operation.

The construction or operation of any solid waste facility shall be preceded by the acquisition of all necessary permits and approvals pursuant to N.J.S.A. 13:1E-1 et seg., and all other applicable laws.

**Issue: County Plan Instruction**

The Regional Recycling Corporation transfer station/materials recovery facility is presently operating without a solid waste facility permit. Therefore, inclusion of this facility in the county Plan will be correct an historical planning deficiency and allow the applicant to apply for a solid waste facility permit.

**Issue: County Plan Implementation Agency**

The country has previously designated the Essex County Division of Solid Waste Management as the solid waste implementation agency. On February 9, 1993 the country informed the DEPE that the Essex County Utilities Authority (ECUA) will become the implementation agency while solid waste administrative matters will be handled by the Essex County Department of Planning and Economic Development. The country must adopt and submit to the DEPE an amendment which specifically indicates the duties of all county agencies which will function as a solid waste implementation agency.

**Issue: Facility Waste Flow**
The Amendment did not indicate whether the transfer station was to be assigned a waste flow commensurate with its specific type of operation. For example, if the facility is to operate as a sole source of transfer station/materials recovery facility, the assignment of a waste flow to the facility is not necessary. Also, if the facility is to operate as a commercial transfer station which accepts waste from other countries in conformance with the DEPE’s “Pereira Policy”, the assignment of a waste flow is not necessary. If, however, the facility is not to operate as a sole source or so noted commercial facility, the County must first assign a waste flow to the facility through a subsequent plan amendment followed by DEPE approval Pursuant to N.J.A.C. 7:26-6.6

C. Certification of the Essex County District Solid Waste Management Plan Amendment

In accordance with N.J.S.A. 13:1E et seg., specifically N.J.S.A. 13:IE-21, which establishments specific requirements regarding the contents of the district solid waste management plans, I have reviewed the September 9, 1992 amendment to the approved County Plan and certify to the County Freeholders that the September 9, 1992 amendment is approved as further specified below.

1. September 9, 1992 Amendment

The County Plan inclusion of the Regional Recycling Corporation transfer station / materials recovery facility located at 295 Frelinghuysen Avenue, Block 3538, Lot 22, Newark, New Jersey, is approved. The facility has been operating without a solid waste facility permit and, therefore, County Plan inclusion will correct a historical planning deficiency.

While a facility has not been specified in the plan amendment, Essex County has indicated by letter that it will concur with whatever capacity the Department finds appropriate in the permit review. Such an application is acceptable to the DEPE in the limited circumstances of this case due to the unique history of the Regional Recycling facility particularly with respect to the record of litigation and delay surrounding inclusion within the Essex County Plan.

The construction or operation of any solid waste facility shall be preceded by the acquisition of all necessary permits and approvals pursuant to N.J.S.A. 13:1E et seg., and all other applicable laws. The issuance of operating permits pursuant to the Solid Waste Management Act is limited to those applicants found by the Department and the Attorney General of the State of New Jersey to be deserving of licensing under the provisions of N.J.S.A. 13:1E-126. Finally, although County Plan inclusion will allow the applicant to apply for a solid waste facility permit, this certification shall not be construed as an expression of the Department’s intent to issue a solid waste facility permit.

2. Essex County District Solid Waste Management Plan Deficiencies

a. County Plan Overview

I have reviewed the entire County Plan to determine whether it fulfills the requirements set forth in N.J.S.A. 13:1E-21, as well as the recommendation of the Emergency Solid Waste Assessment Tank Force (Tank Force). Final Report accepted by the Governor in November 1990. In this regard, the County is reminded that the Department’s January 22, 1992 certification of the County’s September 12, 1990 plan amendment noted detailed deficiencies which the county was required to address in a subsequent plan amendment submission by July 21, 1992. Specifically, the certification required the County’s pursuit of in-state landfill arrangements, the identification of specific truck routes to the County incinerator, and the submission of specific truck routes to the County provisions of the task Force Final Report with
recommendations including source reduction, achievement of at least a 50% recycling rate for the total waste for the municipal waste stream and a 60% recycling rate for the total waste stream, and a plan for long-term regionalization of the County’s incinerator. Further, consideration was also to be given to regional plans for materials processing, recycling, transfer and disposal facilities. The date the Department had not received the required amendment.

Additionally, since it is currently unclear to the DEPE what role the ECUA has in terms of serving as an implementation agency, the County must adopt and submit to the DEPE an amendment which specifically indicates the duties of all County agencies which all function as a solid waste implementation agency.

The outstanding areas noted above represent serious plan deficiencies which must be addressed immediately. At this point in time, Essex County is one of several remaining counties which have not submitted any formal plan to advance state wide goals in critical areas of source reduction, expanded recycling and system regionalization. Further while the County has a regional agreement for is short-term in nature, expiring on March 1, 1994. No specific long-term regional partnership has been formalized at this time. Finally, even with current incinerator Operations, approximately 358,000 tons per year of the county’s out-of-state disposal contrary to the DEPE’s self-sufficiency objectives. Therefore, the County is directed to submit the required amendment as soon as the other noted deficiencies. Please be advised that the failure of the County to comply with this directive may result in the withholding and reallocation of the County’s Solid Waste Services Tax moneys and/or initiating appropriate enforcement action.

b. Expanded Materials Separation Prior to Incineration

The Department has also reviewed the entire County plan focusing upon the existing incinerator operations and need to remove additional constituents from the incoming waste stream to ensure a reduction in facility emissions, in particular mercury. The Department is committed to the use of best available to the use of air pollution air control controls existing facilities, as well as the application of the most stringent standards within permits. The Department is currently is currently working as a part of the “Task Force development of a state-wide mercury emission standard for municipal solid waste incinerators,, involving both air quality control technologies and identification and implementation of specific measures to reduce the content of mercury in the solid waste stream. The mercury Task Force completed its preliminary report, which includes an evaluation of both environmental and health issues and technical and regulatory issues, in August 1992. A public hearing on the preliminary report was held on recommendations of the Mercury Task Force in the interim repot on proposed mercury emission standards in December 1992. The department will continue to work closely to implement use of best available control technology.

The County planning process must complement the future installation of more advanced air pollution control equipment and intended permit modifications to ensure necessary reductions in mercury and other metals from the solid waste stream. As a result of the efforts of the Mercury Task Force and the referenced public hearing process, the Department is considering implementation of an interim and final mercury emission standard of 65 and 28 mg/dcm. From the task force’s technical research, available air pollution control equipment can result in significant reductions (up to 80%) of mercury based upon current emission levels. A portion of this emission standard will be achieved through source reduction programs as manufacturer’s redesign their products their products to eliminate or minimize mercury content. Source separation programs will also remove mercury from waste stream. Therefore, in order to fully necessary for counties with incinerators to develop plans and schedules for the removal of sources of mercury from the waste stream.
Toward the above goal, the County is hereby ordered to submit a report to the department within 120 days of this certification which outlines plans and specific timetables for the removal of materials of concern from the incoming solid waste stream. At a minimum, the plan must address:

- Efforts already being used by the County for removal of toxic materials from the waste stream, particularly mercury;
- Specific plans and timeframes for the removal and separate management of consumer batteries, fluorescent light bulbs, thermometers, and thermostats, all of which contain mercury and other heavy metals;
- An inventory of potential generators of the above materials, such as jewelers, hospitals and large commercial/ institutional/industrial buildings and plans for education and separate collection/ drop-off of these materials;
- Specific plans and timeframes for the removal of wallboard, grass and other yard wastes from the incoming waste stream toward further reducing sulphur dioxide (SO2) and Nitrogen (NOX) emissions;
- An inventory of large generators of wallboard, and plans for education and separate collection/dropoff and disposal (nonincineration) of this material;
- Plans for implementing a combination of grass, cut-it and leave-it programs, backyard composting and/or compost facility development or expansion plans to include management of grass clippings which accept grass for composting, as well as a listing of all landscapers operating within the County;
- Specific plans and timeframes for developing comprehensive recycling and waste diversion programs which support the prohibition from acceptance at the incinerator of paints, tires, electronics and vehicular materials, such as batteries, from the residential, commercial, institutional and industrial sectors to further reduce the potential for toxic materials entering the facility;
- Specific plans and schedule for expanding existing household hazardous waste collection programs and/or the development of a permanent household hazardous waste collection facility and management program for the country.

This report must be submitted within 120 days of this certification and is not required to be submitted in plan amendment form. Department staff within the division of Solid Waste Management and the policy and Planning Program will be available at any time to assist the County.

D. Other provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which in inconsistent with this amendment to the County Plan and which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the County Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment provided however, that any such registrant may, upon application to the Department, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance
All solid waste facility operators and transporters registered with the department and operating within the County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the County Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A.-13IE-1 et. Seg., in violation of N.J.A.C. 7:26-1 ET. Seg., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and 12 and all other applicable laws.

3. **Types of Solid Wastes Covered by the District Solid Waste Management Plan**

The provisions of the County Plan shall apply to all solid waste defined in N.J.S.A. 13:1E-3 and N.J.S.A. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, seepage, and hazardous wastes. All non-hazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Inter-district and Intra-district Solid Waste Flow Rules set forth at N.J.S.A.C. 7:26-6, but are subject to regulation in accordance with N.J.S.C.A. 7:26A-1ET. SEG.

4. **Certification to Proceed with the Implementation of the Plan Amendment**

This document shall serve as the certification of the commissioner of Department to the County Freeholders ad Pursuant to N.J.S.A. 13:1E-24C and f, the County shall proceed with the implementation of the approved amendment certified herein.

5. **Definitions**

For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those found at N.J.S.A. 13:1E-3 and -99.12, N.J.S.A.7:26-1.4 AND -2.13, and N.J.A.C. 7:26A-1.3.

6. **Effective Date of the Amendment**

The Amendment to the County Plan contained herein shall take effect immediately.

7. **Reservation of Authority**

Nothing contained herein shall be construed as a limitation on any other action taken by the Department pursuant to its authority under the law. The County Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Departments published a Statewide Solid Waste Management Plan, with appendices, which include the Department’s Planning guidelines, rules. Regulations, orders of the Department, inter-district and intra-district waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved. 

E. Certification of Approval of the Amendment and Modification of Deficiencies by the commissioner the Department of Environmental Protection and Energy

In accordance with the requirements of N.J.S.C.A. 13:1E et. Seg., I hereby approve the amendment, as outlined in section C of this certification, to the Essex County District Solid Waste Management Plan which was adopted by the Essex County Board of Freeholders on September 9,1992. I hereby also require, as noted in Section C., the Essex County Board of chosen freeholders to address the noted deficiencies
within the timeframe specified. This Certification memorializes the determination made by me on or before May 7, 1993.

5 – 7 – 93

Date

Scott A. Weiner
Commissioner
Department of Environmental Protection
And Energy

County of Essex, New Jersey
BOARD OF CHOSEN FREEHOLDERS

State of New Jersey
County of Essex

I ______ Adrienne Davis _____ Clerk of the Board of Chosen Freeholders of the County of Essex in the State of New Jersey

Do hereby Certify, the foregoing to be a true copy of an ORDINANCE adopted at a meeting of said Board, on ______ Wednesday____ the ______ day of ______ September 1992 and approved by the County Executive on the 16th day of ______ September 1992 together with the certifications signature and endorsements thereon.

ORDINANCE NO. ______ 0-92-0026______

In Testimony Whereof,......
11 (a) Plan Amendment to include white goods and lead acid batteries in District Recycling Plan

Adopted: September 9, 1992
Certified: December 10, 1993
Resolution No.:

Public Notices: (1\textsuperscript{st}): August 18, 1992
(2\textsuperscript{nd}): August 25, 1992
Public Hearings: September 9, 1992
WHEREAS, pursuant to the provisions of the N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and

WHEREAS, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan; and

WHEREAS, said Plan amendment had been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory Council; now, therefore. Be it

ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended by the adoption of the said attached amendment to the Essex County Recycling Plan, incorporated in the Essex County Solid Waste Management Plan by ordinance 0-88-044, adopted December 30, 1988.
2. That public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on Sept. 9, 1992, at 3:00 p.m., in Room #506, Hall of Records, Dr. Martin Luther King, Jr. Blvd, Newark, NJ 07102.

3. That the Clerk of the Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to not be less than ten days prior to the date set for hearing. Said notice shall start that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That the Clerk of the Board upon adoption, shall forward a certified copy of the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon, and proof of publication of public hearing.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Joseph Fiordaliso, Acting Director, Department of
Section 2.2.2. DESIGNATED RECYCLABLES FOR ESSEX COUNTY

Paragraph 2 in amended to read:

As indicated in Table 4 below the County accepted this recommendation of the State and has designated newspaper, glass food and beverage containers, aluminum beverage cans, white goods and lead acid (vehicle) batteries as the “designated recyclables” for all sectors. We have designated corrugated and office paper as “as designated recyclables” for commercial and institutional sectors. Additionally, the County has designated leaves and used motor oil which the Act and other state laws have banned from disposal and for which the State has prescribed recycling regulations. It is understood that these two materials cannot be counted toward recycling goals.

Table 4 is amended to read as follows:
Table 4: DESIGNATED RECYCLEABLES FOR ESSEX COUNTY

RESIDENTIAL: All homes, condominiums, townhouses, apartments, trailer parks, etc., including certain housing types considering housing types considered institutional (i.e. senior citizen homes) are to recycle the following materials. There is no amount, weight to other minimum standards.

- Newspapers
- Glass food and beverage containers
- Aluminum beverage containers
- Leaves
- Used Motor Oil
- White goods
- Lead acid batteries (vehicle batteries)

Commercial: All places of business (wholesale, retail, service, food, transportation, etc.) are included in this sector.

- Newspaper
- Glass food and beverage containers
- Aluminum beverage containers
- Old corrugated containers
- Office paper (all marketable grades)
- Used Motor Oil
- White goods
- Lead Acid batteries (vehicle batteries)
Institutional: All government buildings, schools, colleges, hospitals, clinics, etc. are included in this sector.

- Newspapers
- Glass food and beverage containers
- Aluminum beverage containers
- Leaves
- Old corrugated containers
- Office paper (all marketable grades)
- Used Motor Oil
- White goods
- Lead Acid batteries (vehicle batteries)
11 (b) Plan Amendment to include an ABB Sanitec facility at UMDNJ into the Plan

Adopted: May 12, 1993
Certified: December 10, 1993
Resolution No:

Public Notices: (1st): April 20, 1993
(2nd): April 27, 1993

Public Hearings: May 12, 1993
TO: Donald V. Biase, County Administrator
THRU: Phillip Thigpen, Director - DEPD (pg3)
FROM: Martin Lund, Director – DSWM
DATE: May 21, 1991
SUBJ: Amendment Solid Waste Management Plan – Inclusion of Millburn Compost

Introduction:
Under New Jersey’s Solid Waste Management Act, the County of Essex is responsible for the development and implementation of a recycling plan as a component of its Solid Waste Management Plan – Recycling Component by adding the Township of Millburn’s Compost Facility to the list of municipality owned and operated compost facilities listed in the Solid Waste Management Plan – Recycling Component.

Recommendations:
The Essex County Department of Planning and Economic Development/Division of Solid Waste Management and the Rutgers Cooperative Extension Service recommend that the Board of Chosen Freeholders adopt an ordinance amending the Solid Waste Management Plan to include the Township of Millburn’s Compost Facility to the list of municipally owned and operated compost facilities listed in the Solid Waste Management Plan – Recycling Component.
Reason for Recommendations:

By the state law, leaves are banned from landfills and resource recovery facilities for disposal. Composting is generally the acceptable method of managing leaned and is viewed as being environmentally favorable. Moreover, this particular facility has been redesigned with the assistance of the Essex County Agricultural Extension Agent and is now a ‘model’ facility with adequate drainage and turning cycles for efficient decomposition of he leaves. It is operated in accordance with the Rutgers Composting requirements.

Budget Impact:

This amendment will make no impact upon the County Budget.

Conclusion:

Amending the County’s Solid Waste Management Plan – Recycling Component to include the Township of Millburn’s Compost Facility’s is in accordance with State Law. Furthermore, since this compost is a public facility, this amendment is in accordance with the existing procedure to amendment the Solid Waste Management Plan.

Discharge Elimination System Permit
Table 7: Operating Composting Sites in Essex County

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Block\Lot</th>
<th>Address</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caldwell</td>
<td>131/8</td>
<td>Pine Tree Place</td>
<td>1</td>
</tr>
<tr>
<td>Essex Falls</td>
<td>8,1/46,50</td>
<td>Roseland Ave</td>
<td>2</td>
</tr>
<tr>
<td>Fairfield</td>
<td>6801/4</td>
<td>Marignal Road</td>
<td>5.3</td>
</tr>
<tr>
<td>Maplewood</td>
<td>343</td>
<td>Parker Avenue West</td>
<td>2.5</td>
</tr>
<tr>
<td>Millburn (County)</td>
<td>5503/1</td>
<td>South Orange Avenue</td>
<td>1</td>
</tr>
<tr>
<td>Millburn</td>
<td>5401/1</td>
<td>JFK Parkway</td>
<td>-</td>
</tr>
<tr>
<td>Newark</td>
<td>5056/16,20</td>
<td>Rutherford St</td>
<td>7</td>
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<td></td>
<td>30,80,84,86</td>
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<tr>
<td>North Caldwell/Verona (County)</td>
<td>NC10/1;11;2</td>
<td>Sanitarium Road</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>V 128/30-32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roseland</td>
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<td>Roseland Boro</td>
<td>.75</td>
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<td>South Orange</td>
<td>115/80-103</td>
<td>Walton Avenue</td>
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</tr>
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<td>Verona (County)</td>
<td>28a/2,4</td>
<td>Sanitarium Road</td>
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</tr>
<tr>
<td>W. Caldwell</td>
<td>6/1903</td>
<td>Pine Tree Place</td>
<td>2 – 4</td>
</tr>
<tr>
<td>W. Orange</td>
<td>170/13</td>
<td>Mount Pleasant Avenue</td>
<td>35</td>
</tr>
</tbody>
</table>
11(c) Plan Amendment designating ECUA as implementing agency of County’s solid waste management plan

Public Notices: (1st):
(2nd):

Public Hearing(s):
County of Essex, New Jersey
BOARD OF CHOSEN FREEHOLDERS

State of New Jersey
County of Essex

I, Adrienne Davis, Clerk of the Board of Chosen Freeholders of the County of Essex in the State of New Jersey,

Do hereby Certify, the foregoing to be a true copy of an ORDINANCE adopted at a meeting of said Board, on _____ Wednesday _____ the ___4th__ day of _____ August ____ 1993 and approved by the County Executive on the 6th day of August ____ 1992 together with the certifications signature and endorsements thereon.

ORDINANCE NO. ______ 0-93-0009

In Testimony Whereof,......
Resolution of the Board of Freeholders
County of Essex

Ordinance No. 0-93-0009
Proposed by: County Executive
Subject: ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN TO DESIGNATE THE ESSEX COUNTY UTILITIES AUTHORITY TO SUPERVISE IMPLEMENTATION OF THE SOLID WASTE MANAGEMENT PLAN

Whereas, the Solid Waste Management Act, N.J.S.A. 13-1E-1, et seq. (the “ACT”) requires that each solid waste management plan that includes, among other requirements, the designation of an agency to implement said plan; and

Whereas, by Ordinance No 00220 dated August 8, 1979, the Essex County Solid Waste Management Plan (the “plan”), which plan has been amended from time to time; and

Whereas, by Ordinance No. 0-92-0023, adopted July 1, 1992, (The “Creation Ordinance”), the Essex County Board of Chosen Freeholders formed the Essex County Utilities Authority (the “Authority); and

Whereas, the Creation Ordinance provided for, among other things, designation of the Authority as the implementing agency for the Plan in substitution for the County’s Division of Solid Waste Management; and

Whereas, the Plan must be formally amended to effectuate the terms of the Creation Ordinance; and

Whereas, the County Executive, through the Department of Planning and Economic Development, has submitted for Board of Freeholders approval, he necessary amendment to the Plan; now, therefore, be it

Ordained, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby amended to designate the Essex County Plan in substitution for the County’s Division of Solid Waste Management
2. That public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on June 16th, 1993, at 10:00 a.m., in Room #506, Hall of Records, Dr. Martin Luther King, Jr. Blvd, Newark, NJ 07102.

3. That the Clerk of the Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to not be less than ten days prior to the date set for hearing. Said notice shall start that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That the Clerk of the Board upon adoption, shall forward a certified copy of the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon, and proof of publication of public hearing.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance to Joseph L. Fiordaliso, Acting Director, Department of Planning & Economic Development, Martin Lund, Director of
Operations, ECUA, and to Stephen J. Edelstein, County Counsel.
December 10, 1993

Honorable Sarah Bost
Freeholder Director
Essex County Board of Chosen Freeholders
Administration Building
Newark, New Jersey 07102

Dear Freeholder Director Bost:

Enclosed is the certification of the solid waste plan amendments which the Essex County Board of Chosen Freeholders adopted on September 9, 1992, May 12, 1993 and August 4, 1993. The certification approves all three plan amendments. The September 9, 1992 amendment adds white goods and lead acid batteries (vehicle batteries) to the list of designated recyclables within the County Plan. The May 12, 1993 amendment includes within the County Plan an ABB Sanitec microwave facility to be located at the Newark Campus of the University of Medicine and Dentistry of New Jersey (UMDNJ) for processing regulated medical waste generated at the UMDNJ Newark Campus. Finally, the August 4, 1993 amendment designates the Essex County Utilities Authority as the County’s solid waste management plan implementation agency in substitution for the County’s Division of Solid Waste Management.

Also, the County is reminded that the Department’s January 22, 1992 certification of the County’s September 12, 1990 plan amendment noted detailed deficiencies of the County was required to address in a subsequent plan amendment submission by July 21, 1992. Specifically, the certification required the county’s pursuit of in-state landfill arrangements through facility .......... or the negotiation of an inter-district agreement, the identification of specific truck routes to the County’s incinerator, and address in the provisions set forth in the Emergency Solid Waste Assessment Task Force (Task Force) Final Report.

The outstanding areas noted above represent serious plan deficiencies which must be addressed immediately. At this point in time, Essex County is one of the few remaining counties which have not submitted any formal plan to advance the Task Force goals in the critical areas of the source reduction, Expanded recycling, and long-term regionalization of its...
incinerator. Also, while the County has a regional agreement for the acceptance and processing of Bergen County Solid Waste, this agreement is short-term in nature, expiring on March 1, 1994. No specific long-term regional partnership has been formalized at this time. Further, even with current incinerator operations, approximately 358,000 tons per year of the County’s nonprocessible, bypass and residual solid waste is being exported for out-of-state disposal contrary to the DEPE’s self-sufficiency objectives. To date, the Department’s has not received the required amendment. Therefore, the county is directed to submit the required amendment immediately. Please be advised that the failure of the County to comply with this directive may result in the withholding reallocation of the County’s Solid Waste Services Tax money’s, the withholding of the County’s Resource Recovery Investment Tax money’s, and/or initiating appropriate enforcement action.

It is imperative that the County address the above noted deficiencies. I am aware that our respective staffs have been working diligently to address the County Plan deficiencies. However, I must once again stress the seriousness of these deficiencies and the rapidly County Plan deficiencies and the rapidly approaching March 1, 1994 deadline for Essex County to have in place a revised long-term regional disposal plan. In this regard, Department staff will continue to be available to cooperatively work with the County in the achievement of mutual goals.

Sincerely,

Jeanne m. Fox
Acting Commissioner

Enclosure
2142
IN THE MATTER OF CERTAIN AMENDMENTS TO THE ADOPTED AND APPROVED SOLIDS WASTE MANAGEMENT PLAN OF THE ENGAGEMENT DISTRICT


BY ORDER OF THE ACTING COMMISSIONER:

A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1Z-1 ET SEQ.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state's Counties, and the Hackensack Meadowlands Development Commission develop comprehensive plans for the waste management in their respective districts. On August 13, 1980, the Department of Environmental Protection approved, with modifications, the Essex County District Solid Waste Management Plan. (County/Plan).

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for a ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery technique. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district's waste for a ten-year period, which sites may be in the district or, if none are available in another district. (The Act provides procedures for reaching any necessary inter-district agreements.)

The Act further provides that a district may review its County Plan at any time and, if found adequate, a new County Plan must be adopted. The Essex County Board of Chosen Freeholders (County Freeholders) completed such a review and on September 9, 1992, May 12, 1993, and August 4, 1993 adopted amendments to its approved County Plan.

The September 9, 1992 amendment to add white goods and lead acid batteries (vehicle batteries) is the list of designated recyclables in the County Plan. Although the County adopted this amendment on September 9, 1992, it was not considered administratively complete until August 5, 1993. The May 12, 1993 amendment proposed to include within the County Plan an ABB Sanitec microwave facility to be located at the Newark Campus of the University of Medicine and Dentistry of New Jersey (UMDNJ) for processing regulated medicinal waste generated at the UMDNJ Newark campus. Finally, the August 4, 1993 amendment designated the Essex County Utilities Authority as the County's solid waste
management plan implementation agency in substitution for the County’s Division of Solid Waste Management.

The September 9, 1992, May 12, 1993, and August 4, 1993 amendments were received by the Department of Environmental Protection and Energy (Department or DEPE) on August 5, 1993, and October 28, 1993, respectively, and copies were distributed to various administrative review agencies for review and comment, as required by law. The Department has reviewed these amendments, as well as the entire County Plan, and has determined that the amendments adopted by the County Freeholders on September 2, 1992, May 12, 1993, and August 4, 1993 are provided in N.J.S.A. 13:1E-24. Also, deficiencies in the County Plan have been identified within Section C of this certification.

A. Finding and Conclusions with Respect to the Essex County District Solid Waste Management Plan Amendments

Pursuant to N.J.S.A. 13-1E-24A (1), I have studied and reviewed the September 9, 1992 and May 12, 1993 amendments to the County Plan according to the objectives, Criteria, and standards developed in the Statewide Solid Waste Management Plan. In this regard, the County Freeholders and the applicants are notified of the issue of concern relative to the May 12, 1993 amendment which are included below in section B.3.

In conjunction with the review of the amendments, the Department circulated copies to fifteen administrative review agencies and solicited their review and comment. Pursuant to N.J.S.A. 13:1E-24a (2) and (3), these agencies included various bureaus, divisions, and the agencies within the Department. These Agencies are the following:

Office of air Quality Management, DEPE
Land Use of Regulation Element, DEPE
Wastewater Facilities Regulation Element, DEPE
Division of Parks and Forestry, DEPE
Division of Fish, Game and Wildlife, DEPE
Division of Solid Waste Management, DEPE
Green Acres Program, DEPE
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Health
Department of Transportation
Department of Community Affairs
Department of the Public Advocate
U.S. Environmental Protection Agency

1. Agency Participation in the Review of the September 9, 1992 Amendment

The following agencies did not object to the proposed plan amendment:

Wastewater Facilities Regulation Element, DEPE
Division of Parks and Forestry, DEPE
Division of Fish, Game and Wildlife, DEPE
Division of Solid Waste Management, DEPE
Department of Agriculture
Department of Transportation
Department of Community Affairs

The following Agencies did not respond to our requests for comments:
Offices of Air Quality Management, DEPE  
Land Use Regulation Element, DEPE  
Department of Health  
Department of the Public Advocate  
U.S. Environmental Protection Agency  

None of the Agencies provided substantive comments.

2. **Agency Participation in the Review of the May 12, 1993 Amendment**

The following agencies did not object to the proposed plan amendment:

- Division of Parks and Property, DEPE  
- Green Acres Programs, DEPE  
- New Jersey Turnpike Authority  
- New Jersey Advisory Council on Solid Waste Management  
- Department of Agriculture  
- Department of Transportation  
- Department of Community Affairs  

The following Agencies did not respond to our request for comment:

- Office Air Quality Management, DEPE  
- Land Use Regulation Element, DEPE  
- Department of Pioh, Game and Wildlife, DEPE  
- Department of Health, DEPE  
- Department of the Public Advocate, DEPE  
- U.S. Environmental Protection Agency, DEPE  

The following Agencies provided substantive comments which are further addressed below:

- Wastewater Facilities Regulation Element, DEPE  
- Division of Solid Waste Management, DEPE  

3. **Agency Participation in the Review of the August 4, 1993 Amendment**

The following agencies had no objection to the August 4, 1993 amendment:

- Office of Air Quality Management, DEPE  
- Division of Parks and Forestry, DEPE  
- Division of Fish, Game and Wildlife, DEPE  
- Division of Solid Waste Management, DEPE  
- Green Acres Program, DEPE  
- New Jersey Turnpike Authority  
- Department of Agriculture  
- Department of Transportation  

The following agencies did not respond to our requests for comment:
4. Issues of Concern Relative to the May 12, 1993 Amendment

Issue: Regulatory Requirements

To UMDNJ must contain all required permits, authorizations and/or approvals from the DEPE and the New Jersey Department of Health prior to installing and operating the proposed regulated medical waste (RMW) microwave disinfection unit. Specifically, the proposal to install such a unit requires the facility to register as a medical waste destination facility pursuant to N.J.A.C. 7:26-3A.8. Also, an air pollution control permit from the Department will be required pursuant to N.J.A.C. 7:27-8.2 (A)16. Further, the used of the crushers, chippers and shredders will necessitate the control of particulate emissions to the air and, pursuant to N.J.A.C. 7:27-8.2.(B), 7,11, 15, ANF 16, air pollution control permits are required. Additionally, if the operation of the proposed facility will discharge pollutants as defined in N.J.A.C. 7:14A-1.9, the facility must obtain a New Jersey Pollutant Discharge Elimination System Permit and/or a Treatment Works Approval for pollutant discharge prior to operation. Finally, the UMDNJ must also comply with all relevant federal, state, and local regulations.

Issue: Microwave Disinfection Unit Moratorium

Starting on or about September 1993, the DEPE and the Department of Health imposed a moratorium on the sale, operation, and sitting if new ABB Sanitec microwave RMW treatment/destruction facilities pending further evaluation of air emissions from these units and other operational concerns. It is expected that the results of further air quality testing and system analysis will be completed during February 1994. Also, the United States Environmental Protection Agency is expected to publish the results of its analysis of the ABB Sanitec system in its third and final report to Congress in the summer of 1994. Notwithstanding the moratorium, DEPE is approving within Section C, of the certification the County Plan Inclusion of the UMDNJ microwave unit. Upon review of the State and Federal studies regarding the visibility of this form to RMW treatment, the issue of granting an authorization to operate an ABB Sanitec unit at the UMDNJ Newark Campus will be addressed during the technical phase of the DEPE permitting process. The applicant, UMDNJ, may wish to contract the DEPE’s Office of Air Quality Management of the bureau of Medical Waste, Residuals Management, and Statewide Planning for further information relative to the moratorium.

Issue: County Plan Inclusion of Medical Waste Facilities

All future amendments which purpose inclusion of medical waste facilities will be reviewed within the context of the RMW management hierarchy and source reduction initiatives as identified in the Solid Waste Management State Plan Update 1993-2002; section II: Comprehensive Regulated Medical Waste Management Plan. More specifically, the DEPE views as the beat management practice to safely dispose of RMW in environmentally sound and economical ways and to achieve self-sufficiency as quickly as possible. The DEPE’s disposal strategy hierarchy is as follows:
1. County Management strategies which include regional planning for the use of existing or planned RMW processing/treatment/disposal capacity on a multi-county basis through inter-district agreements;

2. Strategies which demonstrate the capacity and timeframes for achieving self-sufficiency through more efficient use of existing in-county RMW disposal capacity at the state-of-art hospital and other facilities such as microwave, chemical disinfection and grinding systems, upgraded incinerations and sanitary sewer systems;

3. Plans for the development of new commercial or noncommercial disposal capacity on a singular countrywide basis;

4. Plans for the development of new commercial or non-commercial disposal capacity for use by single large generator;

5. Plans which call for the merger of RMW disposal within existing solid waste infrastructure of the county through revision of existing regulations to allow for the acceptance of untreated RMW; and

6. Out-of-state disposal which will only be acceptable as a short-term option pending development of in-state capacity and which will not be authorized for long-term use other than as a part of a broad county contingently plan.

Each facility proposed by a County will be evaluated by the DEPE in relation to the RMW disposal hierarchy on a case by case basis in the plan amendment phase. As part of any future amendment for RMW facility inclusion, the County must indicate how the facility fits into the overall RMW plan being developed and provide a rationale, where appropriate, for why more preferred management options within the above hierarchy are not being pursued. As indicated within section C., the DEPE has approved inclusion of UMDNJ microwave unit since the County Freeholders adopted the amendment on May 12, 1993 and the public hearing for the RMW Plan, which marked it the effective date of Department’s County Plan inclusion policy, was held on May 26, 1993.

Issue: Conditions Pertaining to County Plan Inclusions of UMDNJ Microwave Unit

Within the May 12, 1993 amendment, the County imposed certain conditions concerning the inclusion of the UMDNJ ABB Sanitec microwave unit. Specifically, one of the conditions indicated that in the event the County designates in a subsequent plan amendment that RMW generated at the UMDNJ microwave unit, the UMDNJ facility shall cease operation and RMW generated at the UMDNJ shall be disposed of in accordance with the waste flow directive set forth in said amendment. While the Department approves in Section C. of the certification the inclusion of the UMDNJ microwave facility within the County Plan, the County is advised that it may not require the UMDNJ facility to cease operations upon the inclusion of a regional RMW facility in the County Plan unless the County first adopts a plan amendment specifically removing the UMDNJ facility from the County Plan by a subsequent plan. And that amendment is approved solid waste management plan may only be removed from the relevant County Plan by a subsequent plan amendment certification was recently affirmed by the Appellate Division In the matter of certain Amendments to the adopted Approved Solid Waste Management Plan of Mercer County Solid waste Management District A-3448 (July 2, 1993) certif. den. Docket no. 37,231Certificaic

B. Certification of the Essex County District Solid Waste Management Plan Amendments

In accordance with N.J.S.A. 13:1E-1 et. Seq, specifically N.J.S.A. 13:1E-21, which establishes specific requirements regarding the contents of the district solid waste management plans, I have reviewed the September 9, 1992, May 12, 1993, and August 4, 1993 amendments to the Approved County Plan and certify to the County freeholders September 9, 1992, May 12, 1993 and August 4, 1993 amendments are approved as further specified below.

1. September 9, 1992 Amendment

The County Plan inclusion of white goods and lead acid batteries (vehicle batteries) as mandated recyclable materials to be added to the list of previously designated recyclables in the County Plan is
approved. Accordingly, the limit of materials to be recycled by various sectors in the County is as follows:

Residential Sector

Newspapers
Glass food and beverage containers
Aluminum beverage containers
Leaves
Used Motor Oil
White goods*
Lead acid batteries (vehicle batteries)*

Commercial Sector

Newspapers
Glass food and beverage containers
Aluminum beverage containers
Leaves
Used Motor Oil
White goods*
Lead acid batteries (vehicle batteries)*
Old corrugated containers
Office paper (all marketable grades)

Institutional Sector

Newspapers
Glass food and beverage containers
Aluminum beverage containers
Leaves
Old Corrugated containers
Office paper (all marketable grades)
Used Motor Oil
Lead acid batteries (vehicle batteries)*

Institutional Sector

Newspaper
Glass food containers and beverage containers
Aluminum beverage containers
Leaves
Old Corrugated containers
Office Paper (all marketable grades)
Used Motor Oil
White goods*
Lead Acid batteries (vehicle batteries)*

* Newly designated Materials

2. May 12, 1993 Amendments

The County Plan inclusion of an ABB Sanitec microwave unit to be located on Lot 1, Block 211, on Norfolk Avenue between 12th avenue and South Orange Ave, at the University of Medicine and Dentistry
of New Jersey (UMDNJ). Newark campus, in the city of Newark, for processing RMW generated only from within the UMDNJ Newark Campus is approved. The estimated capacity of this facility will be 550 pounds per hour or 6.6 tons per day.

The amendment also states that in the event the County proposes to designers in a subsequent plan amendment a regional RMW processing facility other than the UMDNJ microwave facility and directs the RMW generated at the UMDNJ Newark Campus to the County’s Regional facility, the UMDNJ shall cease operating its microwave facility and shall comply with the waste flow directive set forth in such a subsequent amendment. As noted in section B., the County is hereby notified that it may not require the UMDNJ microwave unit to cease operations upon the inclusion of a regional RMW facility within the county plan unless the County first adopts a plan amendment deleting the UMDNJ unit form from the County Plan and that amendment is approved by the DEPE.

Further, all RMW processed at the UMDNJ microwave facility shall be disposed, subsequent to processing, as type 10 municipal waste in conformance with the Inter-district and Intra-district Solid Waste Flow Rules at N.J.A.C. 7:26-6.6 et. Seq. and the approved Essex County Plan. The microwave facility is also subject to N.J.A.C. 7:26-3A, “Regulated Medical Waste Rules,” and other regulatory requirements as described in Section E. of the Certification.

Finally, as indicated within Section B. of the certification, a moratorium has been imposed on the sale, operation and siting of an ABB Sanitec microwave units. Notwithstanding the moratorium the DEPE is approving at the planning phase of the permitting process the inclusion of the UMDNJ microwave unit. Upon review of State and Federal studies regarding the visibility of this form of RMW treatment, the issue of granting an authorization to operate an ABB Sanitec microwave unit at the UMDNJ Newark campus will be addressed during the technical phase of the DEPE's permitting process.

3. **August 4, 1993 Amendment**

The County Plan inclusion of the designation of the Essex County Utilities Authority as the County’s solid waste management plan implementation agency in substitution for the County’s Division of Solid Waste Management is approved.

4. **Essex County District Solid Waste Management Plan Deficiencies**

I have reviewed the entire County Plan to determine whether it fulfills the requirement set forth in N.J.S.A. 13:1E-21, as well as the recommendations of the Emergency Solid Waste Assessment Task Force (Task Force) Final Report accepted by the Governor on November 16, 1990. In this regard, the County is remained that the Department’s January 22, 1992 certification of the County's September 12, 1990 plan amendment noted detailed deficiencies which the County was required to address in a subsequent plan amendment submission by July 21, 1992. Specifically, the certification required the County’s Pursuit of in-state landfill arrangements, the identification of specific track routes to the County arrangements, the identification of specific truck routed to the County incinerator, and the submission of a plan amendment addressing the provisions of the Task Force Final Report with recommendations including source reduction, achievement of at least a 50% recycling rate for the municipal waste stream and a 60% recycling rate for the total waste stream, and a plan for a long-term regionalization of the county’s incinerator. Further, consideration was also to be given to regional plans for materials processing, recycling, transfer and disposal facilities. To date, the Department has not received the required amendment.

The outstanding issues noted above represent serious plan deficiencies which must be addressed immediately. At this point in time, Essex County is one of few remaining counties which have not submitted any formal plan to advance statewide goals in the critical areas of source reduction, expanded recycling and system regionalization. Further, while the Country has a regional agreement for the acceptance and processing of Bergen County solid waste, this agreement is short-term in nature, expiring on formalized at this time. Finally, even with current incinerator operations,
approximately 358,000 tons per year of the County’s nonprocessible, bypass and residual solid waste is being exported for out-of-state disposal contrary to the DEPE’s self sufficiency objectives. Therefore, the County is directed to submit the required amendment immediately to address these and the other noted deficiencies. Although the Department notes that staff of the DEPE’s Division of solid Waste Management has been working very aggressively over the past month with representatives from Essex County and the Essex County Utilities authority toward correcting these deficiencies may result in the withholding and reallocation of the deficiencies may result in the withholding if the County’s Resource Recovery Investment Tax Moneys, and/or initiating appropriate enforcement action.

C. Other Provisions Affecting the Plan Amendments

1. Contracts

Any contract renewal or new contract for solid waste management collection or disposal which is inconsistent with these amendments to the County Plan and which was executed prior to the approval of these amendments and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department and operating pursuant to a contract as herein described, shall be deemed to be in violation of these amendments and of the county Plan if such renegotiation is not completed or completed within ninety days of the effective date of these amendments provided, however, that any such registrant may, upon application to the Department, and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and transporters registered with the Department and operating within the County and affected by these amendments and are all approved provisions of the County Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E et. Seq., in violation if N.J.S.C. 7:26-1 ET. SEQ., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and all other applicable laws.

3. Types of Solid Waste Covered by the District Solid Waste Management Plan

The provisions of the County Plan shall apply to all solid wastes defined in N.J.S.A. 13:1E-3 and N.J.C.A. 7:26-2.13 and shall not apply to liquid wastes, sewage sludge, septage, and hazardous wastes. All non-hazardous materials separated at the point of generation for sale or resale are excluded from the waste flows designated in the Inter-district and Intradistrict Solid Waste Flow Rules set forth at N.J.C.A. 7:26-6 but are subject to regulation in accordance with N.J.A.C.A 7:26A et seq.

4. Certification to Proceed with the Implementation of the Plan Amendments

This document shall serve as the certification of the Acting Commissioner of the Department to the county of freeholders and pursuant to N.J.S.A. 13:1E and f, the County shall proceed with the implementation of the approved amendments certified herein.

5. Definitions
For the purpose of these amendments and unless the context clearly requires a different meaning, the definition to terms shall be the same as those found in N.J.S.A. 13:1E-3 and -99.12, NJAC 7:26-1.4. AND 2.13 AND NJAC 7:26A-1.3

6. Effective Date of the Amendments

The amendments to the County Plan contained herein shall take effect immediately.

7. Nothing contained herein shall be construed as a limitation on any other action taken by the Department pursuant to its authority under the law. The County Plan, including any amendment made thereto, shall conform which the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan, with appendices, which includes the Department's planning guidelines, rules, regulations, orders of the Department, Inter-district and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments they are approved.

D. Certification of Approval of the Amendments and Notification of Deficiencies by the Acting Commissioner of the Department of Environmental Protection and Energy.

In accordance with the requirements of N.J.S.A. 13:1E-1 ET SEQ, I hereby approve the amendments, as outlined in section C. of this certification, to the Essex County District Solid Waste Management Plan which were adopted by the Essex County Board of Chosen Freeholders on September 9, 1992, May 12, 1993, and August 4, 1993. I hereby also require, as noted in Section C., the Essex County Board of Chosen Freeholders to address the noted deficiencies within the time frame specified.

12 (a) Plan Amendment relating to first Task Force Amendment endorsing 60% recycling goals
Adopted: December 8, 1993
Certified:
County of Essex, New Jersey
BOARD OF CHOSEN FREEHOLDERS

State of New Jersey
County of Essex

I _____ Adrienne Davis _____ Clerk of the Board of Chosen Freeholders of the County
of Essex in the State of New Jersey

Do hereby Certify, the foregoing to be a true copy of an ORDINANCE
adopted at a meeting of said Board, on _____ Wednesday _____ the __8th__ day of
____December____ 1993 and approved by the County Executive on the __16th__ day of
____September____ 1992 together with the certifications signature and endorsements
thereon.

ORDINANCE NO. _____0-93-0037_____

In Testimony Whereof,.....

ORDINANCE OF THE BOARD OF FREEHOLDERS
COUNTY OF ESSEX

Ordinance No. 9-93-0037  Statutory Authority for Ordinance:  N.J.S.A. 40:41A-38
Sponsored by:

Subject:  ____________ ORDINANCE TO AMEND THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN TO INCLUDE A 60% RECYCLING PLAN ____________

Whereas, pursuant to the provisions of the N.J.S.A. 13:1E-1 et seq., the County of Essex, by Ordinance No. 00220, adopted August 8, 1979, and amendments thereto, has adopted a Solid Waste Management Plan; and

Whereas, said Plan was amended by Ordinance 0-88-0044, adopted January 25, 1989, to include a revised Recycling Plan; and

Whereas, the State of New Jersey had mandated a Statewide recycling level of at least 50% on the municipal solid waste stream and 60% of the total waste stream by December 31, 1995; and

Whereas, the County Executive, through the Department of Planning and Economic Development, has prepared, and has requested Board of Freeholder approval for an amendment to said Solid Waste Management Plan further amending the Recycling Plan provisions thereof to incorporate such recycling goals; and

Whereas, said Plan amendment had been duly reviewed and recommended for approval by the Essex County Solid Waste Advisory Council; now, therefore. Be it

ORDAINED, by the Board of Chosen Freeholders of the County of Essex as follows:

1. That County Ordinance 00220 adopting the Essex County Solid Waste Management Plan, as amended, and said Plan are hereby
amended by the adoption of the said attached amendment to the Essex County Solid Waste Management Plan.

2. That public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E-23, on December 8, 1993 at 8:00 p.m., in Nutley Town Hall, Kennedy Dr., Nutley, NJ

3. That the Clerk of the Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to not be less than ten days prior to the date set for hearing. Said notice shall start that said Plan amendment can be inspected at the offices of every municipality within the County.

4. That the Clerk of the Board upon adoption, shall forward a certified copy of the Commissioner of Environmental Protection pursuant to N.J.S.A. 13:1E-23 and 24, together with a copy of the transcript of the public hearing thereon, and proof of publication of public hearing.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certified copies of this Ordinance together with a copy of transmitting letter to the Commissioner of Environmental Protection and Energy, to Joseph L. Fiordaliso, Acting
Director, Dept. of Planning & Economic Development, Martin Lund, Director, of Operations, ECUA, and to Stephen J. Edelstein, County Counsel.

AMENDMENT

To the
ESSEX COUNTY RECYCLING PLAN

Prepared by
Essex County Department of Planning & Economic Development
Essex County Division of Solid Waste Management

Introduction

Pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et. Seq, each county, as well as the Hackensack Meadowlands Development District, in the State of New Jersey, is deemed a solid waste management plan that analyzes solid waste generation and disposal of solid waste generated within the geographical Separation and Recycling Act.
amended the Solid Waste Management Act to require that each solid waste management plan be amended to include, among other things, the designation of recyclable materials, the recycling strategy and recovery targets (N.J.S.A. 13:1E-99.13). In accordance with these statutory mandates, Essex County Promulgated the Essex County recycling Plan by Ordinance 088-0044, adopted January 25, 1989, amending the Essex County Solid Waste Management Plan of April, 1987,(hereafter referred to as “Recycling Plan”).

On August 6, 1990 the Emergency Solid Waste Assessment ask Force issued its Final Report to the Governor of the state on New Jersey, concluding that a recycling rate 60% of the total waste stream and 50% of the municipal waste stream could not be achieved by 1995. Thereafter, in June, 1991, the New Jersey Department of Environmental Protection issued its Solid Waste Policy Guidelines in response to Governor Florio’s emergency Solid Waste Assessment Task Force Final Report and Recommendations, outlining procedures for achieving the recycling goals.

The purpose of the plan Amendment is to establish a strategy for achieving the State’s recycling goals. A three-phase strategy is adopted as follows:

Phase 1: Identify, and proved assistance in implementing, the municipal recycling programs that are needed to accomplish the original recycling goals of the 1989 Recycling Plan.

Phase 2: Define further tasks and studies to achieve a recycling rate of 60%, including expanding the list of designated recyclable materials and developing a system to monitor overall solid waste generation and disposal and the diversion of solid waste activity.

Phase 3: Develop and implement a County or private materials recovery center (s)/ facility (ies).

The following Plan Amendment is organized into three sections, each section describing the activities to be performed under each other phase.
The Recycling Plan included within the Solid Waste Management Plan ("Swamp") requires that municipalities establish systems to collect designated recyclables materials (Recycling Plan at Section 1.2.2.a.). The Essex County Utilities Authority (ECUA) monitors the rate at which municipalities recycle. Although the Authority relies upon the NJDEPE tonnage grant information for actual recycling rates, the ECUA will also rely upon certain data projections and calculations included in the Governor's Emergency Solid Waste Assessment Task Force (referred to as the Task Force) Reports for all overall solid waste and recycling information.

Enforcement of recycling regulations at the curbside is a municipal responsibility. Violations of municipal and County recycling ordinances continue to be found at the Essex County designated Transfer Station and the Resource Recovery Facility.

A. Increase Overall Recycling within Municipalities

Outline

Using the present Solid Waste Management Plan recycling rate methodology, data from the NJDEP 1990 desk audit recycling report shows that 9 of the 33 Essex County municipalities do not meet the July, 1990 required 25% goal. (See TABLE 1: Designated Materials, 1990).

Using the 1990 census information, the recycling rates were calculated against other population indicators, including pounds recycled per person (Table 2), and pounds recycled per dwelling unit (Table 3).

These three tables provide a profile of the 1990 Essex County municipal recycling efforts.

Analysis

Overall, these indicators confirm that if a municipality does not have an effective curbside collection program, it is because the various components of the municipal program are not functioning at an optimum level.

There are certain demographic and business characteristics in Essex County which make uniform analysis for the recycling data invalid. As an example, the City of Newark has a
population of approximately 300,000 people, yet during the workday, this population increases approximately two-thirds. People in offices also generate recyclable material.

Therefore, in addition to the overall recycling rate, the County used this information as an “indicator” to determine the effectiveness of each municipality’s recycling program. This indicator serves as a guideline to approximate how many more pounds per day per dwelling unit/population are needed to meet the goals of the current plan. The data suggest that the following factors contribute to the failure to fulfill the statutory goals:

1) Ineffective municipal recycling program operations;
2) Ineffective municipal enforcement of local laws;
3) Lack if effective and uniform municipal, County and State recordkeeping; and;
4) Ineffective public education/ information;

The steps recommend below are based upon the indications derived from an analysis of the 1990 data.

B. Increase Recycling Activity from Multi-Family Structures

Outline

Essex County municipalities historically have not been responsible for the collection of solid waste from multiple family structures with five (5) or more dwelling units. As a result, when the 1987 New Jersey Mandatory Source Separation and Recycling Act was signed into law, this tradition was applied to the collection of recyclables materials as well. Although some municipalities have made provisions for the collection of recyclable materials from multi-family structures, the owners of multiple family units have not uniformly provided recycling facilities or services within their structures.

A review of the 1990 census housing stock data shows that in Essex County, approximately 27% of the dwelling units are in multiple family structures. This data also reveals that the bulk of housing stock is in four-to-eleven structures (see Table 4).

Analysis

Municipalities that have curbside collection programs and have a higher portion of multiple unit structures still tend to have a lower rate of recycling. There are four possible explanations:
1) The present method of municipal collection is not effective and cannot accommodate large volume containers on site;

2) Recycling efforts implemented by the private sector haulers are not being documented by the municipality;

3) The municipality does not enforce recycling ordinances; and/or,

4) The internal operations of the multiple family structures do not accommodate recycling needs.

Amendments

1) The Recycling Plan is hereby amended to include the following new section 2.3.1.11 (Technical Assistance) which reiterates the County’s commitment to provide technical assistance to municipalities.

Technical Assistance

a. The County will notify each municipality as to its actual recycling rate.

b. The County will collect and provide information to municipalities about successful programs for these recyclable materials.

c. Using the 1990 Census information, the County will assist municipalities in developing plans to increase the multiple dwelling unit structures recycling rates by (1) assisting the municipalities to identify which structures to target; and (2) Working with the municipalities, assist the owners, superintendents, etc., to develop an institute recycling programs in these identified structures.

d. Landlords should notify new and existing tenants about their recycling responsibilities on a regular basis.

e. Municipal master plans should provide recycling provisions as required for new multi-family and commercial structures.

2) Section 2.3.1.5 of the Recycling Plan (referring to municipal ordinances) is hereby amended to add the following: All municipalities must include a provision in their municipal recycling ordinances that requires owners/operators of multi-family housing to provide for the collection and storage of recyclable materials.
3) Section 2.3.1.6 of the Recycling Plan (referring to enforcement) is hereby amended to add the following: Municipalities must enforce programs at the point of generation.

4) Section 2.3.1.6 and 2.3.1.5 referenced above, are hereby amended to include the following procedure for surcharging the solid waste disposal fees of those municipalities that do not enact and enforce comprehensive

C. Increase Recycling From Commercial and Industrial Establishments

Outline

The current Solid Waste Management Plan requires the commercial sector (area Businesses and industries) to recycle corrugated and office paper in addition to more traditional items of newspaper, glass and aluminum. Four municipalities had collection programs specifically for commercial establishments in place at the time of the adoption of the Recycling Plan.

During 1990, area businesses began to test and implement in house recycling programs for corrugated and office paper. Nonetheless, by the end of 1990, most municipalities had not implemented programs to collect and market corrugated paper. Given the fact that Essex County is densely populated and has a large portion of the commercial and industrial establishments in the state, the amount of recycled by the commercial and industrial sector be proportionate.

Analysis

Table 1 indicates that paper recycling from offices remains low and varied. Nationally, the consumption of paper is rising. Some larger companies have instituted paper recycling efforts. Essex County has a large amount of small offices. The recycling rate from such offices for “other paper” or “high grade” paper is lower than it should be and could be improved.

A municipality by municipality analysis shows that the commercial recycling effort is not uniform. It is apparent from this analysis that without a municipal collection program, corrugated and office paper are not recycled. The analysis of municipal activity shows that for municipalities where there is a corrugated and office paper collection program in place, the recycling rate for those particular items is higher.

The then Division of Solid Waste Management, with its environmental consultant, PMK< Ferris & Perricone, Inc., conducted an Industrial Waste Survey in preparation of the opening of the Resource Recovery Facility. Through this survey the Division became aware of the fact that many companies recycle several materials but fail to report the weights to their municipalities.
Amendment

Section 2.3.1.7 of the Recycling Plan (referring to collection/accumulation of designated material) is hereby amended to include the following:
The County will:

1) Continue the implementation of the Industrial Waste Survey program so that the County can identify who is generating what kind of material and how it is being disposed. Using this information, the county will develop a “chart of expectation”. This chart will identify what materials should be recycled by a particular commercial establishment for each municipality. This information will become a tool for both recordkeeping and municipal enforcement.

2) Forward this information to the affected municipalities so that they may collect the weight information.

3) Recommend that State law require commercial and industrial establishments to report recycling data annually.

4) Designate a portion of the NJDEPE program grant funds for experimentation of various methods of collecting corrugated and office paper from small businesses.

5) Assist municipalities to develop and implement curbside collection programs for business.

6) Municipalities should work with businesses to improve recycling rates of “other” and “high grade” paper.

7) Develop a plan to insure that all transfer stations accepting material generated from Essex County maximize their recycling.

D. EXPAND EFFORTS TO Recycle USED MOTOR OIL THROUGH EDUCATION AND ENFORCEMENT

Outline

Used motor oil is a recyclable material. By law, service stations and garages that operate as official re—inspection stations are required to accept used motor oil for recycling. There are several problems in the recycling process for used motor oil. First, the public is generally not aware that recycling of used motor oil can be done or where to take this material for recycling. Second, many service stations are hesitant to accept this material because it may include other automotive materials such as solvents and gasoline that would contaminate the oil. Third, service stations are now being charged for this service but remain reluctant to pass on this cost to a consumer.

Analysis

The amount of used motor oil actually recycled is unknown because of the lack of responses from individual service stations and repair shops. The amount reported as recycled is more of a testimony to the municipal recycling coordinator's tenacity that to valid statistics, The Task
Force estimates that approximately 68,250 tons is generated each year in New Jersey. On a per capita basis, Essex County, with 842,000 estimated populations, generates approximately 17.5 pounds for a County total of approximately 7,359 tons each year.

According to the 1990 Recycling Tonnage Reports, the Essex County Municipalities reported a total of 1,846 tons recycled. This is approximately one-fourth of the amount that could be recycled.

**Amendments**

1) Section 2.3.1.3 of the Recycling Plan (referring to processing capacity of designated materials) is hereby amended to add the following:

    a) Municipal recycling ordinances must include provisions dealing with the recycling of used motor oil with specific enforcement provisions.
    b) The County will assist the municipalities in identifying those service stations which are required to accept motor oil.
    c) Motor oil recycling data is more readily available from collector/haulers, and they shall provide information to the municipalities or the counties, as requested.

2) Section 2.3.1.4 of the Recycling Plan (referring to Publicity and Education) is amended to add the following: The County will work with the municipalities to design an educational program.

**E. EXPAND THE COUNTY’S ROLE TO INCLUDE AN ASSESSMENT OF NEW AND EMERGING SOLID. WASTE MANAGEMENT TECHNOLOGIES**

**Outline**

Because solid waste has become a critical problem in the United States, there are many new and innovative methods of managing it. These range from source separation methods to palletizing solid waste for resource recovery facilities.

**Analysis**

The Essex County Department of Planning and Economic Development, occupies a unique position in the governmental structure in that it both plans implements strategies to effect better management of solid waste in accordance with the New Jersey Solid Waste Management Act and the New Jersey Mandatory Source separation and Recycling Act. As the
Department defines and refines solid waste data, it must also maintain a “data base” of current technology. Additionally, given the characteristics of Essex County (e.g., population, commercial establishments, transportation needs, etc.), some analysis must be made of these technologies to determine their benefit to the County.

**Amendment**

The Recycling Plan is hereby amended to include in the new Section 2.3.1.11 (Technical Assistance) the following tasks:

The County will:

1) Analyze long-range needs of solid waste management for Essex County by incorporating analysis of current and proposed technology and its impact on Essex County and its municipalities

2) Develop and implement a data base of new technologies.
PHASE II

FURTHER TASKS AND STUDIES TO BE INCLUDED AS MIENDMENTS TO THE EXISTING SOLID WASTE MANAGEMENT PLAN

A. DEVELOP A PLAN FOR COMPREHENSIVE SOURCE REDUCTION

B. EXPAND LIST OF REQUIRED DESIGNATED RECYCLABLES TO INCLUDE ALL RECYCLABLE MATERIALS

Outline

The Task Force recommends the abandonment of the concept of the “designated material” in favor of an all inclusive approach to recycling, seeking an overall 60% diversion rate from the solid waste stream. Municipalities and counties would calculate their respective recycling rates using all recyclable materials against all types of waste. To put this recommendation into effect requires that the classification of materials as “designated” be discarded.

Present County enforcement of the recycling ordinance is accomplished through visual inspections by the County at the Resource Recovery Facility and the designated Transfer Station. Municipal enforcement of recycling ordinances is sporadic, uneven and in some cases nonexistent.

Analysis

Reliance on the NJDEPE and the municipalities for recycling data has resulted in dated and incomplete profiles of actual recycling efforts. Amending the present Essex County Solid Waste Management Plan to alter the method of calculating the municipal and county recycling rate will encourage a broader range of recycling activity.

Analysis of each municipality’s NJDEPE 1990 audited recycling activities (Table 1) shows the recycling rate as calculated in accordance with the current Solid Waste Management Plan. The overall rate for the County is 38.25%. This means that the County, as a whole, recycles approximately 38.25% of all of its Type ID 10 wastes. Table 5 shows the tons needed to meet the overall 60% diversion rate. Materials such as glass and ferrous materials which should not be incinerated must be given a high priority and keyed to critical strategies to ensure that such materials are not disposed of at the Resource Recovery Facility.

The Department of Planning and Economic Development considers municipal enforcement one method to make the recycling effort more effective.

While the 1990 recycling data show that most of the municipalities were well on their way to achieving and exceeding a 25% recycling rate, the circumstances have been altered considerably with the Task Force recommendation. Not only will municipalities be required to ensure that all
residential structures are recycling, businesses and industry will also have to assume a greater role in achieving the goal of 60%. Enforcement of recycling laws and ordinances are critical to the success of the effort to achieve an overall 60% diversion rate.

Amendments:

1) Section 2.2.2 of the Recycling Plan (referring to designated recyclables for Essex County) is hereby amended to add the following: The overall recycling goal for each municipality shall be not less than 60%.

2) The new Section 2.3.1.11 (referring to Technical Assistance) is expanded to include the following: The County will assist municipalities in developing individual municipal plans of action to achieve the overall 60% goal. Efforts will start with those municipalities with the lowest rates. Policy, plans and strategies for succeeding years should be established as well as a plan to include more materials in the system for collection.

3) Section 2.3.1.6 Of the Recycling Plan (referring to Enforcement) is hereby amended to include the following tasks:

The County will:

a) Design and test a County system of notification, warning, and penalties for recycling violations at the designated transfer station and Resource Recovery Facility.

b) Assist municipalities in evaluating their enforcement operations and revise the operations to maximize the effectiveness of the program.

c) Use the information from the Industrial Waste Survey to notify generators of recyclable materials that they must notify the County of their recycling activities.

C. DEVELOP A SYSTEM TO MONITOR THE OVERALL SOLID WASTE GENERATION MID DISPOSAL RATES MID THE DIVERSION OF SOLID WASTE ACTIVITY

Outline

Recycling and solid waste data is collected from various sources. The New Jersey Mandatory Source Separation and Recycling Act requires that the municipalities provide an annual tonnage report for all recyclable materials. Solid waste disposal tonnage is collected from the County's designated transfer station and Resource Recovery Facility.

Based on information gathered during the 1990 Industrial Waste survey, many companies recycle as a matter of prudent business practice. When this information was compared with recycling tonnage reports, it was clear that the reporting of business recycling is incomplete. The overall 60% mandate will require Essex County to identify and include all types of materials. An integrated information system would indicate who was recycling which materials and it would give the County an indication of what weight is to be expected for the various modes of solid waste management.
By virtue of this information, the County could pinpoint shortfalls and potential lack of compliance in recycling activities.

Amendment:

Section 2.3.1.8 of the Recycling Plan (referring to the maintenance of recycling records) is hereby amended to include the following:

The County will:

1) Implement an annual mercantile registration system so that the County can conduct a solid waste and recycling survey of all businesses and industries located in Essex County. This registration system would require all businesses and industries to describe their waste generation, disposal, and recycling activities once every year.

2) Institute a universal Origin and Destination form, modeled after the NJDEP O&D form, for all recyclable materials so that the County can maintain a current profile of recycling and solid waste activities.

3) Provide information (gathered from Recommendation 1 above) to the municipalities as to which businesses are not recycling. Then provide assistance and enforcement to maintain an effective recycling program.

4) Design and begin testing a recordkeeping system through which the County will keep all solid waste data in a timely, accurate and complete manner.

5) The County will assist businesses and industries with preparation of a waste audit.

D. IDENTIFY NEW AND EXISTING TECHNOLOGIES WHICH MAXIMIZE THE DIVERSION OF RECYCLABLES FROM THE SOLID WASTE STREAM

Outline

Waste reduction, reuse and recycling are becoming integrated technologies as a precursor to disposal. The primary purpose of these functions, however, is to reduce the amount of solid waste disposed. Given subsequent advances in the management of solid waste, now is the time to investigate the possible enhancements of the County’s present plan.
Analysis

Because Essex County is a part of a market rich region, the task of managing recycling has not been, until now, pressed to find viable and long—term recycling solutions. New techniques and methods are now emerging that will better advance recycling.

At present, more communities commingle than require separation of recyclables. This is the most convenient for residents. Yet, materials processors are finding that the quality of material improves if there is some separation of materials.

In Section 2.3.1.3 of the Recycling Plan (referring to processing capacity for designated materials), the County recommended that municipalities negotiate with vendors for processing of designated materials. The emergence of new technologies may require that the County become more active in providing processing capacity.

Amendment:

Section 2.3.1.3 of the Recycling Plan is hereby amended to include the following tasks:

The County will:

1) Prepare a scope of services for a consultant(s) to collect and interpret the latest trends in materials recycling. This analysis should analyze the present municipal systems of collection and the actual and potential market activity in the region.

2) Should the initial study of the trends in solid waste warrant, engage a technical consultant(s) to identify the latest trends in solid waste and recycling technologies. From these identified trends, have consultant conduct a marketing/engineering feasibility study for a County/Private Materials Recovery Center(s)/Facility (ies) or a Pre—Processing Facility.

3) Engage a consultant(s) to conduct a Materials Recovery Center(s) /Facility (ies) siting study for the purpose of identifying locations which might serve successfully as a County/Private Materials Recovery Center.
PHASE III

DEVELOPMENT AND IMPLEMENTATION OF COUNTY/PRIVATE MATERIALS RECOVERY CENTER(S) /FACILITY (IES)

Outline

Essex County is one of the more market—rich regions of the United States by virtue of its proximity to various forms of transportation. A County/Private Materials Recovery Center(s)/Facility (ies) could provide market preparation of the materials that the municipalities cannot perform because of the space, manpower, technology and other cost considerations. Through this type of facility, municipalities could benefit from the economies—of—scale.

Amendments:

Section 2.3.1.3 of the Recycling Plan (referring to processing capacity for designated materials) is hereby amended to include the following:

The County will:

1) Assess the findings of such a study particularly in terms of the municipal plans of action proposed in Phase II

2) Implement County/Private Materials Recovery Center(s) /Facility (ies).
**Informations:**

- Essex County Designated Materials

**1990 Total Tonnage of Recycle Material for Each Town in Essex County, New Jersey**

<table>
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<tr>
<th>Essex Towns</th>
<th>Aluminum</th>
<th>Asphalt</th>
<th>Auto Scrap</th>
<th>Brush</th>
<th>Battery</th>
<th>Household</th>
<th>Concrete</th>
<th>Corrugated Box</th>
<th>Ferrous Cons</th>
<th>Ferrous Scrap</th>
<th>Food Waste</th>
<th>Grass Clipping</th>
<th>Glass</th>
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**Table 1**

**Overall Recyclng Rate**

- Belleville: 10.00%
- Bloomfield: 26.00%
- Caldwell: 34.15%
- Cedar Grove: 23.04%
- E. Orange: 17.37%
- Essex Fells: 81.33%
- Fairfield: 11.79%
- Glen Ridge: 25.19%
- Irvington: 12.13%
- Livingston: 31.01%
- Hopewoods: 30.24%
- Millburn: 47.00%
- Montclair: 41.53%
- Neunkirch: 50.06%
- Nutley: 23.83%
- Orange: 15.11%
- Roseland: 16.31%
- S. Orange: 37.54%
- Verona: 33.43%
- W. Caldwell: 40.91%
- U. Orange: 36.04%

**TOTAL**: 34.25%
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Total: 778,206, 174,327, 440

**THE COUNTY DIVISION OF SOLID WASTE MANAGEMENT**
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<td>1019</td>
</tr>
<tr>
<td>Caldwell</td>
<td>3,362</td>
<td>2,887</td>
<td>1718</td>
</tr>
<tr>
<td>Cedar Grove</td>
<td>4,222</td>
<td>2,557</td>
<td>1164</td>
</tr>
<tr>
<td>East Orange</td>
<td>28,937</td>
<td>7,199</td>
<td>497</td>
</tr>
<tr>
<td>Essex Fells</td>
<td>751</td>
<td>5,484</td>
<td>14,605</td>
</tr>
<tr>
<td>Fairfield</td>
<td>2,351</td>
<td>2,326</td>
<td>1,978</td>
</tr>
<tr>
<td>Glen Ridge</td>
<td>2,470</td>
<td>1,638</td>
<td>1,326</td>
</tr>
<tr>
<td>Irvington</td>
<td>24,318</td>
<td>3,663</td>
<td>301</td>
</tr>
<tr>
<td>Livingston</td>
<td>8,910</td>
<td>10,596</td>
<td>2,379</td>
</tr>
<tr>
<td>Maplewood</td>
<td>8,132</td>
<td>8,283</td>
<td>2,037</td>
</tr>
<tr>
<td>Millburn</td>
<td>7,108</td>
<td>14,954</td>
<td>4,208</td>
</tr>
<tr>
<td>Montclair</td>
<td>15,069</td>
<td>10,837</td>
<td>1,438</td>
</tr>
<tr>
<td>Newark</td>
<td>102,473</td>
<td>51,846</td>
<td>1,012</td>
</tr>
<tr>
<td>N Caldwell</td>
<td>1,996</td>
<td>850</td>
<td>352</td>
</tr>
<tr>
<td>Nutley</td>
<td>11,001</td>
<td>6,217</td>
<td>1,130</td>
</tr>
<tr>
<td>Orange</td>
<td>12,318</td>
<td>4,073</td>
<td>661</td>
</tr>
<tr>
<td>Roseland</td>
<td>1,850</td>
<td>2,001</td>
<td>2,163</td>
</tr>
<tr>
<td>South Orange</td>
<td>5,488</td>
<td>6,999</td>
<td>2,551</td>
</tr>
<tr>
<td>Verona</td>
<td>5,713</td>
<td>2,830</td>
<td>991</td>
</tr>
<tr>
<td>W Caldwell</td>
<td>3,584</td>
<td>6,318</td>
<td>3,525</td>
</tr>
<tr>
<td>W Orange</td>
<td>15,256</td>
<td>10,891</td>
<td>1,428</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>298,710</td>
<td><strong>174,327</strong></td>
<td><strong>1,167</strong></td>
</tr>
</tbody>
</table>
# Table 4

## Comparison of Designated Recycling Rates and Task Force Recommendation Rate

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Current Recycling Rate (Based on Solid Waste Management Plan)</th>
<th>Task Force Recommended (Based upon Task Force Methodology)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Generation</td>
<td>Recycling Rate</td>
</tr>
<tr>
<td>BELLEVILLE</td>
<td>23,247</td>
<td>9%</td>
</tr>
<tr>
<td>BLOOMFIELD</td>
<td>40,039</td>
<td>25%</td>
</tr>
<tr>
<td>Caldwell</td>
<td>7,692</td>
<td>38%</td>
</tr>
<tr>
<td>CEDAR GROVE</td>
<td>9,209</td>
<td>27%</td>
</tr>
<tr>
<td>EAST ORANGE</td>
<td>58,778</td>
<td>12%</td>
</tr>
<tr>
<td>ESSEX FALLS</td>
<td>6,601</td>
<td>83%</td>
</tr>
<tr>
<td>FAIRFIELD</td>
<td>11,228</td>
<td>21%</td>
</tr>
<tr>
<td>GLEN RIDGE</td>
<td>6,006</td>
<td>27%</td>
</tr>
<tr>
<td>IRVINGTON</td>
<td>35,588</td>
<td>10%</td>
</tr>
<tr>
<td>LIVINGSTON</td>
<td>32,858</td>
<td>32%</td>
</tr>
<tr>
<td>MAPLEWOOD</td>
<td>19,096</td>
<td>43%</td>
</tr>
<tr>
<td>MILLBURN</td>
<td>28,419</td>
<td>53%</td>
</tr>
<tr>
<td>MONTCLAIR</td>
<td>32,612</td>
<td>33%</td>
</tr>
<tr>
<td>NEWARK</td>
<td>227,580</td>
<td>23%</td>
</tr>
<tr>
<td>N. CALDWELL</td>
<td>4,921</td>
<td>21%</td>
</tr>
<tr>
<td>NUTLEY</td>
<td>23,767</td>
<td>25%</td>
</tr>
<tr>
<td>ORANGE</td>
<td>27,206</td>
<td>15%</td>
</tr>
<tr>
<td>ROSELAND</td>
<td>7,974</td>
<td>25%</td>
</tr>
<tr>
<td>S. ORANGE</td>
<td>17,813</td>
<td>37%</td>
</tr>
<tr>
<td>VERONA</td>
<td>10,850</td>
<td>26%</td>
</tr>
<tr>
<td>W. CALDWELL</td>
<td>15,922</td>
<td>40%</td>
</tr>
<tr>
<td>W. ORANGE</td>
<td>40,175</td>
<td>27%</td>
</tr>
</tbody>
</table>

* 10-10 and designated recyclables
** All solid waste and all recyclables
TABLE 5

MUNICIPALITY TONS AVAILABLE TONS RECYCLED 1990 TOTAL TONS NEEDED TO 60% RECYCLE 60% RECYCLING TONS NEEDED TO MEET % RECYCLED BY MUNICIPALITY 1990

<table>
<thead>
<tr>
<th>MUNICIPALITY</th>
<th>TONS AVAILABLE</th>
<th>TONS RECYCLED</th>
<th>1990</th>
<th>TOTAL TONS NEEDED</th>
<th>60% RECYCLING</th>
<th>TONS NEEDED TO MEET 60% RECYCLING</th>
<th>% RECYCLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELLEVILLE</td>
<td>28,206</td>
<td>2,844</td>
<td></td>
<td>16,923</td>
<td></td>
<td>14,079</td>
<td>10%</td>
</tr>
<tr>
<td>BLOOMFIELD</td>
<td>47,324</td>
<td>11,545</td>
<td></td>
<td>28,394</td>
<td></td>
<td>16,349</td>
<td>24%</td>
</tr>
<tr>
<td>CADDY WOOD</td>
<td>10,175</td>
<td>3,475</td>
<td></td>
<td>6,105</td>
<td></td>
<td>2,631</td>
<td>34%</td>
</tr>
<tr>
<td>EAST ORANGE</td>
<td>12,256</td>
<td>2,224</td>
<td></td>
<td>7,354</td>
<td></td>
<td>4,550</td>
<td>23%</td>
</tr>
<tr>
<td>ESSEX FELLS</td>
<td>71,049</td>
<td>12,322</td>
<td></td>
<td>42,629</td>
<td></td>
<td>30,222</td>
<td>17%</td>
</tr>
<tr>
<td>FAIRFIELD</td>
<td>6,850</td>
<td>5,572</td>
<td></td>
<td>4,110</td>
<td></td>
<td>(1,462)</td>
<td>81%</td>
</tr>
<tr>
<td>GLEN RIDGE</td>
<td>23,369</td>
<td>2,758</td>
<td></td>
<td>14,033</td>
<td></td>
<td>11,275</td>
<td>12%</td>
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<tr>
<td>IVERCINGTON</td>
<td>42,025</td>
<td>1,668</td>
<td></td>
<td>3,972</td>
<td></td>
<td>2,304</td>
<td>57%</td>
</tr>
<tr>
<td>LIVINGSTON</td>
<td>40,012</td>
<td>5,097</td>
<td></td>
<td>25,215</td>
<td></td>
<td>20,118</td>
<td>12%</td>
</tr>
<tr>
<td>MAPLEWOOD</td>
<td>40,012</td>
<td>12,408</td>
<td></td>
<td>24,007</td>
<td></td>
<td>11,601</td>
<td>34%</td>
</tr>
<tr>
<td>HILLBURN</td>
<td>40,012</td>
<td>16,942</td>
<td></td>
<td>21,630</td>
<td></td>
<td>4,638</td>
<td>47%</td>
</tr>
<tr>
<td>MONTCLAIR</td>
<td>44,126</td>
<td>18,323</td>
<td></td>
<td>25,976</td>
<td></td>
<td>8,150</td>
<td>42%</td>
</tr>
<tr>
<td>NEWARK</td>
<td>507,743</td>
<td>253,871</td>
<td></td>
<td>304,226</td>
<td></td>
<td>50,414</td>
<td>50%</td>
</tr>
<tr>
<td>NUTLEY</td>
<td>4,542</td>
<td>1,082</td>
<td></td>
<td>2,725</td>
<td></td>
<td>1,643</td>
<td>24%</td>
</tr>
<tr>
<td>ORANGE</td>
<td>33,155</td>
<td>9,354</td>
<td></td>
<td>19,933</td>
<td></td>
<td>10,539</td>
<td>24%</td>
</tr>
<tr>
<td>ROSELAND</td>
<td>14,535</td>
<td>4,697</td>
<td></td>
<td>18,658</td>
<td></td>
<td>13,959</td>
<td>14%</td>
</tr>
<tr>
<td>S. ORANGE</td>
<td>21,978</td>
<td>2,374</td>
<td></td>
<td>8,735</td>
<td></td>
<td>6,361</td>
<td>14%</td>
</tr>
<tr>
<td>VERONA</td>
<td>15,162</td>
<td>8,227</td>
<td></td>
<td>13,151</td>
<td></td>
<td>4,972</td>
<td>31%</td>
</tr>
<tr>
<td>U. CALDWELL</td>
<td>20,656</td>
<td>5,069</td>
<td></td>
<td>9,097</td>
<td></td>
<td>4,029</td>
<td>31%</td>
</tr>
<tr>
<td>W. ORANGE</td>
<td>56,276</td>
<td>8,451</td>
<td></td>
<td>12,393</td>
<td></td>
<td>3,943</td>
<td>31%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,096,597</td>
<td>419,444</td>
<td></td>
<td>657,958</td>
<td></td>
<td>238,513</td>
<td>32%</td>
</tr>
</tbody>
</table>
TABLE 6

SUMMARY OF THE PLAN

PHASE I

IDENTIFICATION OF THE PROGRAMS NEEDED TO ACCOMPLISH THE GOALS OF THE PRESENT SOLID WASTE MANAGEMENT PLAN - RECYCLING COMPONENT

A. Increase overall recycling within municipalities.

B. Increase recycling activity from multi-family structures.

C. Increase recycling from commercial and industrial establishments.

D. Expand efforts to recycle used motor oil through education and enforcement.

E. Expand the Division of Solid Waste Management’s role to include an assessment of new and emerging solid waste and recycling management technologies.
PHASE II

FURTHER TASKS AND STUDIES TO BE INCLUDED AS AMENDMENTS TO THE EXISTING SOLID WASTE MANAGEMENT PLAN

A. Expand list of required designated recyclables to include all recyclable materials.

B. Develop a system to monitor the overall solid waste generation and disposal and the diversion of solid waste activity.

C. Identify new and existing technologies which maximize the diversion of recyclables from the solid waste stream.

PHASE III

DEVELOPMENT AND IMPLEMENTATION OF A MATERIALS RECOVERY CENTER(S)/FACILITY (IES)
## Table 7: Operating Sites in Essex County

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Block/Lot</th>
<th>Address</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALDWELL</td>
<td>131/8</td>
<td>Pine Tree Place</td>
<td>1</td>
</tr>
<tr>
<td>ESSEX FELLS</td>
<td>8, 1/46, 50</td>
<td>Roseland Avenue</td>
<td>2</td>
</tr>
<tr>
<td>FAIRFIELD</td>
<td>6801/4</td>
<td>Marginal Road</td>
<td>5.3</td>
</tr>
<tr>
<td>MAPLEWOOD</td>
<td>343</td>
<td>Parker Avenue West</td>
<td>2.5</td>
</tr>
<tr>
<td>MILLBURN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(County)</td>
<td>5503/1</td>
<td>South Orange Avenue</td>
<td>1</td>
</tr>
<tr>
<td>MILLBURN</td>
<td>5401/1</td>
<td>JFK Parkway</td>
<td></td>
</tr>
<tr>
<td>NEWARK</td>
<td>5056/16, 20</td>
<td>Rutherford Street</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>30, 80, 84, 86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORTH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CALDWELL/</td>
<td>NC10/1; 11/2</td>
<td>Sanitarium Road</td>
<td>23</td>
</tr>
<tr>
<td>VERONA (County)</td>
<td>V 128/30-32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROSELAND</td>
<td>21/12</td>
<td>Roseland Boro</td>
<td>0.75</td>
</tr>
<tr>
<td>SOUTH ORANGE</td>
<td>115/8 0—103</td>
<td>Walton Avenue</td>
<td>3—4</td>
</tr>
<tr>
<td>VERONA</td>
<td>28a/2, 4</td>
<td>Sanitarium Road</td>
<td>1</td>
</tr>
<tr>
<td>(County)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W. CALDWELL</td>
<td>6/ 19 03</td>
<td>Pine Tree Place</td>
<td>2—4</td>
</tr>
<tr>
<td>W. ORANGE</td>
<td>17</td>
<td>Mount Pleasant Avenue</td>
<td>35</td>
</tr>
</tbody>
</table>
AMENDMENT

TO THE

ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN

PREPARED BY:

ESSEX COUNTY DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

DATED: NOVEMBER, 1992
INTRODUCTION

Table IX of the Solid Waste Management Plan ("Plan") of April 1987, as amended, lists existing sites of and suitable sites for, solid waste facilities in Essex County. Said list also includes each facility locations status of the application at the New Jersey Department of Environmental Protection and Energy and other relevant information.

AMENDMENT

Table IX of the Plan, or such other table number as may be designated in any update of the Plan, is hereby amended to include the microwave facility for processing regulated medical waste generated at the University of Medicine and Dentistry of New Jersey, located at Norfolk Avenue between 12th Avenue and South Orange Avenue, City of Newark (Lot 1, Block 211), such inclusion to be in the form attached hereto. In addition, Section IV of the Plan shall be amended to include the following language:

The Plan includes a microwave facility located at Norfolk Avenue between 12th Avenue and South Orange Avenue (Lot 1, Block 211), on the Newark campus of the University of Medicine and Dentistry of the State of New Jersey ("UMDNJ"), for the processing of medical waste that is regulated under the Comprehensive Regulated Medical Waste Management Act, N.J.S.A. 13:1E—48.1, et seq. The inclusion of said facility is specially conditioned upon, and hereby made subject to, the following requirements:

(a) The amounts of such regulated medical waste ("RMW") processed at the facility shall be limited to only the RMW generated at the UMDNJ Newark Campus.

(b) In the event that Essex County designates in a subsequent amendment to the Plan that RMW generated at UMDNJ be directed to a regional RMW facility other than the UMDNJ microwave facility, UMDNJ shall cease operating such microwave facility. Thereafter, UMDNJ shall comply with the waste flow directive set forth in such amendment to the Plan.

(c) All RMW processed at the UMDNJ microwave facility is hereby designated, subsequent to processing, to be Type ID 10 Municipal Waste. The processed waste shall be disposed by UMDNJ in accordance with the Plan.

In the event that UMDNJ does not comply with the requirements imposed upon it pursuant to conditions (a), (b), and (c), above, such failure shall be deemed a violation of the Plan pursuant to N.J.S.A. 13:1E—9.
ORDINANCE OF THE BOARD OF FREEHOLDERS ORD. 3
COUNTY OF ESSEX

ORDINANCE No. 0-93-008  Statutory Authority for Ordinance  NJSA 40:41-3

Proposed by:  County Executive  Authority for Action  NJSA 13:1E-23

Sponsored by:

Subject:  ORDINANCE- AMENDING THE ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN TO INCLUDE A MICROAVE FACILITY TO BE USED AND OPERATED BY THE UNIVERSITY OF MEDICINE AND DENTISTRY

WHEREAS, pursuant to the provisions of N.J.S.A. 13:1E—1 et seq. 1 the county of Essex, by Ordinance No. 00220, dated August 8, 1979, adopted a Solid Waste Management Plan ("Plan"), which Plan has been amended from time to time; and

WHEREAS, the University of Medicine and Dentistry of New Jersey UMDNJ has requested that the County include in the Plan the site of a solid waste facility on the UMDNJ Newark Campus to process by means of a microwave technology medical waste that is regulated under the Comprehensive Regulated Medical Waste Management Act, N.J.S.A. 13:1E—48.1, et seq. and

WHEREAS, UMDNJ has stated that the proposed facility will process only regulated medical waste that is generated at the UMDNJ Newark campus: and

WHEREAS, the County Executive, through the Department of Planning and economic Development, has requested approval by the Board of Chosen Freeholders of said amendment to the Plan;

NOW THEREFORE, be it ORDAINED by the Board of Chosen Freeholders of the County of Essex as follows:

1. That the Essex County Solid Waste Management Plan, as amended, is hereby amended to approve and include therein the proposed microwave facility to be owned and operated by the University of Medicine and Dentistry of New Jersey at Norfolk Avenue, between 12th Avenue and South Orange Avenue (Tax Lot 1, Block 211), the terms of such inclusion to be those set forth in the Plan Amendment attached hereto and by this reference incorporated herein as though fully set forth at length.

2. That a public hearing shall be held on this Ordinance in accordance with N.J.S.A. 13:1E—23, on May 12, 1993, at 3:00 p.m. in Room 506, Hall of Records, Dr. Martin Luther King, Jr. Blvd., Newark, New Jersey 07102.
3. That the Clerk of this Board is hereby directed to send notice of said hearing and copies of this Ordinance and Plan Amendment to the Mayor of each municipality within the County, and to publish notice of said hearing once each week for two consecutive weeks, the last publication to be not less than ten days prior to the date set for hearing. Said notices shall state that said Plan Amendment can be inspected at the offices of every municipality within the County.

4. That a copy of this Ordinance and the Plan Amendment shall be submitted to the Commissioner of Environmental Protection and Energy pursuant to N.J.S.A. 13:1E—23 24, together with a copy of the transcript of the public hearing thereon.

5. That this Ordinance shall take effect at the time and in the manner prescribed by law.

6. That the Clerk of the Board shall forward certificated copies of this Ordinance to Joseph L. Fiorc3aliso, Acting Director, Department of Planning and Economic Development; Stephen Edelstein, County Counsel; and Martin Lund, Director of Operations Essex County Utilities Authority
Approved as to form and legality

ESSEX COUNTY COUNCIL

RECORD OF BOARD VOTE  (X = Vote  N.V. = Abstention  ABS = Absent)

FIRST READING:
Moved by Freeholder ParlaVecchio
Seconded by Freeholder [Signature]

SECOND READING:
Moved by Freeholder [Signature]
Seconded by Freeholder [Signature]

<table>
<thead>
<tr>
<th>Freeholder</th>
<th>Yes</th>
<th>No</th>
<th>N.V.</th>
<th>ABS</th>
<th>Freeholder</th>
<th>Yes</th>
<th>No</th>
<th>N.V.</th>
<th>ABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavagnigh, J.A., VP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cavagnigh, J.A., VP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sebold</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td>Sebold</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
<td>Clay</td>
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<tr>
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</tr>
<tr>
<td>Jones, J.A.</td>
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<tr>
<td>Treffinger</td>
<td></td>
<td></td>
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<td>Treffinger</td>
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<td></td>
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</tr>
<tr>
<td>Bost, Pres.</td>
<td></td>
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Ats Mailed to Municipal Clerks 4/16/93
Ats of Public Hearing 5/12/93
Ats Published 4/20/93

It is hereby certified that the foregoing ordinance was (X) adopted () defeated
and passed by a roll call vote at a Regular meeting of the Board of
Chosen Freeholders of the County of Essex,
New Jersey, held on April 19, 1993.

Sara B. Bost, President

Ats Mailed to Municipal Clerks 6/14/93
Ats Published 6/22/93

It is hereby certified that the foregoing ordinance was (X) adopted () defeated
and passed by a roll call vote at a Regular meeting of the Board of
Chosen Freeholders of the County of Essex,
New Jersey, held on May 13, 1993.

Sara B. Bost, President

X, approve ( ) disapproved the same on
June 13, 1993

Adrian Davis - Clerk

4/16/93
6/14/93
5/13/93
6/16/93