ESSEX COUNTY SOLID WASTE MANAGEMENT PLAN



2006 UPDATE

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SECTION 1.0—INTRODUCTION

The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. (the Act) requires that each solid waste management district include in its solid waste management plan suitable sites to treat and dispose of all solid waste generated within the district, and that such plan also include a statement of the solid waste disposal strategy to be applied in the district. On July 16, 1980, the Board of Chosen Freeholders of the County of Essex (the County) adopted the Essex County District Solid Waste Management Plan (Essex Plan), which was subsequently approved by the New Jersey Department of Environmental Protection (NJDEP) on August 13, 1980.

In 1992, the County created the Essex County Utilities Authority (ECUA) as a public body corporate and politic of the State of New Jersey, with all necessary and proper power to acquire, maintain, and operate or contract for the operation of facilities for the collection, transportation, processing, recycling and disposal of solid waste generated within the County. In 1993, the County amended—and the NJDEP approved—the Essex Plan to designate the ECUA as the sole agency responsible for implementation of the Essex Plan. Thereafter, the County assigned all of its rights and obligations under existing solid waste disposal, transportation, and processing contracts to the ECUA and since such assignment, the ECUA has assumed and carried out all duties and responsibilities relating to solid waste originating within the geographic boundaries of the County. The Essex Plan has since been amended and modified to reflect the changing needs of the County.

This 2006 update is not a new Essex Plan. It is an affirmation of previously approved provisions which have been adopted by the County and certified by NJDEP Commissioners since the 1980 Plan was approved. This specific Plan Update reflects program changes that have not been previously discussed and approved in the Plan, as well as proposals for the future. This plan further identifies the local strategies to be used to achieve the target recycling rate of fifty percent of the municipal waste stream in order to realize significant reductions in disposal volumes, air and water pollutants, natural resource utilization, greenhouse gas emissions and practical mechanisms for expanding the useful life of our County disposal assets. Particular attention is paid to how recycling opportunities will be provided to the generator classes targeted, methods for public promotion of these opportunities, and methods for enforcing local recycling mandates.

1.1 Background

In the 1980's, to implement the County Plan, the County entered into an agreement with the Port Authority of New York and New Jersey (Port Authority) for the processing of all solid waste types 10, 23, 25, and the processible portion of type 27 generated within the county (Processible Waste) at the Essex County Resource Recovery Facility (ECRRF), which agreement was amended and restated as of February 28, 1986 (the Amended and Restated County Service Contract). The site upon which the ECRRF is located is owned by Port Authority, and was leased to the American Ref-Fuel Company of Essex County (Ref-Fuel), which operated and maintained the ECRRF, pursuant to a contract with the Port Authority. The Amended and Restated County Service Contract provided that all Processible Waste generated within the County be delivered to the ECRRF for processing and disposal during its term. At the time the County developed and NJDEP

approved the County Plan, the state's policy was to attain self-sufficiency through instate disposal of solid waste, to avoid dependence upon out-of-state facilities.

The ECUA's solid waste management strategy underwent significant revision following the Third Circuit's decision in <u>Atlantic Coast Demolition and Recycling, Inc. v. Board of Chosen Freeholders of Atlantic County</u>, 112 F.3d 652 (3d Cir.), <u>cert.den.</u> 552 U.S. 996 (1997) (<u>Atlantic Coast</u>), in which the Third Circuit invalidated the portion of New Jersey's solid waste flow control that discriminated against out-of-state solid waste facility operators, finding that regulatory flow control based upon an "in-state sufficiency policy" discriminated against interstate commerce. Pursuant to its statutory obligations and the Third Circuit's mandate in Atlantic Coast, the ECUA recommended and the County approved a revision to the County Plan to address the safe and efficient transfer, transportation and disposal of solid waste generated in the County and entered into a Waste Disposal Agreement (Waste Disposal Agreement) with the Port Authority for the delivery to and processing of Processible Waste at the ECRRF. The Waste Disposal Agreement has an initial term of ten years beginning in 2000.

Under the terms of the Waste Disposal Agreement, the Port Authority (through its ECRRF vendor) is obligated to operate and maintain the ECRRF and accept and dispose of all Processible Waste delivered to the ECRRF by (or on behalf of) the ECUA. The ECUA is obligated to deliver (or cause to be delivered) Processible Waste to the ECRRF in an amount that is equal to 360,000 tons per year (Guaranteed Tonnage) and to pay a per ton service charge for each ton of Processible Waste delivered (or for the Guaranteed Tonnage if less than the Guaranteed Tonnage is delivered).

In order to satisfy its waste delivery commitments under the Waste Disposal Agreement (in a manner consistent with the Atlantic Coast), the ECUA entered into substantially similar contractual agreements (Voluntary Contracts) with each of the County's twentyone (21) municipalities, the County with respect to County-related facilities, other quasigovernmental agencies, and certain commercial transporters servicing the County customers, to provide for the disposal of Processible Waste at the ECRRF. The Voluntary Contracts with the municipalities and other entities are for a ten-year period, commencing in 2000.

With respect to disposal of that portion of Processible Waste that is not otherwise delivered to the ECRRF pursuant to the Voluntary Contracts, in accordance with <u>Atlantic Coast</u>, the ECUA reestablished flow-control over this waste stream through the nondiscriminatory, public procurement and award of a contract for the transfer, transportation and/or disposal of this portion of the Processible Waste stream with Waste Management of New Jersey, Inc. (WMI). Accordingly, the portion of Processible Waste that is not otherwise delivered to the ECRRF pursuant to the Waste Disposal Agreement is directed to WMI's facilities in Elizabeth, New Jersey. The ECUA will, from time to time, enter into new and replacement contracts to provide for disposal of this portion of the ECUA is preparing to engage in another non-discriminatory, public procurement process to award a thirty-one (31) month contract for the disposal of this waste stream.

As part of its response to Atlantic Coast, in 1998 the ECUA issued non-discriminatory bid specifications to procure transfer, transportation and/or disposal services for all Non-Processible Waste. Specifically, the ECUA advertised for bids throughout the State of New Jersey, regionally, and nationally in strict conformance with the public bidding

requirements of the *Local Public Contracts Law*, N.J.S.A. 40A:11-1, et. seq.. In compliance with the decision in <u>Atlantic Coast</u>, the procurement was open to all bidders, regardless of geographic location.

The ECUA conducted an open, non-discriminatory procurement for Non-Processible Waste disposal services in 2005. The lowest, responsible and complying bidder was Canadian Pacific Transload America, Inc. (Canadian Pacific), which operated a rail transload facility in the Oak Island Rail Yard located in the City of Newark. Prior to awarding the contract, the ECUA communicated the results of its procurement process to NJDEP and specifically inquired whether there would be any regulatory impediment to awarding a contract to a rail-based facility. DEP had adopted regulations (N.J.A.C. 7:26-2D) (2D Regulations) on November 15, 2004 that prescribed certain minimum operational requirements that had to be met by rail-based facilities to engage in solid waste transfer activities. In a response, dated May 17, 2005, from Bradley Campbell, Commissioner of DEP, the ECUA was advised that "it is the [DEP's] position that any Class I, II, or III rail carrier proposing to provide solid waste services to the County of Essex and/or the Essex County Utilities Authority would be fully authorized to do so provided that such rail carrier is in compliance with the terms and conditions of the subject regulations adopted on November 15, 2004...as of the date of commencement of services under any contract they may enter into with the County of Essex and/or the Essex County Utilities Authority."

Based upon the position expressed by the Commissioner of DEP and the appropriate representations by Canadian Pacific in terms of its intention to comply with the 2D Regulations, the ECUA proceeded with the award of a contract to Canadian Pacific and recommended to the Freeholders an amendment to the County Plan to incorporate the Canadian Pacific transload facility in accordance with the contract for solid waste disposal services. An Ordinance was adopted by the Freeholders on December 14, 2005 after public notice and the conduct of a public hearing in accordance with the requirements of the Act. The amendment to the County Plan was approved by NJDEP by Certification issued on May 24, 2006 and a subsequent letter from the Chief of the Bureau of Recycling and Planning at NJDEP, approving the ECUA's request for an administrative action with regard to its authority to exercise regulatory waste flow control over Non-Processible Waste.

1.2 Additional Definitions

Definitions, words and terms as used in this Solid Waste Management Plan Update shall have the meanings as set forth in the Solid Waste Management Act (N.J.S.A. 13:1E4 et seq.), particularly the New Jersey Statewide Mandatory Source Separation and Recycling Act (N.J.S.A. 13:1E-99.11 et seq., and the rules and regulations promulgated thereunder in N.J.A.C. 7:26-1 et seq., and N.J.A.C. A-1.1 et seq.

Any definitions, words and terms not specifically defined in the applicable law or regulation shall have the meanings indicated below:

Multi-family unit shall mean any building of one or more stories, and any land appurtenance thereto, and any portion thereof, in which five (5) or more units of dwelling space are occupied, or are intended to be occupied, by five (5) or more persons who live independently of each other.

1.3 Scope of the Amendment

This amendment is intended to modify only those portions of the approved Essex County District Solid Waste Management Plan specifically addressed herein. All previously approved provisions which are not inconsistent with this Amendment are intended to remain in full force and effect.

If any clause, provision, subsection, section or article of this Amendment shall be ruled invalid by any court of competent jurisdiction or administrative agency, the invalidity of such clause, provision, subsection, section or article shall not affect any of the remaining provisions unless such ruling adversely impacts the purpose and effect of the remaining portions of this Amendment.

SECTION 2.0—CURRENT WASTE STATUS

The Solid Waste Management Act requires a report on current waste quantities being generated, the sources of that waste, and the composition of that waste.

The most recent full year for which final data is available is 2004. During that year, 2,076,916 tons of waste were generated. Of that waste, 875,426 tons were disposed (599,695 tons of Municipal Solid Waste (MSW) and 275,731 tons of Bulky waste).

In addition to waste generated, a complete report on the amount of waste generated must include recycling of materials such as newspaper, bottles, cans, plastic, corrugated cardboard, paper, tree stumps, scrap wood, concrete rubble, white goods and leaves. The total amount of material recycled in 2004 was 1,201,489.73 tons, or 57.8% of total waste generated. MSW composed 271,262.88 tons of material recycled, creating a MSW recycling rate of 31.1%. MSW consists of corrugated, mixed office paper, newspaper, other paper/magazines/junk mail, glass containers, aluminum containers, steel containers, plastic containers, anti-freeze, used motor oil, brush/tree parts, grass clippings, leaves, batteries (dry cell), food waste, other glass, other plastic, and textiles.

The amount of material recycled by each municipality in Essex County in 2004 is shown in the following table.

Municipality	Material Recycled (Tons)
Belleville	36,856.02
Bloomfield	37,258.76
Caldwell	10,051.03
Cedar Grove	16,049.45
East Orange	31,457.93
Essex Fells	6,083.58
Fairfield	10,906.67
Glen Ridge	5,863.07
Irvington	36,965.70
Livingston	39,014.00
Maplewood	23,201.18
Millburn-Short Hills	21,164.14
Montclair	163,752.58
Newark	594,784.62
North Caldwell	10,709.00

Nutley	25,160.02	
Orange	21,799.00	
Roseland	12,949.99	
South Orange	28,485.18	
Verona	12,025.15	
West Caldwell	14,861.86	
West Orange	42,090.80	
TOTAL	1,201,489.73	

Appendix III includes the 2004 Recycling Tonnage Final Reports for each municipality that reported from the County.

Essex County employs a bifurcated system for the disposal of processible solid wastes. The system includes municipalities either entering into voluntary contracts with the County for disposal of their processible wastes at the Covanta Essex facility or through non-discriminatory bidding process, to have their solid waste directed to either of two Waste Management of New Jersey transfer stations, one located at 864 Julia Street, in the City of Elizabeth, Union County, the other located in Hillsdale Township, Bergen County, for processing prior to out-of-state disposal. In 2004, 404,643 tons, or 46% of the County's wastes, were disposed at the Covanta Essex facility. Ash from the resource recovery facility is used at the following locations at the discretion of the hauler designated by the ECUA, and may be used as landfill cover (tonnage reflects January 2006 reporting):

Material	Tonnage	Location
ID 27 I Resource 22 tons		Gloucester County Solid Waste, Swedesboro, NJ
Recovery Facility Ash	5,607 tons	Cumberland County Landfill, Shippensburg, PA
	4,295 tons	Warren County District Landfill, Oxford, NJ
	7,422 tons	Rolling Hills Landfill, Boyertown, PA
Total	17,346 tons	
Ferrous Recycled	1,359 tons	American Steel, Passaic, NJ

Essex County intends to renegotiate another contract with these facilities to complete the 10-year projection.

Also, as of January 1, 2006, Essex County delivers its non-processible solid waste (Type 13 and 13C, the non-recycled portion of Type 23, and the non-processible portion of Type 27) to the Canadian Pacific Railway (CPR) located at 91 Bay Avenue in Newark, for disposal.

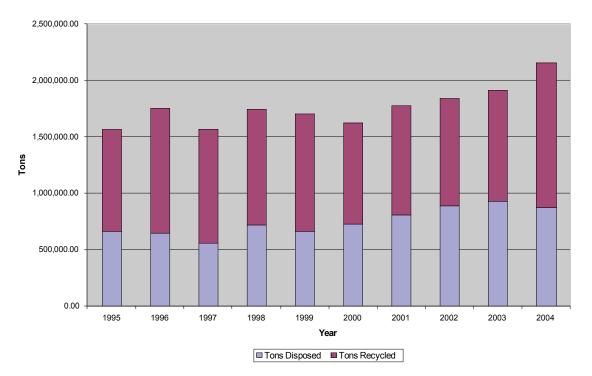
SECTION 3.0—SOLID WASTE PROJECTION TO 2016 (TEN YEARS)

In 2004 the generation rate of all waste in Essex County was approximately 14.31 pounds/person/day. (Note: 2004 is the most recent year that NJDEP certified figures are available.) Using that figure and the population projections as provided by the Essex County Department of Planning, the projected total waste generation is as follows:

Year	Population	Total Waste Generation
2004	795,015	2,076,916 tons
2007	807,400	2,109,271 tons
2012	816,400	2,132,783 tons
2015	823,700	2,151,853 tons

Of the waste generated by Essex County each year, a significant percentage is recycled. Below is a table and chart which shows total tons recycled and disposed per year, the population of the County, and the split between pounds per person per day disposed and recycled from 1995 through 2004.

Year	Tons Disposed	Tons Recycled	Total Generated	% Recycled	Population	Lbs. per Person/Day	Lbs per Person/Day Recycled	Lbs per Person/Day Disposed
1995	665,299.0	906,812.7	1,572,111.7	58%	783,308	11.00	6.34	4.65
1996	651,652.0	1,105,891.1	1,757,543.1	63%	782,503	12.31	7.74	4.56
1997	559,046.0	1,013,769.8	1,572,816.0	64%	782,774	11.01	7.10	3.91
1998	723,858.0	1,025,368.0	1,749,226.0	59%	785,348	12.20	7.15	5.05
1999	668,831.0	1,034,323.0	1,703,154.0	61%	789,678	11.82	7.18	4.64
2000	730,714.0	899,191.0	1,629,905.0	55%	793,633	11.25	6.21	5.05
2001	810,257.0	965,076.5	1,755,333.0	55%	794,714	12.10	6.65	5.59
2002	894,939.0	948,007.4	1,842,946.4	51%	796,382	12.68	6.52	6.16
2003	933,587.0	985,814.0	1,919,401.0	51%	797,184	13.19	6.78	6.42
2004	875,426.0	1,201,489.7	2,076,916.0	58%	795,015	14.31	8.28	6.03



Essex County Waste Disposed Vs. Waste Recycled

SECTION 4.0—INVENTORY OF FACILITIES

This section of the plan deals with existing solid waste and recycling facilities. In Appendix I are lists showing:

- 1. Recycling Facilities (including Class A & Class B)
- 2. Composting Facilities
- 3. Intermediate Processing Facilities
- 4. Transfer Stations/Material Recovery Facilities
- 5. Resource Recovery Facilities

Inclusion in these lists does not represent State approval.

The specification of approved truck routes for solid waste facilities is included in Appendix II.

SECTION 5.0—SOLID WASTE DISPOSAL STRATEGY FOR 10-YEAR TIMEFRAME

Pursuant to the Act, and specifically N.J.S.A. 13:1E-21(b)(2), the County Plan is required to include a "statement of the solid waste disposal strategy to be applied in the solid waste management district, which strategy shall include the maximum practicable use of resource recovery procedures." Consistent with amendments to the County Plan adopted by the County and certified by NJDEP, the County has based its solid waste disposal strategy around the Waste Disposal Agreement with the Port Authority and the Voluntary Contracts with all of the County municipalities for the delivery, processing and disposal of Processible Waste at the ECRRF, which is now leased to Covanta Essex, as seen below.

Essex County currently has signed 5- to 10-year contracts with interstate solid waste haulers and the resource recovery facility. These contracts are as follows:

5-year contracts:

Waste Management, Inc. Canadian-Pacific Railroad Expires June, 2007 Expires December, 2011

10-year contracts:

Covanta Essex (Resource Recovery Facility Management) Expires December, 2009

The County intends to continue to provide services for the disposal of Processible Waste at the ECRRF through the balance of the term of the Waste Disposal Agreement with the Port Authority and the Voluntary Contracts with the County municipalities. The ECUA continues on an on-going basis to assess its future options in anticipation of the conclusion of the initial ten-year terms of the Waste Disposal Agreement and the Local Waste Disposal Agreements. At such time (and periodically thereafter throughout the term of the Refunding Bonds), the ECUA may determine to continue with a voluntary contract-based system on terms to be renegotiated with the Port Authority and the participating County municipalities. However, it would also be Essex County's intention to review new technologies, waste flow patterns, and the success of their recycling initiatives as part of this contract review, before awarding a contract. Furthermore, upon expiration of the existing contract for the balance of the Processible Waste (and upon expiration of each subsequent contract), the ECUA intends to undertake new nondiscriminatory procurements for the disposal of this waste stream in order to continue to exercise regulatory flow control consistent with the holding in <u>Atlantic Coast</u>. The ECUA is required by the Local Public Contracts Law and the holding in <u>Atlantic Coast</u> to publicly procure disposal services for these waste streams. Under the Local Public Contracts Law, governmental entities are constrained from entering into contracts for such services to a period not to exceed five (5) years. Therefore, it is not possible for the ECUA, under the law as it presently exists in New Jersey, to procure disposal services involve some use of resource recovery technologies, which allow for a long-term contract of up to forty (40) years to be awarded.

In an attempt to enter into a long-term contract for the disposal of the balance of Processible Waste and the Non-Processible Waste generated within the County, the ECUA may consider publicly issuing a Request for Expressions of Interest (RFEI) for alternate disposal technologies. The purpose of the RFEI would be to identify entities who have alternate disposal technologies for solid waste types 10 municipal (household, commercial and institutional), 13 bulky, 13C construction and demolition, 23 vegetative, 25 animal and food processing, and 27 dry industrial generated within the County.

Through the issuance of an RFEI, the ECUA would be interested in identifying viable alternative solid waste disposal technologies that will enable the ECUA to avoid utilizing in the future a disposal strategy similar to the present system involving transfer station. transportation and landfilling out-of-state. Proposals would be solicited aimed at identifying facilities and technologies with design capacities equal to all or for a significant portion of the County's waste flows. The facilities and technologies offered in response to the RFEI must be supported by data and studies that demonstrate their viability and operability for waste materials similar to those currently disposed on behalf of the County. Any operating facilities for the technologies proposed would also be required to be identified so that the ECUA could visit these facilities. Should viable technologies be identified through the RFEI process, the ECUA would pursue further investigations of the proposals and determine whether these processes would offer longterm possibilities for disposal consistent with the law in New Jersey, allowing the ECUA a much greater planning window that the current five (5) year timeframe permitted under the local Public Contracts Law. The law provides for exceptions to this limitation on disposal contracts for alternatives that implement "resource recovery" strategies. For the purposes of this exception, "resource recovery" is defined as a solid waste facility constructed and operated for the incineration of solid waste for energy production and the recovery of metals and other materials for reuse; or a mechanized composting facility, or any other facility constructed or operated for the collection, separation, recycling, and recovery of metals, glass, paper, and other materials for reuse or for energy production. If compliance with this exception is achieved, contracts with a term of up to forty (40) years are permissible.

SECTION 6.0—PROCEDURE FOR INCLUSION AND REMOVAL OF FACILITIES IN THE SOLID WASTE MANAGEMENT PLAN

The following procedure is followed for the inclusion of new facilities in the County Solid Waste Management Plan.

The applicant submits an application to the Essex County Division of Planning (ECDP) at 900 Bloomfield Avenue, Verona, New Jersey 07044. This application must consist of:

- Two (2) original applications;
- Three (3) copies of the site plan;
- Application fee, with a check made out to "Essex County Treasurer";
 - Application fees are \$1,500.00 for an existing facility or a modification and \$2,500.00 for a new facility
- Appropriate municipal approvals, if available;
- Proof of notification to municipality of intent to operate;
- One (1) copy of an 8 ½" x 11" tax map identifying the location of the site, the street address, and the lot and block numbers;
- A key map showing the boundary of the Facility plotted on a 7.5 minute USGS Quandrangle map; and,
- A copy of the deed of record indicating that the Applicant is the owner of the site. If the Applicant is not the owner of the site, a copy of a lease for the site with its owner, and written documentation demonstrating that the owner is aware of the operations proposed for the site.

Within thirty (30) business days, the ECDP will determine if the application is administratively complete. At the end of the 30-day review period, any incomplete applications will be returned to the applicant.

Once the application is deemed administratively complete, The ECDP will review the application for compliance with Land Use, the Solid Waste Management Plan, and other applicable County Codes and Regulations. All facilities that apply for inclusion into the County Plan will have their application reviewed by the Essex County Health Department (ECHD) / County Environmental Health Agency (CEHA) to determine if there are any outstanding violations issued under the Solid Waste Management Act. The application is then reviewed by the ECUA to determine if the facility is consistent with the Essex County Oversight Agreement. The full technical review process through these agencies will occur within sixty (60) business days from the time the application is deemed administratively complete.

ECHD/CEHA and the ECUA Board of Commissioners review the application for consistency with the Solid Waste Management Plan, their recommendations are sent back to the ECDP. Once the application is deemed both administratively and technically complete, it is submitted to the Solid Waste Advisory Council (SWAC) and the Essex County Board of Chosen Freeholders for inclusion in their agendas, as follows. ECDP submits the application to the SWAC to discuss the facility and receive input from the SWAC member where the facility is proposed. During this process, SWAC reviews and votes upon the pending application. The outcome of the vote is offered as comment to the Board of Chosen Freeholders.

The ECDP submits the application to the Essex County Board of Chosen Freeholders for their approval. Once Freeholder approval is granted and a Certification is issued by DEP approving the plan amendment and the inclusion of the facility in the plan, the facility is included in the County Solid Waste Management Plan, and the facility is given a dated Letter of Approval.

The Letter of Approval expires five (5) years from the date of issuance. Six (6) months prior to the expiration of the letter, facilities must apply for renewal at a fee of \$100. This

renewal fee will cover the administrative processing cost. If request for renewal is not received by the ECDP at least six (6) months prior to the expiration of the Letter of Approval, the facility will be removed from the County Solid Waste Management Plan.

It typically takes between six (6) months to one (1) year to obtain the necessary approval for the inclusion of a facility in the County Solid Waste Management Plan. The start up of facility operations is conditional upon approval by the NJDEP for the applicable activity.

SECTION 7.0—RECYCLING GOALS & STRATEGIES

The designated recyclables for Essex County are as follows:

RESIDENTIAL: All homes, condominiums, townhouses, apartments, trailer parks, etc., including certain housing types considered institutional (i.e. senior citizen homes) are to recycle the following materials. There are no *de minimis* standards based upon amount or weight:

- Newspapers
- Mixed paper (i.e. junk mail, office paper, all marketable grades)
- Old corrugated containers
- Glass food and beverage containers
- Aluminum beverage containers
- o 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.

- Newspapers
- Glass food and beverage containers
- Aluminum beverage containers
- o Leaves
- 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
- o Leaves
- Old corrugated containers
- Office paper (all marketable grades)
- Used motor oil
- White goods

• Lead acid batteries (vehicle batteries)

Essex County intends to meet the 50% MSW recycling goal by increasing the amount of recycling of currently designated materials. The table below shows the generation rate of municipal solid waste, the current recycling rate for those materials, and the target recycling rate necessary to meet and exceed the 50% MSW recycling goal. Essex County expects to recycle an additional 164,216.06 tons of material to meet the 50% MSW goal.

	Tons Generated	Tons Recycled	Current Rate	Target Rate	Additional Tons to be Recycled
Total MSW	870,957.88	271,262.88	31.15%	50%	164,216.06

Recycling is a well-documented environmental success story. According to the NJDEP Recycling website, in 2003, New Jersey recycled nearly 10.3 million tons of its total solid waste. Recycling not only saves resources and energy, but also reduces the need for landfills and resource recovery facilities. For this reason, and in order to realize the necessary significant reductions in disposal volumes, air and water pollutants, natural resource utilization, greenhouse gas emissions and practical mechanisms for expanding the useful life of our County disposal assets, Essex County will implement the following recycling strategies to reach the fifty percent municipal solid waste recycling goals established under the 2006 State Solid Waste Management Plan.

7.1 Coordination with Municipal Recycling Coordinators

Essex County is completely revising its coordination with local municipal recycling coordinators for municipalities within Essex County. As a result, Essex County is doing the following:

- a. Coordination Regular meetings between the Essex County Utility Authority and the municipal coordinators. The intent of these meetings shall be to standardize programs, share information, update recycling plans and increase the percentage of recyclable materials removed from the solid waste stream. These Recycling Coordinator meetings are held six (6) times per year, on the fourth Tuesday of every other month.
- b. Ordinances The Essex County Utility Authority will collect and review all existing municipal recycling ordinances for consistency with this updated County recycling plan, and will assist municipalities in the update of their ordinances. Essex County municipalities will have six months from the date of NJDEP certification of this amendment to update their municipal ordinances so they are consistent with the County Solid Waste Management Plan.
- c. *Enforcement* The ECHD/CEHA will manage enforcement of the recycling plan and the County Solid Waste Management Plan as outlined in Section 7.5 below.
- d. *Record Keeping* The ECUA will work with local coordinators to standardize and improve record keeping on the local level, and reporting to the ECUA for inclusion in the annual tonnage reports. This includes efforts to identify possible materials being missed, recyclable materials lost to other waste streams, and tonnages lost due to poor record keeping.

A table including the names and contact information for all Municipal Recycling Coordinators, last updated November 3, 2006, is included in Appendix IV.

7.2 Education and Outreach

Essex County, through the ECHD/CEHA Program, currently enacts a school inspection program to monitor recycling in schools. The NJDEP mandates that 50 inspections be conducted per year. Essex County surpasses the inspection mandate and sends recycling surveys to 187 schools, eliciting responses regarding recycling practices and levels of success. Once the completed surveys are returned, CEHA chooses 50 at random to verify through an on-site inspection. This information is being used to develop a database to further identify problem areas with recycling in schools. Through these efforts, a better course of action can be determined. Once the database is operating, all Superintendents, Principals and school teachers will have access to the information, and an education and outreach program will be developed.

Essex County has a number of resources currently available to the public that provide education about recycling and the environment. The Essex County Environmental Center, located at 621 Eagle Rock Avenue, Roseland, New Jersey, is open Monday through Friday from 9am until 5pm, and on Saturday from 10am until 2pm. As stated in its Mission Statement, the Essex County Environmental Center is dedicated to creating awareness, understanding and appreciation of the environment and its relationship to Essex County residents. Essex County Environmental Center is devoted to uniting its urban and suburban constituencies through developing and delivering holistic educational programs and action projects that foster Earth stewardship to the County's diverse populations and habitats. The Essex County Environmental Center promotes environmental sustainability and encourages individuals and communities to live responsible lifestyles that minimally compromise the Earth's resources in planning for the future of Essex County.

The Environmental Center offers a number of educational programs about recycling. The following are descriptions of past and present programs offered:

Reduce, Reuse, Recycle & Rethink!

There is more you can do to help the planet then you think! From action projects to everyday choices, learn how you can become ambassadors for your home and school environments. Learn how the 4 R's are more then just separating trash through interactive games, hands-on activities, make-and-take projects and natural history hikes.

Programs for Grades PK-2

- Litter Bits: Almost every living thing is responsible in some way for littering the earth. Students learn to recognize and differentiate between inorganic human litter and organic litter that will decompose quickly.
- Packaging: Children will classify the remains of a bag lunch to determine what leftovers can be recycled and what packaging can be reduced.

Programs for Grades 3-5

> Where Does it All Go? Kids pick up on the secret life of trash: Materials

collected in Essex County don't just disappear. In this class students will learn how Essex County handles its many different wastes.

- Paper Making: Students investigate the paper making process by trying it for themselves. Using colored construction paper scraps students make a useful and pretty product.
- Nonrenewable vs. Renewable Resources: Students will discuss the eventual depletion of nonrenewable fossil fuels and learn about the positives and negatives of renewable alternatives.

Programs for Grades 6-8

- "Green" Architecture: Students learn how about minimizing negative impacts on the environment, conserving and efficiently using natural resources and respecting the relationship of buildings to their surroundings. There are many features of the Essex County Environmental Center that make it an environmentally friendly facility.
- Balancing Environmental Decision Making with Real Life Issues—A Town Meeting: Students are introduced to current concerns related to the environment and conservation, but have little knowledge of the problems faced by individuals and communities when addressing these concerns. Students participate in a "town meeting" focusing on waste management that introduces both environmental and governmental process using role-playing and discussion.

Programs for High School 9-12

- Expand your Environmental Science Curriculum with field-tested labs and activities in our wooded wetland habitat just steps away from the Passaic River. Customize your trip around the following topics:
 - Exploring Municipal Solid Waste
 - Water Supply, Use & Management
 - Bioregionalism
 - Regional Analysis of Global Environmental Issues
 - -Dams and Control Structure
 - -Resource Extraction
 - -Global Climate Change

The Essex County Environmental Center also provided a program for small businesses entitled **Recycling for Municipalities and Small Businesses: Increasing Efficiency and Compliance** in March of 2006. The program provided a great opportunity to local business owners to learn how the community, each attendee's business and the environment can benefit by recycling. This program was free and open to the public.

Furthermore, the Essex County Utility Authority is developing a website to host recycling information for municipalities, haulers, teachers, businesses, etc.

Essex County is developing educational programs and public awareness of the County recycling program by reaching out and trying to involve the following institutions:

- a. Essex County Community College
- b. New Jersey Institute of Technology
- c. Montclair State University
- d. Seton Hall University
- e. Essex County Environmental Center

Participating volunteer groups are asked to coordinate with primary schools for implementing recycling initiatives in schools, which in turn, will hopefully bring the recycling initiative into homes as well. Recycling stickers, handouts, etc. can be provided for students to bring home, and recycling containers designed to separate recycling from garbage can be provided. School grades or classrooms can elect a "recycling monitor" to ensure that his/her fellow classmates are recycling. Any volunteer organization and primary school participating in this program will receive written certificates of achievement from the County for doing their part to recycle!

Essex County also encourages Municipal Recycling Coordinators to take the Recycling Coordinator Training offered through Rutgers Office of Continuing Education, in coordination with NJDEP.

7.3 Meeting with Commercial Haulers

Designees from the SWAC shall meet on a periodic basis with the commercial haulers servicing the County to review strategies for increasing the recovery of recyclable materials and request their assistance in maintaining compliance with the County recycling plan. Commercial haulers will be notified of the County Inspection Protocol, and will be advised to notify residents of the new policy, and that waste loads with over 25% recyclable content will not be picked up.

7.4 County Inspection Protocol

Through the ECHD/CEHA Program, the solid waste control program shall also include periodic monitoring of onsite activities occurring at all solid waste facilities in operation within the County and monitoring of the activities of County designated solid waste disposal facilities, generators, collectors and haulers to ensure compliance with the County Solid Waste Management Plan, the Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) and regulations promulgated at N.J.A.C. 7:26-2.1 et seq. Additionally, the ECHD shall conduct periodic monitoring of formerly operating solid waste facilities known to exist within Essex County, or such other monitoring of these closed and/or formerly operated facilities as directed by the NJDEP. These activities shall be performed by two (2) or more solid waste inspectors who shall be employed by the ECHD for this specific purpose. Essex County will particularly focus on compliance with general operational requirements set forth at N.J.A.C. 7:26-2.11 and requirements relating to the collection, recycling and transporting of solid waste pursuant to N.J.A.C. 7:26-3 et seq. In order to implement this program, the ECHD shall undertake certain activities detailed below and further explained in the CEHA grant contract to ensure compliance with solid waste and recycling regulations throughout Essex County. Neither this work plan, nor any activities conducted thereunder, is in any way directed toward any matters whatsoever pertaining to hazardous waste.

7.4.1 Investigation of Citizen Complaints and NJDEP Referrals

Essex County's environmental hot line under the Air Pollution Control Program shall also be made available for the reporting of citizen complaints relating to alleged illegal activity involving solid waste. Upon the performance of appropriate in-take to verify the substance of a complaint, the ECHD or its agents shall respond, as deemed necessary, to investigate the extent and nature of such complaint. The ECHD, through its agents and employees, shall take appropriate enforcement action, including, but not limited to, the issuance of a Notice of Violation or Summons to any persons (i.e. individuals and/or business entities) immediately upon the verification of a violation, and shall provide prompt notice to the NJDEP of any enforcement action.

To the extent that any solid (not hazardous) waste matters are referred to the ECHD by the NJDEP, these matters shall be investigated in accordance with the direction of the NJDEP.

7.4.2 Mandatory Facility Inspections

The following table represents the mandatory facility inspections pursuant to the CEHA agreement between Essex County and the NJDEP:

Program	Number of Facilities	Frequency of Inspection	Projected Annual Total
Transfer Stations/MRF Inspections	6	Annually	6
Resource Recovery Facility Inspections	1	Annually	1
Class A Recycling Center Inspections	2	Annually	2
Class B Recycling Center Inspections	2	Annually	2
Exempt and Limited Class B Inspections	1	As required	1
Class C Inspections	5	Semi-annually	10
Exempt Compost Facility Inspections	5	Semi-annually	10
Intermodal Facility Inspections	1	Annually	1
Recycling Investigation/Surveys	50	As required	50
Truck Checks	50	As required	50
Container Inspections	50	As required	50
Complaint Investigations- DEP Referrals		As required	10
Complaint Investigations- Citizen Complaints		As required	10
Enforcement Actions- Settlement Conferences		As required	4
Enforcement Actions- Court Actions		As required	4

7.4.3 Additional Activities

The following table represents the additional inspections that will be conducted to ensure recycling in the multi-family and commercial sectors:

	Frequency of Inspection	Projected Annual Total
Multi-Family Housing Units	Four (4) per Month	48
Commercial Establishments	Four (4) per Month	48

7.4.4 Additional Strategies

In cooperation with the Solid Waste Advisory Council (SWAC), Essex County will meet six (6) times per year with local municipalities, recycling and solid waste transporters, facility management and housing authorities within the County to both assist and boost compliance with the County Recycling program as outlined in this Solid Waste Management Plan.

In addition, the ECHD will institute an inspection protocol for commercial establishments and multi-family housing units (5 or more units) to assure compliance with the County Solid Waste Management Plan recycling and solid waste regulations and/or ordinances. See the table provided in Section 7.4.3 of this report for the frequency of these additional inspections.

Also, the ECHD will randomly inspect solid waste loads tipped by both commercial and municipal contracted solid waste haulers at County designated solid waste facilities to assure that generators are not disposing of, or transporters are not tipping solid waste that contains more than 25% recyclable material. Violators can be issued a Notice of Violation and/or Summons in accordance with the NJDEP Solid Waste Rules found at N.J.A.C. 7:26 and the Solid Waste Utility Rules found at N.J.A.C. 7:26H, and/or this County Solid Waste Management Plan.

7.5 County Enforcement Mechanism

A successful enforcement mechanism is critical to the success of Essex County's recycling initiative. The Solid Waste Management Act was substantially revised in 1987 with the addition of the Mandatory Source Separation and Recycling Act, to expand the existing voluntary State recycling plan and establish a statutory framework for a mandatory statewide recycling program. Following that revision, Essex County adopted a district recycling plan, which is being further revised and expanded in this amendment. Essex County designated the mandated recyclable materials as indicated above, and municipalities were required to adopt an ordinance to implement the recycling plan. Recycling enforcement occurs through:

1. Enforcement of the District Recycling Plan by the CEHA agency, as identified through the inspection protocol outlined above and the penalties outlined below;

2. Enforcement of the municipal recycling ordinance by the municipal recycling coordinator or other municipal officials identified in the municipal ordinance; and/or,

3. Enforcement of the State's recycling regulations by the Department's Solid Waste inspectors, CEHA agency, or local agency that has entered into an Interlocal Services Agreement with the CEHA agency.

The amount of penalty to be assessed for a recycling violation is governed by what authority is being cited to take the enforcement action.

• If the violator is cited for failing to comply with the County Solid Waste Management Plan, the penalty matrix listed in the state regulations at N.J.A.C.

7:26-5.5(f) must be used. Penalties assessed using this matrix are based on the seriousness of the violation and the conduct of the violator.

- If the violator is cited for violating the NJ Statewide Mandatory Source Separation & Recycling Act and regulations adopted thereunder, the penalty is assessed pursuant to N.J.S.A. 13:1E-99.42 and must be not less than \$500 nor more than \$1000 for each offense.
- If the violator is cited for violating a municipal recycling ordinance, the penalty assessed is based on the penalty provisions within the ordinance.

7.6 Commercial Recycling Initiatives

The ECUA will run a pilot commercial recycling program in which a minimum of five (5) voluntary municipal recycling coordinators will distribute a County-provided recycling survey to commercial establishments in that municipality. This survey will assess the level of recycling occurring presently in each business, and will provide a baseline upon which to develop additional strategies for increasing the recovery of recyclable materials at the commercial level.

All municipalities will be encouraged to adopt the Toter System of waste management, with a specific focus on cardboard, typically a "problem" item with recycling in the commercial sector.

7.7 Multi-Family Residential Unit Recycling Initiatives

Designees of the SWAC will work with the Housing Authorities within Essex County to ensure that additional recycling containers and informational signage are placed to assist residents in separating out recycling materials. Coordination with the commercial haulers and other possible resources to increase the recovery of recyclable materials from high density population areas will be emphasized. Pictorial signage depicting what should and should not be recycled will be placed to facilitate the understanding of all residents.

7.8 Existing Recycling Events

Essex County remains committed to continuing and expanding the existing recycling/waste collection events run for our residents. These are as follows:

Household Hazardous (Universal) Waste Collection Event

Two (2) Household Hazardous (Universal) Waste Collection Events are held per year (Spring and Fall). The recycling tonnage results for the most recent event (Fall 2006) are shown in the table below.

Household Hazardous (Universal) Waste Type	Actual Pounds
Aerosols	2,880
Anti - Freeze	2,610
Asbestos/ Asbestos - containing mat.	0
Corrosives	2,092
Flammable Liquid Bulk	8,473
Flammable Solid	57
Household Batteries	7,584
Oxidizers	775
Pesticides/Herbicides	5,905

Poison B Liquid	1,656
Waxes/Films/Abrasives	0
Oil Based Paint Bulk	27,390
Oil Based Paint Lab Pack	0
Latex Paint	3,470
Lead Acid Batteries	13,032
Waste Oil	9,009
Propane Cylinders	10,915
Fluorescent Light Tubes	1,152
Fluorescent Light Ballasts	0
Mercury/mercury - containing products	0
Household Fire Extinguishers	1,701
Other Regulated Material	767
TOTAL TONNAGE (POUNDS)	99,468
TOTAL TONNAGE (TONS)	50

<u>Computer / Electronics Recycling Event</u> Two (2) Computer / Electronic Recycling Events are held per year (Spring and Fall). The number of residents participating from each municipality and the total recycling tonnage results to date for all events since Spring 2003 are shown in the table below.

Municipality	2003	2003	2004	2004	2005	2005	2006	2006	Total
Municipality	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Residents
Belleville	5	1	23	13	12	18	15		87
Bloomfield	35	5	36	34	51	66	50		277
Caldwell	10	0	24	13	16	31	21		115
Cedar Grove	54	2	52	9	25	82	38		262
East Orange	5	3	5	5	10	6	16		50
Essex Fells	9	0	17	3	15	16	18		78
Fairfield	6	0	12	5	9	17	14		63
Glen Ridge	9	1	11	10	23	17	15		86
Irvington	0	7	17	8	7	1	4		44
Livingston	50	8	69	64	116	63	116		486
Maplewood	8	5	14	22	15	9	20		93
Millburn	3	1	1	21	36	10	56		128
Montclair	63	8	73	33	70	143	95		485
Newark	2	18	13	11	15	6	10		75
North	7	0	15	0	10	13	18		63
Caldwell									
Nutley	2	2	29	15	25	33	44		150
Orange	1	5	4	9	11	5	19		54
Roseland	9	0	14	7	34	23	24		111
South	13	9	25	45	39	25	54		210
Orange									
Verona	75	1	48	20	38	74	53		309
West Caldwell	24	1	33	20	26	42	33		179

West	60	6	50	105	150	68	186	625
Orange								
Unknown							8	8
Total Tons	34	21.6	47	42.3	51.8	39.5	51.4	287.6
Collected								

7.9 Additional Potential Strategies for Future Adoption

Essex County is committing to revitalizing their recycling program to emphasize sustainable and cost effective methods to reach the goal of fifty percent of the municipal solid waste stream. As addressed to some extent above, Essex County has already begun program changes to address the following:

1. <u>Green Purchasing –</u>

Essex County believes that any commitment to recycling needs to include a look at supporting post-recycled markets and materials. To this end, the County will be evaluating the costs and benefits of a Green Purchasing program, using the guidelines set forth in the NJDEP program (http://www.recyclenj.org/), with assistance and examples of contract language as set forth in the US Environmental Protection Agency (http://www.epa.gov/epp/tools/database1.htm) "Environmentally Preferred Purchasing database. The County believes that Sustainable (Green) purchasing demonstrates the County's commitment to action by buying goods, materials, services, and capital improvements in a manner that reflects Essex County's core values of fiscal responsibility, social equity, community and environmental stewardship.

For a Green Purchasing Program, Essex intends to consider:

- Energy from renewable resources;
- Biodiesel from commercial waste cooking oils and wastewater treatment;
- Reduced purchasing/less packaging; and,
- Purchase of renewable and more easily recycled products as substitutes for materials already purchased (such as cleaning materials, office paper, furniture etc.).

2. Leaf and Mulch Composting Operations –

Essex County is currently reviewing options on installing and operating a centralized leaf and mulch composting operation for the benefit of County facilities and parks, and Essex municipalities. Management of leaves and yard waste is problematic within the County, and a well managed program can not only provide solutions for these problems, but a resource of mulch and compost for parks, gardens and open spaces.

3. <u>Waste Motor Oils –</u>

In 2005, the US Department of Energy estimated that up to eighty percent (80%) of the used motor oils from do-it-yourselfers (DIY) was improperly disposed of. Essex County will be evaluating the feasibility of running a County-wide program in cooperation with retailers and municipal recycling facilities to evaluate the costs and benefits of making it easier for DIY's to find a location to responsibly dispose of their waste motor oil and antifreeze. If the evaluation proves promising, Essex County will be looking at a program that provides responsibly managed drop-off locations at retailers and municipalities, information on drop off locations, contacts and operating hours on the new recycling web-site. In addition, further information on the benefits of recycling these

products will be made available through the web-site, such as how properly managing waste oils will help improve the quality of local streams and other water bodies.

4. Food Wastes –

Within Essex County are many retail shops and restaurants that generate significant amounts of food scraps and wastes. Currently, some of this waste flow is passing through a transfer facility for use and animal (pig) feed, but the private facility is inadequate in both the volume it handles and the manner in which it operates. With new recycling/composting technologies starting to appear for the management of these wastes, Essex County will begin a review to see which, if any, can operate successfully within a dense, urban environment. The County believes that there are not only environmental benefits to managing these wastes better, but also offers a possible financial benefit to the businesses working within the County.

5. <u>NOTE –</u>

Any (or other) new initiatives adopted by the County of Essex for the management of recycled materials or solid waste, and not otherwise cited in this amendment, will be provided to the NJDEP as a separate amendment.

APPENDIX I

INVENTORY OF FACILITIES

Any entry preceded with an "X" means that research indicated that the facility was no longer an operating facility at the time of the adoption of this Solid Waste Management Plan Update.

Any entry marked "NA" means that the information was not available at the date of adoption of this Solid Waste Management Plan Update.

ESSEX COUNTY RECYCLING FACILITIES					
Name and Address	Class	Block & Lot	Approved Waste Types	Approved Waste Amounts	Hours of Operation
X AGM Technologies Nutley, NJ 07110	А	NA	NA	NA	NA
X Arthur Ames Scrap Metal, Inc. P.O. Box 58 Livingston, NJ 07039 (973) 374-2191	A	NA	NA	NA	NA
Colantuono & Klurman 227 Clifford Street Newark, NJ 07105 (973) 589-5445 973-589-8141 FAX	A	NA	Scrap steel	NA	NA
Dublin Scrap Metal 489 Frelinhuysen Ave Newark, NJ 07114 (973) 622-0400	A	NA	Scrap metal	Ferris: Min. 5 tons No Max Non-Ferris: Min:1000 lbs No Max	8AM- 4:30PM M-F, 8AM- 12PM Sat
X Dublin Glass 1171 Stuyvesant Ave Irvington, NJ 07111	A	NA	NA	NA	NA
X East Coast Recycling P.O. Box 609 Belleville, NJ 07109	A	NA	NA	NA	NA
Exide Corporation 113 E. Centre X Street Nutley, NJ 07110 (973) 667-4555	A	NA	NA	NA	NA
Giordano Paper Recycling 292 Marlin Street Port Newark, NJ 07114 (973) 485-2009	А	NA	Fiber materials (paper; newspaper; cardboard; etc)	NA	6AM- 3:30PM M-F
Berkowitz Fat Company Inc.	А	NA	Food greases/fats	NA	24 Hours

	-42 Bay Avenue					Sun-Sat
	ewark, NJ 07105 73) 589-5994					
x	lorio Carting/Heritage Recycling 47 Alon Drive Fairfield, NJ 07004 (201) 256-4885	A	NA	NA	NA	NA
x	Mercury Tires 111 Clinton Road Fairfield, NJ 07006 (973) 575-9315	A	NA	NA	NA	NA
x	P Pepe & Sons 27 Malvern Street Newark, NJ 07195 (973) 589-0479	A	NA	NA	NA	NA
x	Recycling Systems, Inc. 150 St. Charles St. Newark, NJ 07105 (973) 344-2222	A	NA	NA	NA	NA
x	Regional Recycling Corp 295 Frelinghuysen Ave. Newark, NJ 07114 (973) 824-3603	A	NA	NA	NA	NA
88 Eli	ockrete 18 Fairmount Ave izabeth, NJ 07201 08) 352-2009	A	NA	Clean concrete	No limit- Pieces less than 2' x 2'	8AM- 4:30PM M-F
x	The Newark Group Recycled Fibers Division – Eastern Region 60 Lockwood Street Newark, NJ 07105 (973) 465-3900	A	NA	NA	NA	NA
x	Tri-County Disposal Service, Inc. P.O. Box 9TCB West Orange, NJ 07052 (973) 736-4454	A	NA	NA	NA	NA
an 41 Ne	Fiore Demolition d Recycling Corp 1 Wilson Avenue ewark, NJ 07103 73) 589-3366	В	B 5020; L 69.02	Asphalt; Asphalt Millings; Asphalt Based Roofing Material (received/ stored/transferred only); Brush; Brick & Block; Ceramic Tile;		

			Cinder Block; Clean Wood (non- chemical and non- painted wood material); Concrete; Concrete Block; Creosote Wood (received/stored/ transferred only); Plaster; Porcelain; Street Sweepings ; Tires (received/stored/ transferred only); Trees; Tree Branches; Tree Branches; Tree Parts; Tree Stumps		
Caputo Brothers Tree Service Village Park Road Upper Montclair, NJ 07043 (973) 746-1160	В	NA	Leaves; Trees; Tree Parts; Tree Stumps;	NA	NA
Waste Management, Inc. 864 Julia Street Elizabeth, NJ	NA	NA	NA	NA	NA
Waste Management, Inc. 131 Patterson Street Hillsdale, NJ	NA	NA	NA	NA	NA

	ESSEX COUNTY COMPOSTING FACILITIES						
Municipality	Street Address	Block & Lot	Approved Waste Types	Approved Waste Amounts	Hours of Operation		
Borough of Caldwell (973) 403-4640	Pine Tree Place West Caldwell, NJ	B 3101; L 13	Brush (< 3" diameter), Leaves	10,000 yds ³	7AM- 3:30PM M-F		
Borough of Essex Fells (973) 226-3040	307 Runnymede Rd Essex Fells, NJ	B 14; L 1	Leaves	10,000 yds ³	7AM- 3:30PM M-F		
Township of Fairfield (973) 882-2737	Marginal Road Fairfield, NJ	B 6801; L 4	Leaves; Grass	10,000 yds ³	7:30AM– 3PM M-F		
Millburn Township (973) 564-7060	John F. Kennedy Parkway Millburn, NJ 07041	B 5401, 5302; L 1, 5	Leaves; Brush	40,000 yds ³ (leaves); 10,000 yds ³ (brush)	7AM- 3:30PM M-F		
Township of South Orange	300 Walton Avenue South Orange	B 2301; portion of	Leaves	3,000 yds ³	7:30AM- 4:30PM		

Village (973) 378-7708 Township of West Caldwell (973) 226-2300	Village, NJ Bloomfield Avenue West Caldwell, NJ	L 1 B 1903; L 6	Leaves; Brush; Tree parts	NA	M-F; 8AM- 12PM Sat 7AM- 3:30PM M-F
Township of West Orange (973) 325-4104	590 Mt. Pleasant Ave West Orange, NJ	B 170; L 13, 15.03 & 17	Leaves; Brush	10,000 yds ³	7:30AM- 3:30PM M-F; 7:30AM- 2PM Sat
	LEAF TF	RANSFER F	ACILITIES		
Township of Cedar Grove Road Dept (973)-239-1410 Engineering 973-129-1410	Village Park Road Cedar Grove, NJ	B 290; L 1	Leaves	10-12,000 yds ³	7AM- 5PM
City of Newark (973) 733-3704 (973) 733-3708	Rutherford & Delancy Streets Newark, NJ	B 5056; L 16, 20, 30, 80 & 86	Leaves	No permit (transfer by contractor: S. Rotunde and Sons, Cooperative, Summit, NJ)	8AM-4PM M-F

ESSEX COU	ESSEX COUNTY INTERMEDIATE PROCESSING FACILITIES (IPFs)					
Name and Address	Contact	Block & Lot	Approved Waste Types	Approved Waste Amounts	Hours of Operation	
Recycle America Alliance, LLC 150 St. Charles Street Newark, NJ 07105	Dan Heimann, Facility Manager (973) 344-3003	NA	NA	NA	NA	

	ESSEX COUNTY	TRANSFER ST	ATIONS/M	ATERIAL REC	OVERY FAC	ILITIES
Nai	me and Address	Contact	Block & Lot	Approved Waste Types	Approved Waste Amounts	Hours of Operation
Rec 442	d Waste Trans. & ycling Frelinghuysen Ave /ark, NJ 07114	Quinn Martin (973) 565-0181	NA	10, 13, 13C, 23	NA	NA
170	cor, Inc. Frelinghuysen Ave /ark, NJ 07114	Armand Lembo Jr. (973) 642-1212	NA	10, 13, 13C, 27	NA	NA
ICF*	EPIC Brills Yard/Wilson Ave Newark, NJ 07114	Dave Iverson 100 Stierli Ct Suite 103 Mt. Arlington, NJ 07856 (973) 601-9212	B 5030; 1020; 5025 L 80, 104; 110, 120, 108, 98; 1	10, 12, 13, 13C, 23, 25, 27, 72, 73, 74	3,400 TPD	NA
Rail Transfer	Canadian-Pacific Railroad/Trans- Load America, Inc.	NA	NA	NA	NA	NA

ESSE	ESSEX COUNTY RESOURCE RECOVERY FACILITIES				
Name, Address & Block and Lot	Contact	Facility ID	Approved Waste Types	Approved Waste Amounts	Hours of Operation
Covanta Essex 183 Raymond Blvd. Newark, NJ 07105 (973) 344-0900 B 5000, L 28, 30; Parts of 20, 34,	George Kimiecik Env. Engineer (973) 817-7322	133546	10, 23**, 27*** (processible waste)	985,500 TPY	24 Hours M-SAT
36, 40, 50, 52, 60, 60A, 80, 92, B 5001 L parts of 18, 29, 32, 35A, 80, 80A, 90					

*ICF = Intermodal Container Facility

^{**}Approved Waste Type 23 includes Vegetative Waste (except for large quantities of easily discernable yard wastes such as grass clippings, leaves, tree trimmings, bushes, and shrubs, as described in the facility's Title V Air Pollution Control Operating Permit), pursuant to Permit #RRF000001—SW Resource Recovery Permit.

^{***}Approved Waste Type 27 includes Dry Industrial Waste (except for asbestos and asbestos-containing wastes; dry non-hazardous pesticides; contaminated soils; and, hazardous waste defined in N.J.A.C. 7:26G-1 et seq. and 40 CFR 261 which is generated by small quantity generators as defined in N.J.A.C. 7:26G-1 et seq.), pursuant to Permit #RRF000001—SW Resource Recovery Permit.

APPENDIX II

SPECIFICATION OF ROUTES

Waste Management, Inc. (Class B Recycling Facility)

All vehicles delivering acceptable waste to the Waste Management Inc. facilities and leaving the facilities shall utilize the following specified routes.

Ellesor Transfer Station Facility – 864 Julia Street, Elizabeth, New Jersey

Route 21 South to Routes 1 & 9 South

From Route 1 & 9 South to:

- Right (West) onto Laura Street.
- Turn left (South) onto Jackson Avenue.
- Turn left (East) onto Olive Street to Julia Street.

Hillsdale Facility – 131 Paterson Street, Hillsdale, New Jersey

- Route 21 North to Route 3 East to Route 17 North
- Route 3 East to Route 17 North
- Route 80 East to Route 17 North

From Route 17 North:

- To Lindwood Avenue (East) Exit. Bear right (east) onto Lindwood Avenue.
- Proceed to the end of Lindwood Avenue.
- Turn left (North) onto Pascack Road.
- Proceed to fourth traffic light (Hillsdale Avenue).
- Turn right onto Hillside Avenue.
- Go to first traffic light and make a left onto Paterson Street.
- Proceed to Prospect Place and make a left.
- Follow Prospect Place to Knickerbocker Avenue.
- On your right, enter the gate into the yard and stay to your left and proceed to inbound Scale.

Canadian-Pacific Railroad/Trans-Load America, Inc. (Rail Transfer)

All vehicles delivering acceptable waste to the Waste Management Inc. facilities and leaving the facilities shall utilize the following specified routes.

MUNICIPALITY

ROUTES

1. Belleville Route 21 South to Route 280 East exit onto New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

- 2. Bloomfield Belleville Avenue to Route 21 South to Route 280 East exit onto New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp, proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 miles where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
- 3. Caldwell Roseland Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Livingston Avenue. South on Livingston Avenue to Route 280 East exit onto New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
- 4. Cedar Grove From the southern and eastern sectors of the town, Pompton Avenue South crossing Bloomfield Avenue to Prospect Avenue. Prospect Avenue to Route 280 East exit onto New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn Proceed approximately (Canadian Pacific RR sign). 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
- 5. East Orange Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR"

and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

- 6. Essex Fells Roseland Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Livingston Avenue. South on Livingston Avenue to Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
- 7. Fairfield
 From the southern sector of the town, Clinton Road East to Passaic Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Eisenhower Parkway North to Route 280 East to New Jersey Turnpike South.

✤ From the northern sector of the town, Passaic Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Eisenhower Parkway North To Route 280 East to New Jersey Turnpike South.

Once on New Jersey Turnpike South follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

8. Glen Ridge Belleville Avenue to Route 21 South to Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

- 9. Irvington Lyons Avenue to Route 78 East, exit onto Exit 59 B and following signs to Route 1 & 9 North to the Delancev Street Exit. Turn left onto Delancev Street. At the next light go straight approximately 0.1 miles where Delancey will make a hard right bend. Do NOT follow bend. Proceed straight (you will see signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles and make the hard left turn following the Canadian Pacific RR signs. Proceed approximately 100 yards to a stop sign; you have arrived at Oak Island Yard. Follow signs to the scale house.
- 10. Livingston Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
- 11. Maplewood Route 78-24 East exit onto Exit 59 B and following signs to Route 1 & 9 North to the Delancey Street Exit. Turn left onto Delancey Street. At the next light go straight approximately 0.1 miles where Delancey will make a hard right bend. Do NOT follow bend, proceed straight (you will see signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles and make the hard left turn following the Canadian Pacific RR signs. Proceed approximately 100 yards to a stop sign; you have arrived at Oak Island Yard. Follow signs to the scale house.
- 12. Millburn-Short Hills Route 78-24 East exit onto Exit 59 B and following signs to Route 1 & 9 North to the Delancey Street Exit. Turn left onto Delancey Street. At the next light go straight approximately 0.1 miles where Delancey will make a hard right bend. Do NOT follow bend, proceed straight (you will see signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles and make the hard left turn following the Canadian Pacific RR signs. Proceed approximately 100 yards to a stop sign; you have arrived at Oak Island Yard. Follow signs to the scale house.
- 13. Montclair Bloomfield Avenue West to Prospect Avenue. South on Prospect Avenue to Route 280 East to New Jersey Turnpike

South. Follow signs to Route I & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives". Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

- 14. Newark Truck routes within the City of Newark are developed by the City of Newark. These routes involve local roads to the entrance of the Transload Facility from the Delancey Street entrance.

✤ From the southern sector of the town, Mountain Avenue South to Bloomfield Avenue East to Lakeside Avenue South to Pleasant Valley Way. South on Pleasant Valley Way to Route 280 East to New Jersey Turnpike South.

Once on New Jersey Turnpike South follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

16. Nutley Route 21 South to Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

17. Orange	Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
	Oak Island Yard. Follow signs to scale.

- 18. Roseland Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
- 19. South Orange From the eastern sector of the Village, Valley Street South to Vaux Hall Road. East on Vaux Hall Road to Route 78 East exit onto Exit 59 B and following signs to Route 1 & 9 North to the Delancey Street Exit. Turn left onto Delancey Street. At the next light go straight approximately 0.1 miles where Delancey will make a hard right bend. Do NOT follow bend. Proceed straight (you will see signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles and make the hard left turn following the Canadian Pacific RR signs. Proceed approximately 100 yards to a stop sign; you have arrived at Oak Island Yard. Follow signs to the scale house.

From the western sector of the Village, Wyoming Avenue South to Vaux Hall Road. East on Vaux Hall Road to Route 78 East exit onto Exit 59 B and following signs to Route 1 & 9 North to the Delancey Street Exit. Turn left onto Delancey Street. At the next light go straight approximately 0.1 miles where Delancey will make a hard right bend. Do NOT follow bend. Proceed straight (you will see signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles and make the hard left turn following the Canadian Pacific RR signs. Proceed approximately 100 yards to a stop sign; you have arrived at Oak Island Yard. Follow signs to the scale house.

20. Verona	From the western sector of Verona, Passaic Avenue South to Eagle Rock Avenue West to Eisenhower Parkway North to Route 280 East to New Jersey Turnpike South. Follow signs to Route I & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.
	From the eastern sector of the town, Prespect Avenue South

From the eastern sector of the town, Prospect Avenue South to Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

21. West Caldwell From the west side of town, Passaic Avenue South to Eagle Rock Avenue West to Eisenhower Parkway North to Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 miles where Delancey will make a hard right bend. Do NOT make the Proceed straight (follow the signs for "Canadian bend. Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

> From the east side of town, Mountain Avenue South to Bloomfield Avenue East to Lakeside Avenue South to Pleasant Valley Way. South on Pleasant Valley Way to Route 280 East to New Jersey Turnpike South. Follow signs to Route I & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR"

and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific R.R sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

22. West Orange Route 280 East to New Jersey Turnpike South. Follow signs to Route 1 & 9 South to the Wilson Avenue Exit. At the traffic light at the end of the exit ramp proceed straight and to the left onto Stockton St. to the next light (Delancey Street). Turn right on Delancey for approximately 0.1 mile where Delancey will make a hard right bend. Do NOT make the bend. Proceed straight (follow the signs for "Canadian Pacific RR" and "Craig Adhesives"). Follow road for approximately 0.1 miles to a hard left turn (Canadian Pacific RR sign). Proceed approximately 100 yards to stop sign; you have arrived at the Oak Island Yard. Follow signs to scale.

Covanta Essex (Resource Recovery Facility)

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 (New Jersey Turnpike, US Route 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 New Jersey Turnpike or US Route 1 & 9:

MUNICIPALITY

ROUTES

- 1. Belleville Route 21 South to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
- 2. Bloomfield Belleville Avenue to Route 21 South to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
- 3. Caldwell Roseland Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Livingston Avenue. South on Livingston Avenue to Route 280 East to New Jersey Turnpike at interchange 15E. Enter facility at jug handle.
- 4. Cedar Grove From the southern and eastern sectors of the town, Pompton Avenue South crossing Bloomfield Avenue to Prospect Avenue. Prospect Avenue to Route 280 East to New Jersey

Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.

From the northern and western sectors of the town, Fairview Avenue South to Bloomfield Avenue East to Lakeside Avenue South to Pleasant Valley Way. Pleasant Valley Way to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.

- 5. East Orange Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
- 6. Essex Fells Roseland Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Livingston Avenue. South on Livingston Avenue to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
- 7. Fairfield From the southern sector of town, Clinton Road East to Passaic Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Eisenhower Parkway North to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.

From the northern sector of town, Passaic Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Eisenhower Parkway North to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.

- 8. Glen Ridge Belleville Avenue to Route 21 South to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
- 9. Irvington Lyons Avenue to Route 78-24 East to New Jersey Turnpike North. Exit Turnpike at interchange 15E. Enter facility at jug handle.
- 10. LivingstonRoute 280 East to New Jersey Turnpike South. Exit Turnpike
at interchange 15E. Enter facility at jug handle.
- 11. MaplewoodRoute 78-24 East to New Jersey Turnpike North. Exit
Turnpike at interchange 15E. Enter facility at jug handle.
- 12. Millburn-Short Hills Route 78-24 East to New Jersey Turnpike North. Exit Turnpike at interchange 15E. Enter facility at jug handle.
- 13. Montclair Bloomfield Avenue West to Prospect Avenue. South on Prospect Avenue to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.

14. North Caldwell	From the eastern sector of town, North Mountain Avenue East to Pompton Avenue South crossing Bloomfield Avenue to Prospect Avenue. Prospect Avenue to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
	From the southern sector of town, Mountain Avenue South to Bloomfield Avenue East to Lakeside Avenue South to Pleasant Valley Way. South on Pleasant Valley Way to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
	From the northern sector of town, Grand View Avenue North to Main Street. North on Main Street to Pompton Avenue South crossing Bloomfield Avenue to Prospect Avenue. Prospect Avenue to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
	From the western sector of town, Greenbrook Road Westbound to Passaic Avenue South to Eagle Rock Avenue. West on Eagle Rock Avenue to Eisenhower Parkway North to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
15. Nutley	Route 21 South to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
16. Orange	Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
17. Roseland	Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
18. South Orange	From the eastern sector of the Village, Valley Street South to Vaux Hall Road. East on Vaux Hall Road to Route 78 East to New Jersey Turnpike North. Exit Turnpike at interchange 15E. Enter facility at jug handle.
	From the western sector of the Village, Wyoming Avenue South to Vaux Hall Road. East on Vaux Hall Road to Route 78 East to New Jersey Turnpike North. Exit Turnpike at interchange 15E. Enter facility at jug handle.
19. Verona	From the western sector of town, Lakeside Avenue South to Pleasant Valley Way. South on Pleasant Valley Way to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
	From the eastern sector of town, Prospect Avenue South to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.

20. West Caldwell From the western sector of town, Passaic Avenue South to Eagle Rock Avenue West to Eisenhower Parkway North to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
From the eastern sector of town, Mountain Avenue South to Bloomfield Avenue East to Lakeside Avenue South to Pleasant Valley Way. South on Pleasant Valley Way to Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.
21. West Orange Route 280 East to New Jersey Turnpike South. Exit Turnpike at interchange 15E. Enter facility at jug handle.

All internal routes are governed by the applicable municipal ordinances.

APPENDIX III

APPENDIX IV

Municipality	Name	Address	Contact Information
Belleville	Jerry Imperato	152 Washington Avenue	(973) 450-3415 (phone)
		Belleville, NJ 07109	(973) 450-5009 (fax)
Bloomfield	Louise Palagano,	1 Municipal Plaza - Room	(973) 680-4009 (phone)
	Township	203	(973) 680-0134 (fax)
	Administrator ¹	Bloomfield, NJ 07003	
Caldwell	Mario Bifalco	1 Provost Square	(973) 403-4634 (phone)
Cedar Grove	Thomas Tucci	Caldwell, NJ 07006 525 Pompton Ave.	(973) 403-1355 (fax) (973) 239-1410 (phone)
	Thomas Tucci	Cedar Grove, NJ 07009	(973) 239-7541 (fax)
East Orange	Donald Wharton	44 City Hall Plaza	(973) 266-5337 (phone)
		East Orange, NJ 07019	(973) 266-5367 (fax)
Essex Fells	Roger Kerr	255 Roseland Ave.	(973) 226-3040 (phone)
	-	Essex Fells, NJ 07021	(973) 228-5439 (fax)
Fairfield	Larry Gonella and	230 Fairfield Ave.	(973) 882-2725 (phone-Larr
	Alternates Ron Karl	Fairfield, NJ 07004	(973) 244-9255 (fax)
Glen Ridge	and Mike DeMontagne Jay Weisenbach	Municipal Bldg.	(973) 882-2734 (phone-Alt.) (973) 748-8400 (phone)
Gien Ridge	Jay weisenbach	825 Bloomfield Ave	(973) 748-8400 (phone) (973) 748-3926 (fax)
		Glenridge, NJ 07028	(373) 740-3320 (18x)
Irvington	Aubrey A. Malvasio	Civic Square	(973) 399-6697 (phone)
	Recycling & Clean	Rm. 209	(973) 399-6798 (fax)
	Communities	Irvington, NJ 07111	
	Coordinator		
Livingston	Russel A Jones, Jr.	357 S. Livingston Ave.	(973) 535-7973 (phone)
Manlawaad	Gary Lenci, Director of	Livingston, NJ 07039 359 Boyden Ave.	(973) 535-7697 (fax) (973) 762-1175 (phone)
Maplewood	Public Works	Maplewood, NJ 07040	(973) 762-3624 (fax)
Millburn	Tim Monahan,	345 Essex St.	(973) 564-7060 (phone)
	Superintendent of	Millburn, NJ 07041	(973) 564-7061 (direct phon
	Public Works		(973) 564-7468 (fax)
Montclair	Gray Russell, ,	Municipal Building	(973) 509-5721 (phone)
	Environmental Affairs	205 Claremont Ave 2 nd	(973) 783-7703 (fax)
	Coordinator	Floor	grussell@montclairnjusa.org
Newark	Bob Minter	Montclair, NJ 07042 62 Frelinghuysen Ave.	(973) 733-6683 (phone)
Newark	BOD MILLEL	Newark, NJ 07102	(973) 733-6685 (alternate
			phone)
			(973) 733-5961 (fax)
North Caldwell	Frank Zichelli	Township Hall, Gould Ave	(973) 228-6414 x107 (phone
		North Caldwell, NJ 07006	(973) 229-2914 (fax)
Nutley Orange Roseland	Patricia Davis	1 Kennedy Drive, Nutley	(973) 284-4984 (phone)
	Dahart Gamada	NJ 07110	(973) 284-4905 (fax)
	Robert Corrado,	29 North Day St.	(973) 266-4031 (phone)
	Director, Public Works Gary Schall	Orange, NJ 07050 300 Eagle Rock Ave.	(973) 677-7848 (fax) (973) 226-6565 (phone)
		Roseland, NJ 07068	(973) 226-8520 (fax)
South Orange	Richard Fernicola	S. Orange Village Hall	(973) 378-7747 (phone)
		Public Works Bldg.	(973) 762-4265 (fax)
		101 S. Orange Ave	
		S. Orange, NJ 07079	
Verona	James Helb	10 Commerce Court,	(973) 857-4803 (phone)
West Caldwell	Candra Davardi	Verona, NJ 07044	(973) 239-7837 (fax)
	Sandra Berardi	30 Clinton Ave.	(973) 226-2303 (phone)
West Orange	Joe Mauriello	W. Caldwell, NJ 07006 25 Lakeside Ave	(973) 226-2396 (fax) (973) 325-4067 (phone)
West Orange		West Orange, NJ 07052	(973) 736-3194 (fax)
			PublicWorks@WestOrange.org

¹ Municipal Recycling Coordinator recently retired; all correspondence should go to Township Administrator until a new Recycling Coordinator is appointed.