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SECTION 1 PLANNING UNIT DESCRIPTION

In accordance with E.C.L. Article 27-0107(1)(a), all municipalities that generate waste and are responsible for its disposal should prepare a solid waste management plan (SWMP). The New York State Department of Conservation (DEC) is tasked to ensure compliance with Article 27, and may withhold permits for new solid waste facilities for jurisdictions lacking an approved SWMP.

The City of Long Beach (Long Beach) is operating under the current integrated waste management plan since 1988. The aim of this SWMP is to document Long Beach's achievements and identify possible cost-effective improvements that will enhance productivity. This plan was prepared in accordance with New York State Solid Waste Management Plan and covers a planning period of fifteen (15) years from 2011 through 2025.

This SWMP is divided into ten (10) sections with appendices. The contents of the sections are outlined below.

Section 1 ? Planning Unit Description

Section 2 ? Solid Waste Composition

Section 3 ? Existing Program Description

Section 4 ? Projected Solid Waste Generation and Disposal

Section 5 ? Technology Evaluation

Section 6 ? Integrated Waste Management Plan

Section 7 ? Implementation Schedule

1.1 PLANNING AREA DESCRIPTION

1.1.1 Long Beach Environs

Long Beach is located in the extreme southwest portion of Nassau County. Reynolds Channel, a deep, highly used, navigable waterway forms its northern boundary. Beaches and the Atlantic Ocean form its southern boundary. Long Beach is bounded on the east and west by Lido Beach and East Atlantic Beach, respectively. The specific boundaries are shown in **Figure 1-1**.

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1.1 Planning Area Description

1.2 Significant Factors Affecting Waste Generation

1.3 Objective of the Plan

Figure 1-1. City Limits of Long Beach, NY



Three roadway bridges and one railroad bridge link the barrier island to the mainland of Long Island. The Michael Valente Memorial Bridge is the only bridge located within Long Beach city limits. The remaining bridges, Loop Parkway and Atlantic Beach Bridge, are located two miles east and west, respectively. A railroad bridge enters Long Beach approximately one-third mile west of the Michael Valente Memorial Bridge and terminates at Long Beach Railroad Station located at West Park Avenue and Park Place.

The topography of Long Beach is typical of most barrier island communities; generally flat with little topographic variation and the highest ground elevations are in the center of the island. Ground elevations are generally between 5 and 11 feet above mean sea level. The lowest points are found along the boundary of Reynolds channel.

Development of Long Beach started in the 1870's when the island was first linked to New York City by railroad. With more accessibility, however, came the development of the former meadowlands into what is now the area north of Park Avenue and the main east-west artery. Extensive development continued through 1920, and in 1922 Long Beach became a City under the municipal laws of the State.

The character of Long Beach has changed through the years, from a predominantly vacation community to year-round residents with seasonal tourism through the 1970s. Today summer visitors typically travel locally from surrounding communities and enjoy the beach and commercial establishments along the shore. Long Beach is predominantly residential with modern, high-rise apartments, condominiums, multi-family dwellings, and single family residences as population density limited industrial and commercial development. Future development is not expected due to the scarcity of available land.

Property development can be characterized as follows:

- Small wood frame bungalows situated on small lots (typically 1,800 to 3,000 square feet (SF)) in the west end and walk areas, many of which were converted into multi-family residences.
- Large 1- to 2-family homes located in the center and easterly portion of the City, typically situated on lots from 5,000 to 10,000 SF.
- Multi-family homes and townhouse condominiums on small lots (typically 20,000 SF) in the south.
- Large apartment and condominium buildings (6 to 10 stories) located along Broadway and Shore Road.
- Commercial strips consisting of 1- to 2-story retail establishments along Park Avenue and West Beech Street.
- Light industrial areas, municipal utilities, and multi-family low to moderate income public housing in the north.

Section 1 ? Planning Unit Description

- The Long Beach Hospital occupies a substantial portion of the northeast areas.
- Nursing homes and senior citizen residences are predominantly located on Broadway.

Long Beach comprises approximately 1,560 acres, of which about 48 percent is developed or designated for residential use. Based on 2005-2009 Census Bureau American Community Survey, a total of 16,998 housing units exist, of which 1,836 are vacant, and 37.6% of occupied housing units are rental units. About 2.6 percent of the area is occupied by business or commercial establishments. **Table 1-1** provides data on land usage.

Table 1-1. Existing Land Usage in the City of Long Beach

Usage Type	Acres	Percentage
Residential	752	48.2
Roadways	363	23.3
Recreational	163	10.4
Water	136	8.7
Vacant	51	3.3
Commercial	41	2.6
Institutional	23	1.5
Utilities	22	1.4
Industrial	9	0.6
TOTAL	1,560	100

1.1.2 Population Projections

The United States Census Bureau conducts regular census surveys that document the population of Long Beach. **Table 1-2** presents historical population data.

Table 1-2. City of Long Beach Historical Population, 1920-2010

Year	Population
1920	282
1930	5,817
1940	9,306
1950	15,586
1960	26,473
1970	33,127
1980	34,073
1990	33,510
2000	35,462
2010	33,275

Long Beach experienced significant growth from 1920 to 1970, however population has since stabilized. According to the Nassau County Master Plan, the population will likely increase between 2010 and 2020, with more substantial increases between 2020 and 2025. However, this is unlikely to affect Long Beach as new development is significantly constrained by limited

available space. Instead, Long Beach is likely to see fluctuations between 32,000 and 36,000 residents.

1.2 Significant Factors Affecting Waste Generation

With a stable population projected over the planning period, the quantity of waste generated should remain relatively stable and eventually decrease. In 2010, Long Beach residents generated 25,992 tons of municipal solid waste (MSW), including recyclables, biosolids, hazardous wastes, and construction and demolition debris (C&D), or 0.78 tons MSW per person. Despite population decreases, this value shows an overall MSW per capita decrease from 0.89 tons per person in 1999.

Factors that may have contributed to this reduction include the following:

- Approximately 18.5% of the population are age 65 and older. Senior citizens typically generate less waste than other age groups.
- A large portion of residents live in apartments or condominiums. This lifestyle typically generates less waste than those living in larger homes.

Some factors that may alter future waste generation rates include:

- A change in the age configuration within Long Beach.
- A stronger emphasis on waste reduction practices.
- Institution of a fee structure that charges residents by quantity of waste.

1.3 Objective of the Plan

This plan was prepared in accordance with 6 NYCRR Part 360 which identifies regulations that must be followed in developing an approvable solid waste management plan. By evaluating Long Beach's integrated waste management experience and efforts in the context of the State's goals for waste minimization, a comprehensive strategy for enhancing reduction, reuse and recycling in Long Beach is provided herein. The ultimate goal of the plan is to achieve the most cost-effective and efficient solid waste operation feasible.

SECTION 2 SOLID WASTE COMPOSITION

In accordance with New York State solid waste management goals embodied in Article 27-0106 of the Environmental Conservation Law and the Beyond Waste Report; the intent of a solid waste management program is to maximize waste reduction and recovery/reuse for all components of the waste stream to the extent economically and technically feasible. In order to progress towards this goal, it is vital to understand the composition of the current waste stream.

2.1 WASTE GENERATION AND COMPOSITION

According to the 2010 U.S. Census, the population of Long Beach is 33,275 (a decrease from 35,462 in 2000). In 2010, Long Beach collected 25,991 tons of solid waste, which equates to 0.78 tons/person/year or 4.3 pounds/person/day. Of that total, 6,176 tons was recycled material. Thus, final refuse accounted for 0.60 tons/person/year or 3.3 pounds/person/day.

In order to get a more accurate view of the trends in solid waste generation, data for the previous six years (from 2005 to 2010) was analyzed. Total solid waste generation, which includes municipal solid waste (MSW), biosolids from the wastewater treatment plant, C&D debris, and recycled materials, increased until 2008. In 2009, total waste decreased by approximately 1,300 tons in comparison to the previous year. In 2010, total waste decreased by approximately 8,500 tons in comparison to 2009. It should be noted that in downturned economies total waste production generally decreases.

Due to dramatic decreases in overall waste production, components of the waste stream were assessed independently. **Figure 2-1** demonstrates waste collection trends by showing total MSW collected in Long Beach, including C&D, final refuse, recyclables, and biosolids as well as total C&D and total final refuse collected. Total MSW collected has been decreasing steadily since 2005. C&D increased substantially between 2005 and 2008 as home renovations continued to dominate much of the financial landscape, but as the economy downturned, so did this waste stream and the construction industry as a whole. In response to the downturned economy, the Long Beach made efforts to recover debris or reuse asphalt, bricks, and concrete (ABC) materials for road base rather than discarding it.

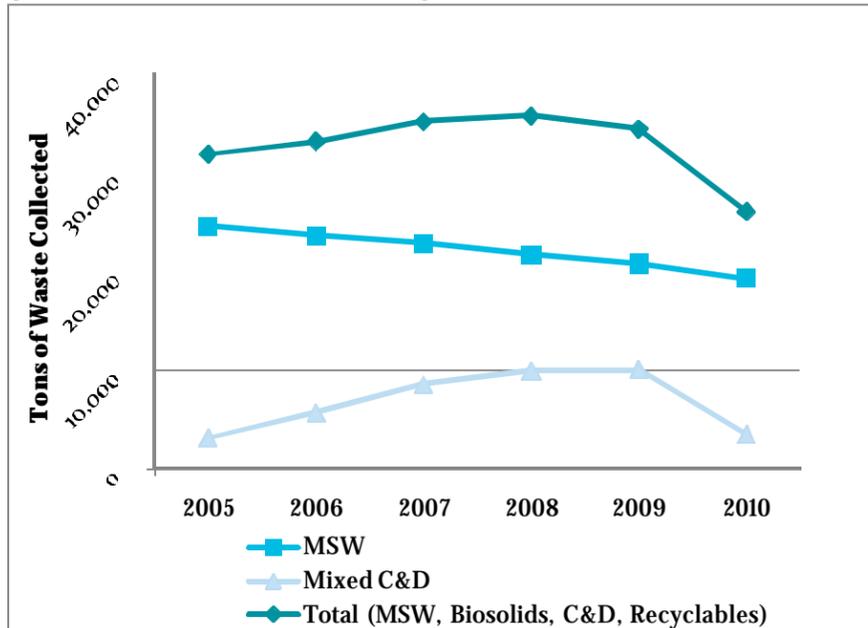
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2.1 Waste Generation and Composition

2.2 Description of the Components of the Waste Stream

Section 2 ? Solid Waste Composition

Figure 2-1. Annual MSW collected in Long Beach (tons)



To get a more detailed view of the current waste generation trends, **Table 2-1** shows the tons of waste collected, separated by disposal method and type of waste during 2010.

Table 2-1. Tons of MSW Collected in Long Beach by Waste Stream, 2010

Waste Stream	Weight (tons)	% Generated Waste
Energy Recovery		
MSW	19,261.2	74.1%
Landfilled		
Biosolids	542.3	2.1%
Waste Recovery and Landfilled Total		
Recycled		
Corrugated Cardboard	551.5	2.1%
Mixed Paper	1,086.0	4.2%
Scrap Metal	36.0	0.1%
Commingled Containers	1,034.5	4.0%
Electronics	1.6	0.0%
Tires	4.3	0.0%
Anti-Freeze	4.6	0.0%
Car Batteries	9.5	0.0%
Waste Oil	12.4	0.0%
Mixed C&D	3,448.0	13.3%
ZGD?DusYO dZIAu??Z	???????	?????
ZGD?DusYO dZIAu?sIS	???????	?????
TOTAL	25,991.7	

2.2 DESCRIPTION OF THE COMPONENTS OF THE WASTE STREAM

Components of the waste stream can be divided into three fractions: the fraction that used as fuel in the Hempstead Resource Recovery Facility, the fraction that is landfilled, and the fraction that is recycled.

2.2.1 Municipal Solid Waste

MSW to refers to the fraction of collected waste that is transported to the Merrick Transfer Facility and processed and transported to the Hempstead Resource Recovery Facility for use as fuel. This waste stream includes recyclables that were not source-separated before collection as well as other materials that cannot be recycled, packaging material, some plastics, food scraps, and small amounts of yard waste.

2.2.2 Biosolids

Biosolids are generated during operation of Long????? wastewater treatment plant. Total tonnage is based on the quantity of wastewater produced and the processes involved in treating wastewater. Biosolids can be composted however, as discussed in Section 1 of this SWMP, previous studies on composting biosolids showed it to be an economically infeasible in most applications. Currently biosolids from the wastewater treatment plant are transported by Tully Environmental to the Greentree Landfill in Kersey, Pennsylvania.

2.2.3 Recyclables

Recyclables include all collected materials that are not intended to be used as fuel or landfilled. The following descriptions include historical information and current recycling practices.

2.2.3.1 Corrugated Cardboard

Long Beach began recycling corrugated cardboard in October 1992. The program was first initiated in the commercial sector, where accumulation of this material was most prevalent. Due to space constraints, Long Beach has provided pickup 7 days per week for commercial properties since the inception of the 1995 SWMP.

Long Beach began collection of commingled corrugated cardboard, newspaper, and mixed papers in 1995 in both commercial and residential sectors. Recyclables are collected from the residences once per week for most homes and 7 days per week in apartment complexes and high-rise condominiums.

On November 1, 2010, Long Beach signed a 2-year contract with Westbury Paper Stock in Westbury, NY. Westbury Paper Stock is responsible for accepting all mixed paper, cardboard, scrap metal, and commingled recyclables. Exact tonnages on the amount of cardboard collected is not available because the cardboard is tracked under mixed paper. Approximately

258 to 675 tons of corrugated cardboard have been collected annually between 2006 and 2010.

2.2.3.2 Mixed Paper

Long Beach began a voluntary recycling program for newspapers and magazines in 1987. In 1992, Long Beach began collecting from commercial, industrial, and institutional establishments as well. In the late 1980's and early 1990's most Long Island sanitation districts were paying between approximately \$10 and \$40 per ton to recycle newspapers and magazines due to the limited markets available to recycle the material.

Long Beach has long been a proponent of office paper recycling. The generic term "office paper" typically applies to paper products utilized in various establishments including printing, offices, and businesses, and is defined as a type of paper that has long fibers and is brighter when compared to newspaper. In the early 1990's Long Beach began collection of office paper in City Hall. Long Beach diverted approximately 10 tons of material per year during that time and received no revenue for the commodity.

In 1994, in an effort to increase public awareness and promote recycling, Long Beach developed a pilot office paper recycling program. The initial plan required the contractor to collect the material from the establishments once per week however volumes were not accumulating enough to justify the pickup frequency. The program was somewhat successful, but collected materials were less than anticipated.

In January 1995 Long Beach discontinued individual paper recycling programs and began collecting office paper commingled with newspapers, telephone directories (as part of a spinoff from participation in a NYNEX public outreach and recycling campaign), and junk mail. Other lower-grade paper including magazines, color paper, paperback books, glossy inserts from newspapers, and paper bags have since been collected with mixed paper.

Long Beach is currently under the contract with Westbury Paper Stock to collect mixed paper. Long Beach receives money for this waste stream based on a percentage of the stock price listed in the Official Board Markets publication. In 2010, the average price was \$12.81 per ton for mixed paper.

2.2.3.3 Commingled Glass, Plastics, and Metals

Long Beach currently collects clear, amber, and green glass from both residential and commercial sectors. The material is commingled with #1 through #5 plastics as well as ferrous and non-ferrous cans. Glass and cans were the first materials included in the recycling program because viable markets existed for them. Even though Long Beach initially expected to pay \$10 to \$40 per ton for glass recycling, it was more cost-effective because the disposal tipping fees were in the range of \$70 to \$80 per ton, saving the City approximately \$30 to \$80 per ton.

2.2.3.4 Scrap Metal

Scrap metal includes miscellaneous post-consumer steel products including washing machines, dryers, air conditioners, automobiles, and other bulky ferrous products. Typically, post-consumer steel is sold to brokers by municipalities. The brokers remove hazardous substances such as polychlorinated biphenyls and prepare metals for end use processors.

Steel scrap metal has long been recycled by the public sector due to the viability of secondary markets. Historically, scrap metal was picked up by residents by appointment only, however, in the early 1990s the system was changed to provide regularly scheduled pickups. Long Beach has since returned to picking up scrap metal by appointment only.

Prior to 1992, Cousins Metal Industries Inc. purchased and hauled all scrap metal for \$10 per ton. In 1990 and 1991 Long beach collected over 850 tons and generated over \$8,000 in revenue. With avoided tipping fees of approximately \$75/ton at the waste-to-energy facility, the savings from recycling scrap metal was over \$70,000 for the two-year period.

From February 1992 to December 1994, LJS Scrap Metal Haulers was utilized as a broker for Long Beach recyclable material. The contract specified that Long Beach would receive \$20/ton for the material. From 1992 to 1994 Long Beach collected over 900 tons and generated over \$18,000 in revenue. With the avoided cost of tipping fees the savings is estimated to have been over \$85,000 for that three year period.

From January 1995 to June 1998, JLJ Recycling Contractors, Inc. (later known as BFI) hauled scrap metal. Long Beach received \$20.15 per ton for the material and realized significant savings under that agreement.

In July 1998, Long Beach entered into an agreement with Jamaica Ash and Rubbish Removal Co. Inc. to haul scrap metal. Jamaica Ash paid \$24 per ton during this time period.

Currently, under the agreement with Westbury Paper Stock, Long Beach receives revenue from the recycling of scrap metal based on a percentage of the stock prices listed in the Iron Age Scrap Metal Bulletin publication. In 2010, Long Beach received an average of \$156.93 per ton of scrap metal.

2.2.3.5 Ferrous/Nonferrous Cans

Long Beach collects ferrous and nonferrous cans through its residential and commercial curbside collection program. Ferrous metals are composed of iron and/or steel while nonferrous cans are typically composed of aluminum. It is estimated that 66% of steel packaging (mostly cans) is recycled.

A majority of aluminum cans are recycled as a result of the Returnable Beverage Container Act commonly referred to as the Bottle Bill. It is estimated that 51% of aluminum cans are recycled and/or redeemed. One of the main reasons for the success of aluminum can recycling is that the material is extremely valuable with a stable market.

2.2.3.6 Plastics

The primary plastic resins found in the waste stream are identified as follows:

- #1: PET - Polyethylene Terephthalate
- #2: HDPE - High Density Polyethylene
- #3: PVC - Polyvinyl Chloride
- #4: LDPE - Low Density Polyethylene
- #5: PP - Polypropylene
- #6: PS - Polystyrene
- #7: Mixed Resins

Of the seven mentioned, Long Beach currently collects plastics #1 through #5.

In the early 1980's Long Beach operated a drop-off area for plastic materials. However, when much of the material received was found to be soiled, contaminating entire truck loads, the program was abandoned. Currently Long Beach collects plastics commingled with glass and cans from the residential and commercial sectors.

Polyethylene is typically utilized to make soft drink bottles and other packaging such as peanut butter and liquor containers. High density polyethylene is probably the most widely used plastic in the household. It is used to make detergent bottles, trash cans, soda bottles base cups, drainage pipes, and plastic milk jugs.

Long Beach has long been a proponent of plastics recycling and has experimented with the use of plastic lumber for local application. Long Beach utilized plastic lumber composed of 100% recyclable plastic resins (manufactured by National Waste Technologies Incorporated) to re-deck the perimeter of its Pacific Boulevard Playground. In addition, it replaced a section of boardwalk with a plastic lumber composed of plastic resins and wood. In spring 1997 Long Beach built a boardwalk ramp made out of Tri-Max plastic lumber that has a fiberglass component. And in 1999 another boardwalk was built out of plastic lumber manufactured by Earthcare. This boardwalk has a special non-slip surface. In addition, Long beach has purchased trash receptacles, planters, and benches composed of recycled plastic, and the City finds these products to be extremely durable.

2.2.3.7 Construction and Demolition Debris

Construction and demolition (C&D) debris refers to all wood, concrete, asphalt, and miscellaneous debris generated by Long ?????? maintenance departments. Long Beach has no data on C&D debris generated by private contractors.

Long Beach generated 3,448 tons of C&D in 2010. Testani Enterprises is under contract to provide containers and remove C&D from the Long Beach Transfer Station. The majority of this waste is recycled.

2.2.3.8 Food Scraps

Food scraps represent all food waste generated from residential and commercial sectors. The only real option for this material other than landfilling or waste-to-energy disposal is composting. In rural communities, where there are few space constraints, composting is a realistic option. However, on a densely populated barrier island such as Long Beach, it is impractical. Products such as privately or municipally procured backyard composters may be used by residents to dispose of their food wastes at home. However, backyard composting may become a nuisance to neighbors due to the close proximity of residences in this densely-populated area.

2.2.3.9 Yard Waste

Yard waste includes leaves, brush, and grass clippings. Long Beach does not currently operate a yard waste program as this densely populated city does not generate a large quantity of material. Most generated yard waste in Long Beach is collected and disposed of by private landscapers. No records of the quantity of yard wastes exist. Long Beach does provide separate collection for Christmas trees.

Long Beach currently provides literature to the public regarding onsite composting procedures, yard waste (grass clipping, branches, etc.). Long Beach intends to continue promoting on-site management of yard trimmings by residents and commercial establishments. In addition, grass clippings from the public malls are generally left in place for decomposition.

2.2.3.10 Tires

Long Beach obtains documentation regarding the quantity of tires recycled at local service stations annually. These figures are included in Long Beach recycling figures. In 2010, 4.3 tons of tires were recycled.

2.2.3.11 Household Hazardous Wastes

In 2010, Long Beach continued to participate with the Town of Hempstead in their "Stop Throwing Out Pollutants" program. The S.T.O.P. program provides residents with a venue to dispose of common household hazardous wastes such as oil-based paint, solvents, waste oil, drain cleaners, weed killers, and batteries for free. The Town of Hempstead organizes ten S.T.O.P. events per year including one in Long Beach.

In 2010, 135 drums of household hazardous waste were collected from Long Beach residents. The amount of household hazardous wastes collected from Long Beach residents is shown in Table 2-2. The 2010 S.T.O.P. program held in Long Beach reached a record 1,422 resident participants.

Section 2 ? Solid Waste Composition

Table 2-2. Quantities Collected during S.T.O.P Events, 2010

Category	Quantity Collected
Batteries (Dry Cell)	5.5 drums
Aerosols	10.5 drums
Poisons	1 drum
Asbestos	4 drums
Corrosives	6 drums
Oxidizers	3.5 drums
Flammable Liquid (Bulk)	16.5 drums
Motor Oil	9 drums
Pesticides	14 drums
Flammable Liquid (Lab Pack)	17.5 drums
Anti-Freeze	3 drums
Fluorescent Bulbs	7.5 boxes
Fire Extinguishers	2 drums
Flammable Liquid (Solids)	1.5 5-gal pails
Mercury	0 drums
Oil Paint	40.5 drums
Propane	2 drums

2.2.3.12 Motor Oil, Automobile Batteries, Tires and Anti-Freeze

Long Beach maintains records certain materials generated at the City Garage and all service stations located within the City. The quantities of materials disposed of in 2010 can be seen in **Table 2-3**.

Table 2-3. Quantities of Waste Oil, Tires, Anti-Freeze, and Batteries disposed in 2010

Facility	Waste Oil (gallons)	Tires	Anti-Freeze (gallons)	Batteries
Long Beach City Garage	50	100	60	40
Surf Glass	1025	None	469	325
Mobil		s EŽI ZG?ĐŽYE		
Mann Auto		s EŽI ZG?ĐŽYE		
Auto Service Center	1857	360	402	115
Merrimack Transfer Station	None	258	None	None

Several contractors were used for the disposal of these materials, including:

- **Waste oil** collected by: Planet Earth Recycling Services (Amityville, NY), Safety Kleen Corp. (Amityville, NY); and Waste Oil Solutions (West Babylon, NY)
- **Tires** collected by: Omni of Babylon (West Babylon, NY) and S&M Rubbish (Oceanside, NY)
- **Anti-Freeze** collected by: Planet Earth Recycling Services and Safety Kleen Corp
- **Batteries** collected by: Interstate Batteries of Southwestern Nassau (Oceanside, NY)

SECTION 3 EXISTING PROGRAM DESCRIPTION

The following section summarizes current and historical practices of solid waste management in Long Beach.

3.1 HISTORICAL PRACTICES

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Following the State Solid Waste Management Plan of 1987 and the Solid Waste Management Act of 1988, Long Beach implemented an integrated solid waste management system that emphasized recycling and waste diversion. The voluntary recycling program was initiated in the residential sector in 1992. Long Beach purchased two state of the art collection vehicles and enough 14 gallon red recycling bins to be distributed to all residences. At the program's inception, Long Beach collected newspaper, ferrous and nonferrous cans and clear, amber, and green bottles. Long Beach also designated a drop off area where plastics could be deposited. Bulk metal was picked up prior to 1988 due to its high secondary market value. Municipal solid waste was collected from all residences and at a majority of commercial, industrial, and institutional facilities. In some cases private haulers were contracted to remove waste.

At the inception of the program Long Beach designated twice per week recyclables pickup and newspaper and commingled items were collected on separate days. In these early days, the market for recyclable commodities was extremely volatile. Long Beach paid approximately \$15-\$30 per ton for disposal due to a glut in the marketplace. While disposal costs were decreased through this practice, after considering cost of labor, materials, and equipment to pick up, transport, and load recyclables most savings were lost.

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In the early 1980's Long Beach hauled its refuse to the Oceanside Landfill at a cost of \$50-\$60 per ton for disposal. In 1983, the New York State Legislature implemented Section 27-0104 of the Environmental Conservation Law, mandating many of Long Island's landfills to close by December 1990. The Oceanside Landfill closed in 1987. At that time, disposal prices increased due to the diminishing markets from \$50-\$60 per ton to as much as \$75-\$80 per ton. Long Beach opted to enter into contract with the privately owned, newly renovated, Long Beach Recycling and Recovery Facility ("LBRRF"). The LBRRF facility, located at 70 Water Street, began taking Long Beach waste at a cost of approximately \$75 per ton in December of 1988. Long waste was disposed at the site until it closed in 1997. After the closure of the LBRRF, Long Beach disposed of waste at Omni of Babylon for 5 years. Currently the City of Long Beach disposes of waste at the Merrick Transfer Station owned and operated by the Town of Hempstead.

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3.1 Historical Practices

3.2 Current MSW Collection Program

3.3 Current Recycling Program

Section 3 ? Solid Waste Program Description

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As part of the solid waste stream, wastewater sludge has presented technical and financial challenges. Prior to the Federal Ocean Dumping Ban Act (1988), Long Beach barged its non-dewatered sludge, as part of a mutual agreement with Nassau County, to ocean disposal sites south of Long Island. Under a consent order with the United State Environmental Protection Agency (USEPA), Long Beach was mandated to investigate and develop an alternate disposal method.

In 1989, Long Beach entered into a contract with Spectraserv Incorporated to pump liquid sludge from its anaerobic digesters and transport this material via barge to a facility in Kearney, New Jersey for dewatering and disposal at an approved landfill (Midwest). This operation was prohibitively expensive. Due to digestion problems at the plant, the solids content of the sludge was 2 to 4 percent and, in essence, Long Beach was paying for the disposal of water. In 1992, Long Beach entered into a contract with Tully Contracting, Inc. to provide an on-site dewatering unit (belt press) to remove liquid and transport the remaining sludge to an approved landfill for disposal. This procedure continues to date.

In the early 1990's, Long Beach conducted a sludge composting pilot project on the Water Street site. The purpose of this three month evaluation was to assess the potential of composting wastewater sludge and to explore the marketability of the end product. The type of system utilized was the Taulman in-vessel unit. The Taulman unit is a cylindrical structure in which varying amounts of sludge and a bulking agent such as wood chips are mixed together to enhance decomposition. The pilot operation produced a rich, usable soil additive. However, the significant financial investment required to construct and operate such a facility, made this alternative infeasible.

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In 1998, Long Beach entered into an agreement with the Town of Hempstead to participate in their household hazardous waste collection program. The program, called Stop Throwing Out Pollutants (S.T.O.P.), provided residents with a disposal option for commonly generated household hazardous wastes.

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Pharmaceuticals collection is scheduled to coincide with S.T.O.P. events held in Long Beach. These events are held by the Long Beach Police Department to comply with regulations which require police oversight during pharmaceutical collection.

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Long ??? e-waste collection program, E-Cycling, has been converted into a daily disposal program. In place of the annual E-Cycling collection event, a drop-off location at the Long Beach Recreation Center located on Magnolia Boulevard has been established.

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Long Beach also implemented a fluorescent light bulb recycling program for municipal facilities in 2005 in accordance with Chapter 145 of the Laws of New York (2004). Containers for fluorescent light bulbs are provided by Northeast Lamp Recycling Incorporated. Container pickup is coordinated as needed.

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Corrugated cardboard was added to the Long ??? commercial curbside program in October 1992 and the residential sector in January 1995. Mixed paper was added to the residential and commercial program in January 1995. Aerosol cans were also added to the program in January 1995, but this practice has since been discontinued. In 2008, Long Beach added #3 (PV), #4 (LDPE), and #5 (PP) plastics to their curbside collection program. These plastics are collected in the same container as the commingled containers.

3.2 CURRENT MSW COLLECTION PROGRAM

All MSW collected is presently brought to the Merrick Transfer Station in the Town of Hempstead. The current contract with Merrick Transfer Station began January 1, 2010 and its term expires on December 31, 2020. Long Beach may dispose up to 200 tons per day or 800 tons per week at the facility at a cost of \$83 per ton. This fee includes \$80.39 for disposal plus a 2% administrative fee. Escalation of the current price occurs on September 1st of each year according to the current contract. The collection schedule for Long Beach is shown in **Table 3-1**.

Biosolids collected from the wastewater treatment plant are hauled by Tully Construction of Flushing, NY. The biosolids are disposed of at Greentree Landfill in Kersey, Pennsylvania.

Long Beach began a contract with Testani Enterprises Inc of Westbury, NY in December 2010 for hauling and recycling C&D. The contract with Testani Enterprises has a duration of one year. Under the agreement, Long Beach pays \$275, \$375, and \$475 for the disposal of 10, 15, or 20 cubic yard containers, respectively.

Table 3-1. City of Long Beach MSW Collection Schedule

Waste Stream	Location	Pickup Day
Residential MSW	East End	Monday/Thursday
	West End	Tuesday/Friday
Commercial/Multi-unit residential buildings	All	Daily
Recycling	Residential	Wednesday
	Commercial/Multi-Unit	Daily
Bulk Garbage	All	By Appointment
Metal Items & Appliances	All	By Appointment
Household Hazardous Waste (HHW)	All	S.T.O.P only
e-Cycling Drop Off	All	At Recreation Center only

3.3 CURRENT RECYCLING PROGRAM

Recycling is mandatory across all sectors of Long Beach as described in the City of Long Beach Code of Ordinances Chapter 12, Article III, Section 12-32 through 12-34. This was adopted in response to Section 120-aa of New York State General Municipal Law (see Appendix 1).

Long Beach provides recycling collection one day per week to residences and seven days per week (excluding holidays) to commercial, industrial, and institutional entities as well as residential apartment buildings. Long Beach does not police for non-compliance, however fines are issued in response to non-compliance complaints from residents.

The Sanitation Department picks up recyclables from residences, as listed in the schedule in **Table 3-1**, and delivers them to the Long Beach Transfer Station located at Riverside Boulevard and Park Place. Commercial entities are required to place commingled recyclables in clear, see through, plastic bags or purchase containers and affix "City of Long Beach ??????????" stickers. The stickers are supplied by Long Beach and the establishments are required to purchase clear bags/receptacles. Mixed paper is placed curbside as well. Corrugated cardboard is collected source separated in the commercial sector as opposed to the residential sector in which it is combined with mixed paper.

Fluorescent light bulbs are recycled in municipal facilities only.

The Long Beach Sanitation Department collects recyclables throughout the City. Long Beach collection vehicles, sanitation trucks, pickup trucks, backhoes, payloaders, etc., are used to provide recycling collection to residences and commercial establishments.

At the Transfer Station, curbside-collected recyclables are minimally processed before being hauled to Westbury Paper Stock located in Westbury, NY under a 2-year contract signed on November 1, 2010. Westbury Paper Stock accepts all mixed paper, cardboard, scrap metal and commingled materials. Under this agreement, Long Beach receives revenue for cardboard, mixed paper, and scrap metal.

The Long Beach Transfer Station is located at the southeast corner of Riverside Boulevard and Park Place and is registered in accordance with Subpart 360-1.8(h) of the general provisions of New York State Part 360 Solid Waste Management Regulations (see Appendix 4 - City of Long Beach Transfer Area Application). Approximately 1/4 of the site consists of an area paved with concrete while the 3/4 of the site is paved with recycled concrete aggregate. The paved area is divided by reinforced structural concrete dividers. The purpose of the dividers is twofold; to serve as "bay" areas for each recyclable material to prevent mixing of recycling streams while also serving as a pushwall during loading operations.

Curbside Pick-up Recyclables

- Mixed Paper
 - Cardboard
 - Newspaper
 - Junk Mail
 - Office Paper
- Commingled Materials
 - Ferrous/Non-Ferrous Cans
 - #1 - #5 Plastics
 - Glass (clear, amber, and green)

SECTION 4 PROJECTED SOLID WASTE GENERATION AND DISPOSAL

The purpose of this section is to estimate the future volume of solid waste to be generated and managed by Long Beach.

4.1 WASTE GENERATION TRENDS

In order to further evaluate trends in waste generation, the following section takes a closer look at curbside collection data. **Table 4-1** shows tons of mixed paper, corrugated cardboard, commingled containers, and municipal solid waste transported to the Town of Hempstead Merrick Transfer Station. From 2005 to 2010, the percent of recyclables collected curbside ranged from 11.7% to 13.3%.

Total MSW collected through curbside collection has decreased every year since 2005, as shown in **Figure 4-1**. When graphed, the sets of data run parallel to each other, suggesting that the recycling rate in Long Beach is relatively steady. Over the past six years, the average recycling rate was approximately 12%.

Table 4-1. Curbside Collected Solid Waste Tonnages

Material	Tons Collected					
	2005	2006	2007	2008	2009	2010
Mixed Paper	2,190.9	1,973.6	1,556.0	1,587.8	1,466.4	1,086.0
Corrugated Cardboard	0.0	257.6	548.6	674.8	428.2	551.5
Commingled Containers	728.4	824.7	924.2	1,046.7	1,077.5	1,034.5
Total Tons	2,919.3	3,055.9	3,028.9	3,309.3	2,972.1	2,671.9
Percentage	10.6%	11.5%	11.7%	13.3%	12.5%	12.2%
MSW (Energy Recovery)	24,547.3	23,560.2	22,798.4	21,663.7	20,758.3	19,261.2
Percentage	89.4%	88.5%	88.3%	86.7%	87.5%	87.8%
Total MSW and Selected Recyclables	27,466.6	26,616.1	25,827.3	24,973.0	23,730.4	21,933.2

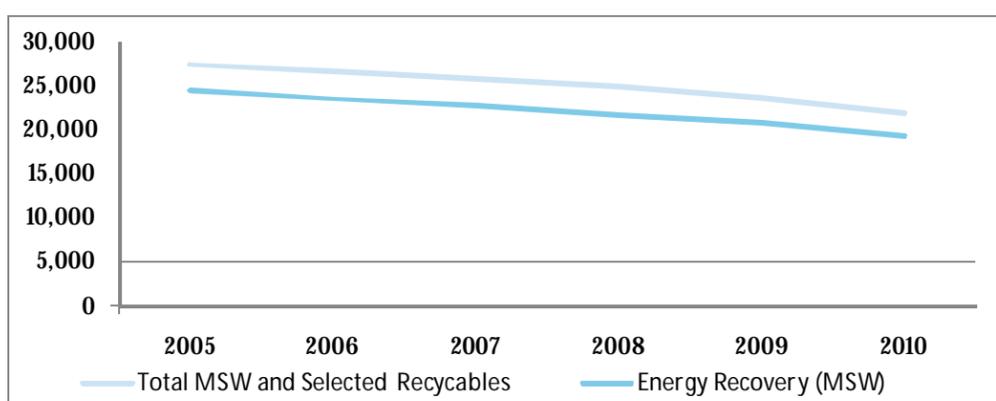


Figure 4-1. Tons of Material Collected through Curbside Collection

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- 4.1 Waste Generation Trends
- 4.2 Current Disposal of Solid Waste
- 4.3 Estimated Composition of Generated Solid Waste
- 4.4 Achieving the Beyond Waste Report Goals

Section 4 ? Projected Solid Waste Generation and Disposal

To get a better idea of this decrease in solid waste generation, the percent difference in the tons collected was calculated for each year. **Table 4-2** shows the tons collected curbside dropped by approximately 3% per year from 2005 to 2008. From 2008 to 2009, there was a decrease of 5%; and from 2009 to 2010, there was a decrease of 7.6%.

Table 4-2. Trends in Curbside Collected Solid Waste

Year	Tons Collected Curbside	Percent Change From Previous Year
2005	27,466.6	
2006	26,616.1	-3.1%
2007	25,827.3	-3.0%
2008	24,973.0	-3.3%
2009	23,730.4	-5.0%
2010	21,933.2	-7.6%

The larger decreases in solid waste generation seen from 2008 through 2010 are most likely due to the downturned United States economy, as poor economic conditions generally result in a decrease in total MSW production. Long Beach is also experiencing higher vacancy rates than in previous years.

It is unlikely that the recession and resulting decline in waste production will continue through the entire 15-year planning period, but diminished waste generation may continue for several years. Prior to 2008, MSW generation was still trending downward approximately 3% per year. Solid waste generation will likely rebound when vacancy rates normalize. However, the overall trend of residents disposing of less waste is likely to continue due to product stewardship initiatives and increased awareness of the benefits of waste reduction.

Total solid waste collected in 2010 was the base tonnage for this Plan. It is assumed that total **MSW generated will continue to decrease at a rate of 3% annually**. Therefore, total MSW generation (which includes recyclables) is assumed to decrease from 21,933 tons per year in 2010 to 17,519 tons in 2025. **Table 4-3** shows the total solid waste collected curbside from 2005 to 2010 as well as the amount ultimately sent to the Hempstead Resource Recovery Facility.

Table 4-3. Solid Waste Collected Curbside in Long Beach, 2005 ? 2010

	Total	MSW (Energy Recovery)	Total (Pounds/Capita/Day)	MSW
2005	27,467	24,547	4.52	4.04
2006	26,616	23,560	4.38	3.88
2007	25,827	22,798	4.25	3.75
2008	24,973	21,664	4.11	3.57
2009	23,730	20,758	3.91	3.42
2010	21,933	19,261	3.61	3.17

This report assumes an average increase in the recycling rate of 2% each year, starting in 2016. Under these conditions, the recycling tonnage increases from 2,672 in 2010 to 5,256 in 2025. The recycling rate will increase during this period from a current rate of 12%, to 30% in 2025, an increase of 18% from current levels.

In the NYS ? Report, a multi-faceted goal of reducing MSW destined for disposal was established. The quantitative goal was to reduce the amount of MSW to 0.6 pounds/person/day by 2030. This value will be used as a goal, however it is unlikely to be achieved within the term of this SWMP.

4.2 CURRENT COMPOSITION OF SOLID WASTE

Table 4-4 presents the tons of material collected as well as their respective percentage of the total tonnage for the year 2010.

Table 4-4. Solid Waste Generation in Long Beach, 2010 (Excluding Biosolids and C&D)

Waste Stream	Weight (Tons)	Percent of Total MSW
Energy Recovery		
Final Refuse MSW	19,261	87.5%
Recycled		
Mixed Paper	1,086	4.94%
Commingled Containers	1,035	4.70%
Corrugated Cardboard	552	2.51%
Scrap Metal	36.0	0.16%
Waste Oil	12.4	0.06%
Car Batteries	9.45	0.04%
Anti-Freeze	4.56	0.02%
Tires	4.30	0.02%
Electronics	1.63	0.01%
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TOTAL MSW	22,002	

4.3 ACHIEVING THE BEYOND WASTE REPORT GOALS

The ? Report set an aggressive goal to reduce MSW destined for disposal/energy recovery to 0.6 pounds/capita/day by the year 2030. The most realistic approach to meet this goal is to encourage a combination of a decreasing MSW generation while increasing recycling rates. **Table 4-5** shows estimated values for MSW and recycling through 2025.

The data presented in this section is based on curbside MSW in Long Beach, including recycling. Other materials such as C&D debris, biosolids, and other recyclables were not included because the generation of these materials is more difficult to influence through public outreach or other means.

4.3.1 Increasing the Recycling Rate

Currently the national average recycling rate is 33% and New York State average recycle rate is just 20%. The state has established a very aggressive goal. A recycling rate increase of this size will require a firm commitment not just from Long Beach, but also from the NYSDEC.

Long Beach can also improve recycling efforts through education and outreach programs that teach residents the importance of recycling and environmental conservation starting in grammar school. This has the added benefit of children bringing information home and helping to educate their family.

Another way to increase recycling rates is by creating a financial incentive to recycle. One example is a residential pay-as-you-throw (PAYT) program. In PAYT, the municipality typically sells MSW bags for a fee which residents must use in order to dispose of MSW to be picked up by the City. Recyclables are then collected for free. This program creates a financial incentive to recycle that has worked in many communities in New York and throughout the country.

4.3.2 Decrease the Refuse Generation Rate

Decreases in solid waste generation can be achieved through macro and micro level. At the macro level, decreases in MSW generation can be achieved through changes in consumer behavior where consumers make choices based on amount of packaging or choose to purchase less altogether. Secondly, strong product stewardship programs from the state and national level pursued with industry to lower the amount and type of packaging used in commercial trade will also reduce the overall quantity of solid waste generation.

At the micro level, sanitation districts can impose fees and regulations on solid waste collection that pursued consumers to decrease the quantities of waste. This is typically the PAYT model described above.

4-5. Table of Solid Waste Projections Based on Tonnage

Year	Final Refuse MSW			MSW Incinerated			Recyclables (total)		
	Total MSW ¹	% Decrease	Total Decrease (tons) ²	MSW Energy Recovery ¹	% Decrease	Total Decrease (tons) ²	Recyclables Tonnage ¹	Recycling Rate ³	Recyclables (total)
Actual									
2005 (actual)	27,467	—	—	24,547	—	—	2,919	11%	2,919
2006 (actual)	26,616	3%	851	23,560	4%	987	3,056	11%	3,056
2007 (actual)	25,827	3%	789	22,798	3%	762	3,029	12%	3,029
2008 (actual)	24,973	3%	854	21,664	5%	1,135	3,309	13%	3,309
2009 (actual)	23,730	5%	1,243	20,758	4%	905	2,972	13%	2,972
2010 (actual)	21,933	8%	1,797	19,261	7%	1,497	2,672	12%	2,672
5-yr Average	25,091	4%	1,107	22,098	5%	1,057	2,993	12%	2,993
5-yr Difference	5,533	—	—	5,286	—	—	247	—	247
% Total	—	—	—	—	—	—	—	—	—
Estimated/Proposed									
2011 (est.)	21,056	4%	877	18,529	4%	732	2,527	12%	2,527
2012 (est.)	20,214	4%	842	17,788	4%	741	2,426	12%	2,426
2013 (est.)	19,607	3%	606	17,254	3%	534	2,353	12%	2,353
2014 (est.)	19,215	2%	392	16,909	2%	345	2,306	12%	2,306
2015 (est.)	19,023	1%	192	16,740	1%	169	2,283	12%	2,283
2016 (est.)	18,262	4%	761	16,071	4%	670	2,191	12%	2,191
2017 (est.)	17,714	3%	548	15,234	5%	836	2,480	14%	2,480
2018 (est.)	17,183	3%	531	14,433	5%	801	2,749	16%	2,749
2019 (est.)	16,839	2%	344	13,808	4%	625	3,031	18%	3,031
2020 (est.)	16,671	1%	168	13,337	3%	471	3,334	20%	3,334
2021 (est.)	16,671	0%	0	13,003	3%	333	3,668	22%	3,668
2022 (est.)	16,837	-1%	-167	12,796	2%	207	4,041	24%	4,041
2023 (est.)	17,006	-1%	-168	12,584	2%	212	4,421	26%	4,421
2024 (est.)	17,176	-1%	-170	12,367	2%	218	4,809	28%	4,809
2025 (est.)	17,519	-2%	-344	12,264	1%	103	5,256	30%	5,256

Notes:

1. MSW tonnage for 2005-2010 based on City reported values.
2. Estimated decrease based on anticipated implementation of 2011 SWMP in 2016.
3. Recycling rate estimated to increase 2% annually through 2025 based on 2006-2010 average share.

SECTION 5 TECHNOLOGY EVALUATION

This chapter assesses program management alternatives and technologies to manage solid waste in Long Beach. This comprehensive evaluation incorporates existing program features and new technologies. The following waste management hierarchy is adopted from the State SWMP ? Report:

1. Waste Reduction
2. Recycling and Reuse
3. Waste -to-energy
4. Land Disposal

5.1 WASTE REDUCTION

Waste reduction activities are aimed at waste generators that produce waste in the process of consuming a good or service and at suppliers who provide goods and services to the generators. "Generators" can include residences or the commercial, institutional, and non-hazardous industrial sector while "suppliers" are usually companies. Both generator-centered and supplier-centered source reduction activities can be divided into three classes:

- Education and promotion;
- Financial incentives and special pricing structures; and
- Governmental regulation and prohibition.

5.1.1 Education and Promotion

Education and promotion strategies are geared toward motivating changes in volume and toxicity of MSW by increasing public awareness of the benefits of source reduction and opportunities to minimize waste generation. Effective educational programs focus on conveying several basic, actionable ideas.

Examples include:

- Altering consumer buying habits to reduce packaging from purchases;
- Encouraging product reuse and purchasing reusable goods;
- Reducing reliance on poorly made and disposable products;
- Encouraging improved maintenance and purchase of durable goods;
- Encouraging reduction in paper use by direct mail reduction, two-sided copying, plain-paper fax machines, and using online resources;

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5.1 Waste Reduction

5.2 Recycling

5.3 Waste-to-Energy Facilities

5.4 Land Burial and Other Methods

- Promoting home composting of yard waste and food scraps; and
- Promoting "grasscycling" where grass clippings decay naturally on the lawn rather than bagging them and promoting mulching lawn mowers.

Long Beach encourages waste reduction by promoting consumer and residential participation.

5.1.2 Creation of Financial Incentives and Specific Price Structures

Financial incentives and special price structures can serve as effective mechanisms for encouraging waste reduction. Some initiatives of this type include the following:

- **Reuse rebate:** Promote reuse of products or containers through direct rebates such as auto battery return and bottle/can deposit programs. Other strategies include supermarkets offering rebates to consumers who bring their own shopping bags.
- **Quantity-based user fees:** Generators pay per bag, per ton (for commercial sector), or per pickup for disposal services. These pay-as-you-throw (PAYT) systems encourage generators to be waste conscious. Recycling is picked up for free.
- **Taxation:** Taxation strategies are one way to influence the behavior of goods manufacturers. Taxation strategies include product disposal charges, litter taxes, and pollution taxes.

In an urban community such as Long Beach, a PAYT program may be effective because all waste is currently collected curbside by the City. The additional revenues that come from PAYT would be available to further fund initiatives outlined in this SWMP and pay for additional equipment or other funding needs related to solid waste.

A sizable portion of the Long Beach community consists of high-rise and multi-family dwellings, where garbage is collected "en masse." For these users, as well as commercial and industrial entities which utilize pickup services, a different fee structure would need to be developed.

5.2 RECYCLING

Long Beach currently collects recyclables from residential and commercial properties. Frequency of service and schedule are discussed in Section 3.

5.2.1. Curbside Collection

Curbside collection of recycling gives Long Beach an opportunity to directly recover recyclable waste for secondary markets while adding convenience to users and stimulating public support for recycling. Curbside collection is already in place in Long Beach as described in Section 3.

5.2.2 Commercial Recycling

Commercial establishments often generate large amounts of high-value recyclable material such as high-grade paper. As with residential recycling, savings include: (1) reduced disposal costs, and (2) revenue from material sales.

Since 1992, Long Beach has had a mandatory recycling program for the commercial sector. The requirements applicable to commercial establishments are listed in Long Beach's mandatory recycling ordinance (Appendix A).

5.2.3 Residential Recycling

Collecting recyclable materials from residences can be accomplished in two ways: 1) homeowners place materials into a single container (single stream recycling), or 2) materials are separated by type or stream at the source. In general, single-stream recycling has resulted in the greatest level of program participation. When done properly, curbside sorting can minimize or eliminate the need for post-collection processing of recovered materials.

5.2.4 Drop-Off Recycling Centers

Drop-off centers range from small sites with a few trash barrels to large sites with equipment and trailers for processing, storing, and transporting recovered materials. They can be staffed or unstaffed. Often drop-off centers are used to supplement curbside collection or other recycling opportunities. Factors to consider include: location, hours of operation, materials handled, population served, and operations and maintenance.

Due to a lack of available land for expanding existing or developing new drop off facilities, Long Beach believes that the current curbside recycling program is the most effective way for residents to recycle.

5.2.5 Recycling Collection Equipment

Recycling vehicles can range in size from pick-up trucks to over 30 cubic yards, and in cost ranging from less than \$20,000 to more than \$70,000. The correct mix of collection vehicles is vital to obtaining collection efficiency, given the particulars of home storage systems, market requirements, transportation routes, and processing capabilities.

Long Beach applied for a grant through NYSDEC in 2007 for new recycling equipment including: a HiFlow Skid Steer Loader, a front-end loader, and curbside recycling bins. Due to State budgetary constraints, it is unknown when funding will be available to purchase this equipment.

5.2.6 Recycling Facilities

After collection at drop-off centers or at the curbside, recyclables are often prepared for delivery to a material recovery facility (MRF), where recyclables are processed either mechanically or manually.

All recyclable materials are taken to the Long Beach Transfer Station where materials are periodically picked up by Westbury Paper Stock. Long Beach

has previously investigated constructing an MRF, however financial limitations and space constraints make a municipally-owned MRF infeasible.

5.2.7 Municipal Solid Waste Composting

There are three commonly accepted approaches to MSW composting: windrow pile, aerated static pile, and mechanical systems. Each system requires a different level of manual labor, equipment needs, and total processing time.

In addition to special constraints, concerns over obtaining approval from NYSDEC rendered this option unworkable. In addition, the outlay of funds required to construct and operate such a facility was prohibitive. At this time, Long beach is not considering composting of municipal solid waste.

5.2.8 Municipal Yard Trimmings Composting

Yard trimmings, generally leaf waste, destined for municipal composting programs can be collected by drop-off or curbside collection. In densely populated areas a more rapidly composting approach must be employed.

Due to population density and space constraints, Long Beach generates a small amount of yard waste. The waste is either removed by commercial landscapers or disposed of with municipal solid waste. On-site composting of yard waste at residences is not prohibited, however small lot sizes and close proximity to nearby residences makes residential composting unpopular in Long Beach.

5.3 WASTE-TO-ENERGY TECHNOLOGIES

Long Beach is currently in a 10-year contract with the Town of Hempstead to transfer municipal solid waste to the Hempstead Resource Recovery Facility, which is a mass-burn waste -to-energy facility. The current contract term runs from of January 1, 2010 to December 31, 2020. For this reason, Long Beach is not pursuing any combustion technologies.

5.3.1 Biogasification

Biogasification is a method by which anaerobic bacteria decompose organic materials into simpler compounds. This process has long been practiced in the treatment of wastewater solids. Biogasification is advantageous because: it produces a relatively clean gas product that can be used to generate electricity; it efficiently converts organic matter to usable fuel; and it can operate at low temperatures and ambient pressure.

Biogasification is not being considered in Long Beach.

5.3.2 Mass-Burn Systems

A mass-burn waste-to-energy system combusts solid waste as it is received, generally with no processing except for minor exclusion. Ferrous metals and nonferrous metals are typically recovered from the post-combustion residue.

The advantages of a mass-burn system include: proven technology, wide range of unit sizes, high energy recovery efficiency, and odor control. The

disadvantages, however, include: relatively high capital and operating costs, tall gas exhaust stacks, and public perception concerns. For these reasons, this technology is not being considered for Long Beach.

5.3.3 Refuse-Derived Fuel (RDF) Systems

The refuse-derived fuel (RDF) system is a solid waste combustion method which incorporates pre-processing of solid waste to produce a relatively uniform or homogeneous fuel with most inert, recyclable, and abrasive material removed. The energy content of the fuel is higher than unprocessed solid waste as a result. In order to produce electricity or steam, the prepared RDF is burned in a dedicated boiler. RDF can also be co-fired with biogas, wood waste, coal, or other solid fuels in a new or modified furnace.

The current receiving facility, the Hempstead Resource Recovery Facility, is an RDF system. Long Beach is not considering developing its own RDF system.

5.3.4 Fluidized Bed Combustion

Basic fluidized-bed technology has been in existence for over 60 years. This technology has been used for catalytic-cracking, chemical manufacturing, sludge processing, coal combustion, and in the last 20 years, increasingly for burning a variety of typically low-quality or waste fuels such as high-sulfur coal, peat, tires, sludges, waste oils, wood waste, and other biomass wastes.

This technology is not being considered in Long Beach.

5.4 LAND BURIAL AND OTHER METHODS

Land disposal is the least preferred method of New York State's hierarchy of waste management strategies. The state's goal is to use this method only for disposal of wastes that cannot be reduced, recycled, reused or combusted in waste-to-energy facilities.

In the past, Long Beach owned and operated a landfill to dispose of final refuse collected. As capacity for that facility was reached, waste was diverted to another receiving facility as described in Section 3 of this SWMP. The NYSDEC Long Island Landfill Law, ECL 27-0704, banned development of new landfills on Long Island. For this reason, along with land use restrictions and general disinterest, this method of MSW disposal was not explored further.

SECTION 6 INTEGRATED WASTE MANAGEMENT PLAN

Long Beach recognizes the need to continually evaluate, develop and improve its solid waste management program. As the economic climate changes and new technologies are developed, it is essential that the integrated waste management program is reevaluated to determine whether more cost-effective or efficient approaches are available for achieving diversion goals.

The purpose of this chapter is to outline the new approach to solid waste management which will allow Long Beach to work towards reaching waste diversion goals established by the NYSDEC.

6.1 PROPOSED INTERGRATED WASTE MANAGEMENT PLAN FOR LONG BEACH

The major focus for this SWMP is to improve the efficiency of the integrated solid waste management system and comply with existing state law. It is expected that many of the components proposed will be modified or eliminated as conditions change and/or further research on each program is carried out. Long Beach is considering the viability of each component described in this section while acknowledging responsibility to its citizens to balance environmental responsibility with an economically viable system.

6.2 PAY-AS-YOU-THROW

Long Beach will develop a Pay-As-You-Throw (PAYT) program in an effort to address State ? goals and aid in overall reduction of MSW accumulation. PAYT programs in comparable cities throughout the country have proven to be successful in increasing recycling rates by providing a financial incentive to separate and remove recyclables from the waste stream.

In order to initiate a substantial change in solid waste management, Long Beach will first conduct a market study which will assess comparative programs in similar municipalities. Following the results of that study, Long Beach will begin to set goals for the program and conduct a feasibility study to ensure PAYT is a reasonable waste management option. If the program is deemed feasible, an implementation plan, which is likely to include a pilot study prior to full-scale implementation.

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- 6.1 Proposed Integrated Waste Management Plan
- 6.2 Pay As You Throw
- 6.3 Public Education
- 6.4 Waste Reduction and Recycling Program Improvements
- 6.5 Procedural Changes
- 6.6 Solid Waste Disposal
- 6.7 Policy Compliance

6.2.1 Market Study

Long Beach will begin PAYT program assessment by developing a task force whose primary responsibility is to oversee assessment, development, and implementation of the PAYT program. The first priority of the task force will be to conduct a market study to assess similar communities and successful PAYT programs.

Along with the market study, Long Beach will set realistic goals and expectations that will be used for development of the implementation plan. These goals will account for resident needs as well as commercial and industrial sector priorities. Considerations will be made for ? environmental goals, economic conditions, financial feasibility, resident and private sector accessibility, municipal law, and other waste management concerns.

6.2.2 Feasibility Study

The task force will work with a consultant to conduct a feasibility study based on the goals outlined previously. Recycling rates and final refuse MSW will be assessed and monitored. Considerations will include pay-per-bag prices, container options, rate structure, and program monitoring needs. Following conclusion of the feasibility study, Long Beach will determine if PAYT is feasible.

6.2.3 Implementation Plan

If PAYT is determined to be feasible, Long Beach will move forward with an implementation plan that details costs to residents, cost per bag, container options, container and bag suppliers, outreach and education, and reporting measures to assess the success of the program over time. The implementation plan will also provide a detailed schedule.

In addition, Long Beach will develop and pass a by-law which requires residents to participate in the PAYT program.

6.2.4 Pilot Study

Before full scale implementation, Long Beach will begin PAYT in a small area to test the implementation plan. Residents will be provided with education and outreach materials and open informational sessions will be held. The timeline of the pilot study will allow Long Beach to give residents enough time to make accommodations for the change and give enough lead time for rental and investment property owners to notify tenants.

6.2.5 PAYT Implementation

The pilot study will give Long Beach an opportunity to assess full-scale implementation and redevelop any program areas which require improvement. When appropriate, Long Beach will proceed with full scale implementation to all residents. Staff will be available to hear resident questions and concerns and host several informational sessions while extra resources will be made available to ensure the success of the program.

6.3 PUBLIC EDUCATION

Education and outreach is crucial to ensuring participation in the new PAYT program, overall waste reduction, and increasing recycling rates. Specifics on the proposed education and outreach program are proposed below.

6.3.1 Public Outreach Programs

Long Beach has actively promoted recycling and waste reduction programs for some time. Informative newsletters and flyers are sent out routinely to provide reminders to reuse, recycle and reduce waste. In addition, Long Beach routinely publishes notices and articles in local newspapers apprising residents of local environmental events or recycling program changes.

With the introduction of the PAYT program, residents and businesses will need information to understand the new regulations and procedural changes. For this reason, public education and outreach programs leading up to the roll out of PAYT will focus on changes to waste collection, benefits of PAYT, and how increased recycling will aid softening the financial impact of the change.

6.3.2 School Recycling Programs

Long Beach has been working with local school administrators to promote the concepts of solid waste management and recycling in the classroom. A significant amount of educational literature and material has been distributed to aid this effort and recycling programs have been set up in many classrooms. This is especially important at the grammar and intermediate school levels where such practices will become routine habits in the future if instilled at an early age. Long Beach hopes to maintain this program in the future.

In the past, Long Beach has made presentations to classrooms and at the local library regarding solid waste issues and recycling. These sessions focus on informing the students about the problems with garbage and the merits of recycling and reuse. A key aspect of the presentation involves illustrating how recycled materials are used in every day operations. Long Beach will continue to work with local school administrators/educators in evaluating/developing a series of lectures or seminars that deal with various environmental issues related to solid waste management.

6.3.3 Presentations to Civic Groups

Long Beach often responds to requests by various civic groups and organizations to make presentations regarding solid waste issues and recycling. Such sessions are routinely held by the League of Women Voters, The Long Beach Environmental Committee, Long Beach Chamber of Commerce, and other local organizations. This effort will continue in the future, particularly as PAYT is rolled out.

6.4 WASTE REDUCTION AND RECYCLING PROGRAM IMPROVEMENTS

The curbside recycling program has been in place for over 25 years. During that period, opportunities for expanding the program were actively sought while overall cost-effectiveness was improved. Long Beach recognizes that in order to make progress towards the diversion goals in this SWMP and the ? Report, large fractions of its waste stream will need to be diverted by waste reduction and recycling efforts. Long Beach is committed to its diversion goals to the extent that they are consistent with its historical approach to recycling: decreasing overall solid waste system costs by increasing diversion. Long Beach believes that the adoption and implementation of the PAYT program will address these goals.

6.4.1 Expand Yard Waste Composting

Because yard trimmings comprise such a small portion of Long Beach's waste stream, it is unlikely that curbside collection would include these materials. Long Beach intends to continue promoting on-site management of yard trimmings by residents and commercial establishments. In addition, consideration will be given to develop an ordinance that requires private and commercial landscapers to compost yard trimmings. To accommodate residents that do their own yard work, Long Beach will evaluate the possibility of locating a small drop-off area where yard waste could be composted. Home composting programs may also be considered.

6.4.2 Expand Commercial and Residential Recycling

PAYT programs have historically increased recycling rates immediately following adoption due to the financial incentive to separate recyclables, which are free to dispose of, while final refuse MSW must be disposed for a fee. Long Beach anticipates that this change will lead to demand for an expanded recycling program.

Materials that have been collected as part of the curbside recycling program have historically been dictated by market trends and associated internal labor and equipment costs. Depending on future market demands, it may become cost-effective to alter or add to the current list of recycled materials. Long Beach will continue to evaluate opportunities for expanding its recycling and waste reduction programs throughout the planning period.

6.4.3 Upgrade Recycling Fleet

Long Beach requested a grant from the NYSDEC on August 23, 2007 under the NYSDEC Waste Reduction and Recycling Program to purchase two side-loading recycling vehicles, two rear-loading recycling vehicles, a HiFlow Skid Steer Loader with attachments, a front-end loader with attachments and recycling bins. The total eligible cost of the requested equipment is \$596,254 of which Long Beach would be responsible for \$298,127. Currently the request is #816 on the NYSDEC list, and the NYSDEC is currently at #812. Due to

budgetary constraints on the State level, it is unknown when funding under this program will become available.

6.5 PROCEDURAL CHANGES

The PAYT program is anticipated to have few procedural changes following implementation. However, during development and initial implementation adjustments will need to be made in order to ensure compliance with PAYT by all residents. In addition, evaluating procedural and administrative elements may enhance existing and proposed diversion programs by insuring efficient and cost-effective management. Various procedural/administrative elements that are under active consideration are described below.

6.5.1 Enforce PAYT and Recycling Ordinances

The PAYT will be implemented in 2016. To ensure compliance with this program, Long Beach will evaluate and adjust, as needed, existing collection procedures. In addition, recycling in Long Beach is mandatory and subject to fines for non-compliance. Historically, penalty provisions have been enforced only when there is a complaint. Further assessment of the current program, however, suggests commercial and residential generators are not in full compliance with the ordinance. While it is likely that implementation of PAYT will alleviate this issue, Long Beach will evaluate the best methods for warnings and enforcement in the interim and consider audits and/or other observation methods to ensure compliance through 2025.

6.5.2 Improve Recyclable Accounting Methods

Long Beach has routinely sought input from commercial establishments for battery, waste oil, and construction debris recycling rates. Long Beach intends to continue and expand upon this effort in the near tenor by considering, for example, defective items removed by auto garages that may be repurposed. Improved data collection procedures will be evaluated in the future.

6.5.3 Support Statewide Proposals and Legislation

Long Beach will continue to encourage and support local and state efforts to promote and develop solid waste reduction legislation.

6.5.4 Institute Waste Reduction Procurement

Long Beach has been active in specifying a preference for recyclable products in procurement and bidding exercises. Changing procurement procedures to specify the purchase of items that minimize packaging will be evaluated.

6.6 SOLID WASTE DISPOSAL

All refuse is currently disposed at the Hempstead Resource Recovery Facility. The contract with the Town of Hempstead expires in 2020. This arrangement has been effective however Long Beach will evaluate all possible alternatives before negotiating a new contract in 2020.

Long Beach may also consider consolidating all solid waste disposal contracts and services in order to provide more cost-effective waste disposal. Currently, separate services are procured for the disposal of recyclables, C & D and wastewater sludge. A consolidated disposal contract could offer cost benefits as well as provide for better overall service and cooperation.

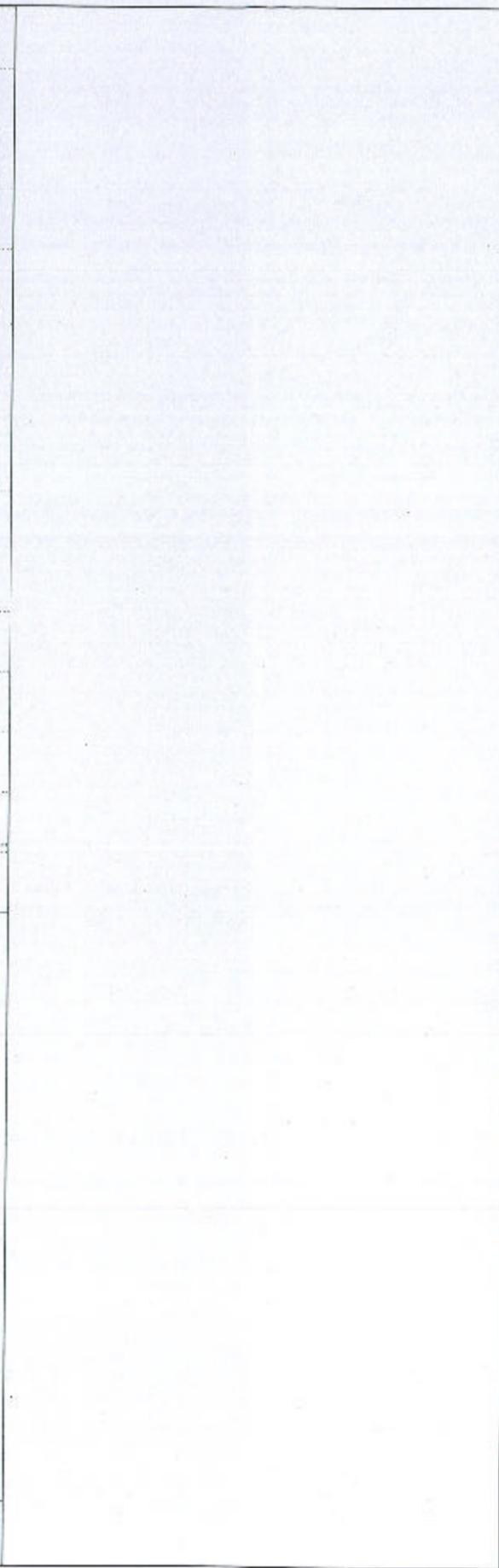
6.7 POLICY COMPLIANCE

This SWMP is consistent with the goals set forth in The Solid Waste Management Act of 1988 which established a statewide goal to maximize solid waste reduction and recovery to the extent economically and technically feasible.

SECTION 7 IMPLEMENTATION SCHEDULE

As described in Section 6, many of the elements outlined for 2010 through 2025 have been in place for more than a decade. The new element introduced in this SWMP is the PAYT program which will be implemented in 2016. In order to reach that goal, the City must first conduct a series of assessments, develop and pass a by-law which requires residents and applicable commercial entities to dispose of waste using City issued bags, detail an implementation plan which includes product supplier contracts, and conduct a pilot study. The implementation schedule is displayed in **Table 7-1**.

ID	Task Name	Duration	Start	Finish	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
1	Market Study	261 days	Mon 1/2/12	Mon 12/31/12																	
2	Goal Setting	261 days	Mon 1/2/12	Mon 12/31/12																	
3	Feasibility Study	261 days	Tue 1/1/13	Tue 12/31/13																	
4	Implementation Plan	261 days	Wed 1/1/14	Wed 12/31/14																	
5	By-law Passec	261 days	Wed 1/1/14	Wed 12/31/14																	
6	Commercial Pilot Study	261 days	Thu 1/1/15	Thu 12/31/15																	
7	Plan Modifications	391 days	Thu 1/1/15	Thu 6/30/16																	
8	Implementation	262 days	Thu 6/30/16	Fri 6/30/17																	
9	Residential Pilot Study	262 days	Thu 6/29/17	Fri 6/29/18																	
10	Plan Modifications	393 days	Fri 6/29/18	Tue 12/31/19																	
11	PAYT Program Active	1566 days	Wed 1/1/20	Wed 12/31/25																	



Project: 2011 SWMP Schedule.mpp
Date: Tue 2/14/12

Task Split Progress

Milestone Summary Project Summary

External Tasks External Milestone Deadline

Appendix A
Public Comment Summary
(to be appended following receipt of comments)

Appendix B
State Environmental Quality Review
(to be appended following receipt of comments)

Appendix C – Long Beach Code of Ordinances
Chapter 12. Garbage and Refuse

Long Beach, New York, Code of Ordinances >> PART II - CODE OF ORDINANCES >> Chapter 12 - GARBAGE AND REFUSE >>

Chapter 12 - GARBAGE AND REFUSE [42]

[ARTICLE I. - IN GENERAL](#)
[ARTICLE II. - CITY COLLECTIONS](#)
[ARTICLE III. - RECYCLING](#)

FOOTNOTE(S):

⁽⁴²⁾ **Cross reference**— Roll-off containers or dumpsters, § 7-240 et seq. [\(Back\)](#)

Long Beach, New York, Code of Ordinances >> PART II - CODE OF ORDINANCES >> Chapter 12 - GARBAGE AND REFUSE >> ARTICLE I. - IN GENERAL >>

ARTICLE I. - IN GENERAL [43]

[Sec. 12-1. - Improper disposal of refuse.](#)
[Sec. 12-2. - Hospital and medical laboratory waste.](#)
[Sec. 12-3. - "Person" defined.](#)
[Sec. 12-4. - Penalties.](#)
[Secs. 12-5—12-17. - Reserved.](#)

Sec. 12-1. - Improper disposal of refuse.

- (a) No person shall dump any ashes, garbage, refuse or debris on any land within the geographical boundaries of the city or upon those areas over which the city has jurisdiction (including but not limited to all streets, avenues, boulevards, roads, runways, alleys, sidewalks, public way, the land adjacent to the bulkhead on the bay front, the Ocean Beach Park, (as defined in [section 18-13](#) of this Code), public parks and any vacant land or lots within the city), except with the prior written consent and permission of the city council.
- (b) Any person committing an offense under the provisions of this section shall be guilty of a violation. Each occurrence shall constitute a separate and distinct violation. If the violation is of a continuing nature, each day during which it occurs shall constitute an additional, separate and distinct violation. Each violation, upon conviction, shall be punishable by a fine and/or imprisonment in accordance with the following schedule:
- (1) Upon a first conviction, by a fine not less than one hundred dollars (\$100.00) and not more than five hundred dollars (\$500.00) or by imprisonment for a period not to exceed seven (7) days or by both such fine and imprisonment.
 - (2) Upon a second conviction, by a fine not less than two hundred fifty dollars (\$250.00) and not more than one thousand dollars (\$1,000.00) or by imprisonment for a period not to exceed ten (10) days or by both such fine and imprisonment.
 - (3) Upon a third conviction or subsequent conviction, by a fine not less than five hundred dollars (\$500.00) and not more than two thousand five hundred dollars (\$2,500.00) or by imprisonment for a period not to exceed fifteen (15) days or by both such fine and imprisonment.

(Ord. No. 1884/97, § 1, 6-17-97)

Sec. 12-2. - Hospital and medical laboratory waste.

- (a) No infectious waste material shall be dumped on any land within the geographical boundaries of the city or upon those areas which the city has jurisdiction (including but not limited to all streets, avenues, boulevards, roads, runways, alleys, sidewalks, public ways, the land adjacent to the bulkhead on the bay front, the Ocean Beach Park, as defined in [section 18-13](#) of this Code, public parks and any vacant land or lots within the city).
- (b) Any person committing an offense under the provisions of this section shall be guilty of a violation. Each

occurrence shall constitute a separate and distinct violation. If the violation is of a continuing nature, each day during which it occurs shall constitute an additional, separate and distinct violation. Each violation, upon conviction, shall be punishable by a fine of not less than one thousand dollars (\$1,000.00) and not more than ten thousand dollars (\$10,000.00) or by imprisonment for a period not to exceed fifteen (15) days or by both such fine and imprisonment.

- (c) The provisions of the New York Public Health Law and the Rules and Regulations of the Health Department for the State of New York shall control the interpretation of this section.

(Ord. No. 1884/97, § 1, 6-17-97)

Sec. 12-3. - "Person" defined.

The word "person" as used in this chapter shall be construed to include any individual, association, firm, partnership, corporation, company or other entity and includes any officer, employee, department or agency of the above.

(Ord. No. 1884/97, § 1, 6-17-97)

Sec. 12-4. - Penalties.

Where a penalty is not specified, any person who commits an offense under the provisions of this chapter shall be guilty of a violation. Each occurrence shall constitute a separate and distinct violation. If the violation is of a continuing nature, each day during which it occurs shall constitute an additional, separate and distinct violation. Each violation, upon conviction, shall be punishable by a fine not exceeding two hundred fifty dollars (\$250.00), or by imprisonment not exceeding fifteen (15) days or by both such fine and imprisonment.

(Ord. No. 1884/97, § 1, 6-17-97)

Secs. 12-5—12-17. - Reserved.

FOOTNOTE(S):

⁽⁴³⁾ **Editor's note**— Ord. No. 1884/97, § 1, adopted June 17, 1997, amended the Code by repealing Art. I, §§ 12-1—12-3, and adding a new Art. I, §§ 12-1—12-4. Former Art. I pertained to similar subject matter, and derived from the Code of 1957, §§ 2-414.12(D) and 6-217; Ord. No. 3326-A, adopted July 5, 1960; Ord. No. 723, adopted July 7, 1964; Ord. No. 1133/72, adopted July 11, 1972; Ord. No. 1145/72, adopted October 3, 1972; Ord. No. 1153/72, adopted December 12, 1972; Ord. No. 1683, adopted January 3, 1989; and Ord. No. 1777/92, adopted April 7, 1992. ([Back](#))

Long Beach, New York, Code of Ordinances >> PART II - CODE OF ORDINANCES >> Chapter 12 - GARBAGE AND REFUSE >> ARTICLE II. - CITY COLLECTIONS >>

ARTICLE II. - CITY COLLECTIONS

[DIVISION 1. - GENERALLY](#)

[DIVISION 2. - DEPARTMENT OF SANITATION](#)

Long Beach, New York, Code of Ordinances >> PART II - CODE OF ORDINANCES >> Chapter 12 - GARBAGE AND REFUSE >> ARTICLE II. - CITY COLLECTIONS >> DIVISION 1. - GENERALLY >>

DIVISION 1. - GENERALLY

[Sec. 12-18. - Persons in charge of premises to provide receptacles for garbage: location.](#)

[Sec. 12-19. - Regulations to be promulgated by city manager concerning collection of garbage and refuse.](#)

[Sec. 12-19.1. - Reserved.](#)

[Sec. 12-20. - Noncollectible refuse.](#)

[Sec. 12-21. - Placement of containers for collection.](#)

[Sec. 12-22. - Cleanliness of receptacles.](#)

[Sec. 12-23. - Service charges for collection of garbage imposed on commercial establishments.](#)

[Sec. 12-24. - Sanitation charges for collection of garbage imposed on residential properties.](#)

[Sec. 12-25. - Supervision of collection and disposal operations.](#)

[Sec. 12-26. - Private incineration or burning of solid waste prohibited.](#)

[Sec. 12-27. - Bulk collections.](#)

[Secs. 12-28, 12-29. - Reserved.](#)

Sec. 12-18. - Persons in charge of premises to provide receptacles for garbage; location.

- (a) It shall be the duty of each owner, lessee, tenant, householder, occupant, superintendent or manager of any building, premises or place of business in the city where garbage, refuse or ashes is produced, accumulated or exists, to provide himself or cause to be provided, and at all times to keep in the building or upon the premises or place of business, suitable and efficient galvanized or other metal receptacles fitted with tight covers for receiving and holding, without leakage, all garbage that may accumulate from the building, place of business or premises, or portion of the premises of which the person may be the owner, tenant, lessee, occupant, superintendent or manager.
- (b) Each metal receptacle required by subsection (a) for the reception and retention of garbage shall be kept on the premises no nearer to the street than the building line of the premises; and the receptacles shall not remain on any sidewalk or in any exposed place longer than may be necessary for the removal of the contents thereof, and the receptacles shall at all times be kept securely closed and covered.
- (c) The metal receptacles required by subsection (a) shall have a bail or handles for convenience in handling and shall be placed and kept at all times other than the period for the collection of the contents thereof, in a place sheltered from snow and inclement weather and safe from the interference of dogs and cats and sufficiently removed from the adjoining premises to prevent any offense thereto.
- (d) It shall be unlawful and a violation of this chapter for any person, firm or corporation specified in subsection (a) to install, cause to be installed or permit to exist after July 1, 1988, any in-ground receptacle or storage space designed for the accumulation of garbage or refuse, all or any portion of which is below the level of the adjoining ground.

(Code 1957, § 2-414.12; Ord. No. 1657/88, § 1, 4-5-88)

Sec. 12-19. - Regulations to be promulgated by city manager concerning collection of garbage and refuse.

The city manager is authorized and empowered to promulgate rules and regulations concerning all details and requirements in connection with the times, places and manner of collection of garbage and refuse, and details and requirements as to times, places and manner of placement of garbage and refuse for collection. Such rules and regulations shall have all of the force and effect of a provision of this Code of Ordinances from and after the dates therein specified when published in the official newspaper of the City of Long Beach.

(Ord. No. 1658/88, § 1, 4-5-88)

Editor's note—

Ord. No. 1658/88, § 1, adopted April 5, 1988, repealed [§ 12-19](#) in its entirety and enacted new provisions therefor.

Former [§ 12-19](#) was concerned with receptacles for refuse other than garbage and derived from the Code of 1957, § 2-414.12.

Sec. 12-19.1. - Reserved.

Editor's note—

[Section 12-19.1](#), relating to recycling newspapers, derived from Code of 1957, § 2-414(c)(5)(a), (b), and Ord. Nos. 1126/72, 1144/72 and 1633/87, was repealed by § 1 of Ord. No. 1787/92, adopted Sept. 1, 1992. See art. III of this chapter, [§ 12-32](#) et seq.

Sec. 12-20. - Noncollectible refuse.

No dirt, earthen matter, ashes nor construction or demolition debris shall be collected as refuse, and such materials shall not be placed or deposited for collection as refuse.

(Ord. No. 1658/88, § 2, 4-5-88)

Editor's note—

Ord. No. 1658/88, § 2, adopted April 5, 1988, repealed [§ 12-20](#) in its entirety and enacted new provisions therefor.

Former [§ 12-20](#) was concerned with separate receptacles for dirt and ashes, and derived from the Code of 1957,

§ 2-414.12.

Sec. 12-21. - Placement of containers for collection.

In all residential areas of the city it shall be unlawful to keep any garbage or refuse receptacle required by this division at any place other than one no closer to the curb than the building line nor farther from the curb than twenty (20) feet from the building line. In commercial areas, in premises having an alley to the rear or side thereof, the receptacles shall be kept on the side of the building adjacent to the alley against the building; in premises having no alley but having a driveway, the receptacles shall be kept in the driveway in the same location as that described in this section for residential areas; in premises having no driveway or alley, the receptacles may be kept on the sidewalk, for the period permitted by this division, against the side of the building.

(Code 1957, § 2-414.12)

Sec. 12-22. - Cleanliness of receptacles.

All garbage receptacles and all other receptacles required by this division shall be kept clean and in a sanitary condition by the owners thereof.

(Code 1957, § 2-414.12)

Sec. 12-23. - Service charges for collection of garbage imposed on commercial establishments.

(a) The department of sanitation shall collect garbage, refuse and ashes from all commercial establishments upon the payment in advance of the quarter-annual service charges fixed for each such respective establishment, which charges shall be billed on the first day of each of the months of July, October, January and April in each fiscal year, and shall be paid quarter-annually by the owner or operator of each such establishment on or before the tenth day of each such respective month. If such payment is not received by the City of Long Beach from the owner or operator of such establishment on or before the tenth day of each such respective month, then upon notice of such default to the owner of the subject premises upon which the commercial establishment is operating, the owner of said premises is required to pay such quarter-annual service charges within ten (10) days after notice of such default is given to such owner of said premises.

- (1) *Commercial use:* The charge for each commercial establishment shall be based upon a survey conducted by the city, which survey shall be available for inspection by any person affected by the same, computed at the rate of twenty-three dollars and forty cents (\$23.40) per cubic yard, as disclosed by such survey. Such survey shall remain effective until it shall be superseded by a subsequent survey.
- (2) Anything contained in the preceding paragraph (1) notwithstanding, the collection charge for hotels, adult homes, convalescent homes, nursing homes and other similar establishments shall be one hundred sixty-five dollars (\$165.00) per annum per unit.
- (3) *Long Beach housing authority:* the charge for each building owned and/or operated by the housing authority shall be based on a survey conducted by the city, which survey shall be available for inspection by the housing authority. Based on the cooperation agreements entered into between the city and the housing authority, unless there is an agreement to the contrary, the user fee shall be based on a per cubic yard usage, as disclosed by the survey and shall be computed at a rate of seventy-five (75) percent of the commercial use as set forth in (a)(1) above. The survey shall remain effective until it shall be superseded by a subsequent survey. If the owner or operator of the commercial establishment or the landlord or owner of the subject premises upon which any commercial establishment operates disputes or shall make a complaint concerning the inequities in the application of the foregoing collection charges, such dispute or complaint must be made in writing to the city manager within thirty (30) days from the date the charges are billed.

The city manager may hear, investigate and determine any complaints concerning specific charges or inequities in the application of such charges and may make equitable adjustments on the basis of the foregoing criteria.

(b) The minimum collection charge for any commercial establishment shall be one hundred five dollars (\$105.00) per quarter.

(c) *Storage:*

- (1) All commercial garbage and refuse shall be placed in plastic, sealed bags at curbside, no larger than twenty (20) gallons' capacity.
 - a. In no event shall there be any oil or grease left for the city's curbside collection program. The owner, manager and/or operator of the commercial establishment shall be responsible for the proper disposal and labeling of such refuse by private collection.
- (2) All cardboard and paper shall be broken down, baled or tied.

- (3) If a compactor is utilized, the maximum compacted weight per bale shall not exceed forty (40) pounds.
- (d) Notwithstanding the provisions of this Code or any other city ordinance, all fees and charges for the collection of garbage, refuse and ashes by the department of sanitation provided for by this section shall be payable in advance by any seasonal commercial establishment for the period from the date of the issuance of a license under an applicable provision of this Code or other city ordinance to the last day of September of the then current year where the charge is on a seasonal basis; or for the period from the date of the issuance of a license under an applicable provision of this Code or other city ordinance to September tenth of the then current year where the charge is on a monthly basis.
- (e) In the event of nonpayment of the fees fixed in this section, collection service may be discontinued; and, if payment is not made within thirty (30) days after the due date, a penalty shall be imposed at the rate of one and one-half (1½) percent per month from the date payment is due until the date payment is made.
- (f) Notwithstanding any prior provision of this section, all fees and charges for the collection of garbage, refuse and ashes by the department of sanitation from the housing authority as provided in this section shall be payable at the end of the month following the collection. Billing shall be made at the end of the month and shall be payable within thirty (30) days of the housing authority being billed.

(Code 1957, § 2-414.12(A—C); Ord. No. 460-N, § 1, 7-5-60; Ord. No. 460-O, § 1, 9-6-60; Ord. No. 460-P, § 1, 10-4-60; Ord. No. 780, § 1, 3-1-66; Ord. No. 861, § 1, 10-3-67; Ord. No. 1097/71, §§ 1—3, 11-29-71; Ord. No. 1129/72, § 1, 6-6-72; Ord. No. 1147/72, § 1, 10-3-72; Ord. No. 1192/73, § 1, 12-18-73; Ord. No. 1261/74, § 1, 11-26-74; Ord. No. 1300/75, § 1, 11-18-75; Ord. No. 1401/79, § 1, 8-21-79; Ord. No. 1408/79, §§ 1, 2, 12-18-79; Ord. No. 1412/80, §§ 1, 2, 3-4-80; Ord. No. 1468/82, § 1, 3-16-82; Ord. No. 1491/83, § 1, 2-1-83; Ord. No. 1548/84, § 1, 5-29-84; Ord. No. 1632/87, § 3, 7-21-87; Ord. No. 1719-90, § 1, 4-3-90; Ord. No. 1771/92, § 1, 1-7-92; Ord. No. 1782/92, § 1, 6-16-92; Ord. No. 1884/97, § 1, 6-17-97; Ord. No. 1913/99, § 1, 4-20-99; Ord. No. 1921/99, § 1, 7-6-99; Ord. No. 1958/02, § 1, 6-18-02; Ord. No. 1990/04, § 1, 7-20-04)

Sec. 12-24. - Sanitation charges for collection of garbage imposed on residential properties.

- (a) The owner or owners of every parcel of real property in the city in which one (1) or more residential units is or are located shall pay to the city annually in advance one-half (½) on July 1 of each year, beginning July 1, 2005, and one-half (½) on January 1 of each year, beginning January 1, 2006, sanitation charges in the amount of three hundred twenty-five dollars (\$325.00) for each residential unit contained in such parcel of property for the collection of garbage, paper and refuse from said premises.
- (b) Bills for such residential sanitation charges shall be mailed to each such owner or other person to whom tax bills for said premises are mailed, and shall be due and payable and shall become a lien on such premises one-half (½) on July 1 and one-half (½) on January 1 of each year in advance, and may be paid without interest or penalty on or before July 31 and January 31 next succeeding the due date. If July 31 or January 31 falls on a Saturday, Sunday or legal holiday, such residential sanitation charge may be paid without penalty not later than the next business day.
- (c) The failure to mail or to receive a bill for any sanitation charges shall not affect the validity of any such sanitation charge.

(Ord. No. 1548/84, § 2, 5-29-84; Ord. No. 1750/91, § 1, 4-16-91; Ord. No. 1778/92, § 1, 4-21-92; Ord. No. 1884/97, § 1, 6-17-97; Ord. No. 1921/99, § 1, 7-6-99; Ord. No. 1958/02, § 1, 6-18-02; Ord. No. 2001/05, § 1, 5-3-05)

Editor's note—

Section 12-24, relative to charges imposed on outside contractors for use of city incinerator was repealed by § 2 of Ord. No. 1548/84, enacted May 29, 1984. Said section derived from Code 1957, § 2-414.12; Ord. No. 460-M, § 1, Oct. 6, 1959. Further, § 2 of Ord. No. 1548/84 enacted a new § 12-24 as set out above.

Sec. 12-25. - Supervision of collection and disposal operations.

- (a) All refuse accumulated in the city shall be collected, conveyed and disposed of under the supervision of the superintendent of operations, or next in charge, who shall have the authority to make regulations concerning the days of collection, type and location of waste containers, and such other matters pertaining to the collection, conveyance and disposal as shall be found necessary, and to change and modify the same, after notice as required by law, provided that such regulations are not contrary to the provisions hereunder.
- (b) The superintendent of operations, or next in charge, may provide for the disposal of refuse collected in a sanitary district, village or town at a site owned and maintained by the City of Long Beach for the disposal of refuse, and the superintendent of operations, or next in charge, shall have the authority to make regulations with respect thereto.
- (c) The disposal of the refuse shall be by incineration or other means consistent with accepted practices as prescribed by the superintendent of operations, or next in charge, or any other governmental agency having authority to control or regulate such facilities.
- (d) Regulations as to hours of operation at the incineration site, the outside pickup zones, the type and volume of materials considered to be acceptable or any other regulations concerning the control of refuse shall be

established, modified and revised by the superintendent of operations, or next in charge, from time to time, as operational conditions may require.

- (e) The superintendent of operations, or next in charge, may reject any and all refuse brought for disposal.
(Code 1957, § 2-414.12(C)(6); Ord. No. 1141/72, § 1, 8-1-72)

Sec. 12-26. - Private incineration or burning of solid waste prohibited.

- (a) *Purpose.* The purpose of this section is to reduce to a minimum the dissemination of smoke, gas, dust, odor or any other atmospheric pollutant caused by private incineration of garbage and solid wastes within the City of Long Beach to ensure and maintain a reasonable degree of purity of the air resources therein and maintain and improve the natural and environmental resources for the protection of our present and future citizens.
- (b) Commencing six (6) months after the effective date of this section, no person shall use, or permit the use of, or operation of, refuse burning equipment or incinerators within the City of Long Beach.
- (c) Any person who shall violate the provisions of this section shall be guilty of a violation punishable for each violation by a fine not exceeding two hundred fifty dollars (\$250.00), or by imprisonment not exceeding fifteen (15) days, or by both such fine and imprisonment. Each day such violation continues shall constitute a separate violation.

(Ord. No. 1257/74, § 1, 11-6-74)

Sec. 12-27. - Bulk collections.

- (a) No person shall place any bulk items at the curb for collection at any time other than as prescribed pursuant to [section 12-25](#) of this chapter.
- (b) All bulk items to be collected shall be placed at the curb for collection between the hours of 9:00 p.m. on the evening prior to the specified appointment date described in subdivision (a) herein and 7:00 a.m. on the said specified appointment date and at no other time or times.
- (c) For the purposes of this section, "bulk items for collection" shall be defined as any large items being discarded that cannot be contained in the receptacles required by subsection [12-18\(a\)](#) of this chapter and shall include but not be limited to, such items as major kitchen appliances, furniture, mattresses, lumber and other sizable objects.

(Ord. No. 1427/80, § 1, 8-5-80; Ord. No. 1488/82, § 1, 11-3-82)

Secs. 12-28, 12-29. - Reserved.

Long Beach, New York, Code of Ordinances >> PART II - CODE OF ORDINANCES >> Chapter 12 - GARBAGE AND REFUSE >> ARTICLE II. - CITY COLLECTIONS >> DIVISION 2. - DEPARTMENT OF SANITATION >>

DIVISION 2. - DEPARTMENT OF SANITATION

[Sec. 12-30. - Created.](#)

[Sec. 12-31. - Superintendent of sanitation.](#)

Sec. 12-30. - Created.

There shall be a department of sanitation under the supervision and direction of a superintendent of sanitation.

(Code 1957, § 2-414.12; Ord. No. 1658/88, § 3, 4-5-88)

Sec. 12-31. - Superintendent of sanitation.

A superintendent of sanitation shall be appointed by the city manager. The compensation of the superintendent of sanitation shall be fixed by the council.

(Code 1957, § 2-414.12)

Long Beach, New York, Code of Ordinances >> PART II - CODE OF ORDINANCES >> Chapter 12 - GARBAGE

AND REFUSE >> ARTICLE III. - RECYCLING >>**ARTICLE III. - RECYCLING**

[Sec. 12-32. - Legislative intent.](#)

[Sec. 12-33. - Definitions.](#)

[Sec. 12-34. - Curbside collection established.](#)

[Sec. 12-35. - Preparation of recyclable materials for curbside collection.](#)

[Sec. 12-36. - Containers designated for recyclable materials.](#)

[Sec. 12-37. - Collection of recyclable materials.](#)

[Sec. 12-38. - Unlawful and nuisance activities.](#)

[Sec. 12-39. - Enforcement: Promulgation of additional rules and regulations.](#)

[Sec. 12-40. - Discontinuing solid waste collection.](#)

[Sec. 12-41. - Private solid waste collection contracts.](#)

[Sec. 12-42. - Penalties for Offense.](#)

[Sec. 12-43. - Miscellaneous.](#)

[Sec. 12-44. - Effective date.](#)

Sec. 12-32. - Legislative intent.

In order to reduce the economic and environmental costs associated with the disposal of solid waste and further encourage the reuse of recyclable materials, the City of Long Beach hereby establishes a comprehensive recycling program which will be mandatory for all residential, commercial, industrial and institutional entities within the city limits. The goal of this program is to remove those recyclable materials that are deemed to be economically marketable. By doing so, the city can effectively promote the reuse of valuable materials, preserve natural resources and decrease potential contaminants from entering the environment. The implementation of said comprehensive recycling program will result in an immediate decrease in the amount of disposable solid waste and correspondingly reduce the costs expended on such disposal, thus providing relief to taxpayers within the City of Long Beach.

The enactment of this legislation will permit the city to conform with applicable provisions of the New York State Solid Waste Management Act of 1988, which requires that local municipalities adopt laws which provide for regulating and enforcing the separation of solid waste into economically marketable, recyclable and/or reusable components.

In addition, this section of the Municipal Code of the City of Long Beach shall serve as the city's endorsement and promotion of the use of goods and products manufactured from or derived from recyclable materials, to further encourage and facilitate recycling efforts.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-33. - Definitions.

As used in this article, the following definitions shall apply:

- (a) *Glass*: All clear (flint), amber, brown and green glass bottles and jars rinsed clean of food, beverage or other residue with lids or caps removed and discarded. Mirrors, crystal, laminants, ceramics, porcelains, windows and plate glass are excluded from the program.
- (b) *Lead-Acid Batteries*: Lead-acid batteries utilized in motorized vehicles shall be considered a recyclable material but will not be part of the city's curbside collection program and will be deemed illegal for disposal in regular trash collections. All such batteries must be disposed of at a designated battery recycling location or returned to a retail store that sells lead-acid batteries. New York State law requires that such establishments accept such batteries without charge.
- (c) *Metal*:
 - (1) *Cans*: Containers comprised of aluminum, tin, ferrous or bi-metal components which contained only food and/or beverage substances, and are rinsed clean of food residue.
 - (2) *Scrap/bulk*: All ferrous and nonferrous metals, including steel, aluminum and composite cans, containers, scrap metal, wire, piping, fencing, tubing, sheet metal, etc. Such materials must be free of chemical contamination. Boilers, auto/boat batteries, oil/gas tanks or pipe lengths that exceed four (4) feet in length will be excluded from this program.
- (d) *Motor Oil*: Motor oil shall be considered a recyclable material but will not be part of the city's curbside collection

program. Waste motor oil will be disposed of by residents and occupants of the City of Long Beach at service stations and/or those retailers of motor oil, required to accept such materials, under state law.

- (e) *Paper Products:*
- (1) *Corrugated paper:* Corrugated cardboard containers, boxes and packaging which are empty and free of contaminants such as oils, greases, adhesives, metals, plastics, food wastes, packaging materials or other refuse. This term excludes residential quantities.
 - (2) *Newspaper:* Newsprint and all newspaper and newspaper enclosures such as advertisement, supplements and comics; as well as magazines, telephone books and brown paper bags that are dry and free of contaminants such as dirt, adhesives, oils and food waste. Newspaper recyclables do not include miscellaneous stationery products, letters, envelopes, junk mail, blueprint paper, office paper, computer paper, books or paper products other than those delineated above.
 - (3) *Non-newspaper recycleable products:* Shall include office paper, junk mail and miscellaneous mixed paper.
- (f) *Plastics:* Containers composed of only polyethylene terephthalate (PET) and high-density polyethylene (HDPE) plastics, used for food, beverage, detergent bleach and hair care substances. All containers must be empty, rinsed of residues and contaminants and free of lids or caps. Under the resin-coding system established by the Society of Plastics Industries, PET and HDPE plastic products are assigned the code numbers of "1" and "2" respectively.
- (g) *Recyclable Materials or Recyclables:* Any discarded materials designated by this article, and/or by subsequent resolution of the City Council of Long Beach pursuant to this article which can be reclaimed economically by source separation for the purpose of recycling, reduction and/or reuse.
- (h) *Source Separation (or) Curbside Collection of Recyclables:* The separation of designated recyclables from the solid waste stream by the generator at the point of generation. The recyclables shall be handled as defined within this article, and be placed at curbside for collection on days assigned by the city.

(Ord. No. 1787/92, § 1, 9-1-92; Ord. No. 1875/97, § 1, 3-18-97)

Sec. 12-34. - Curbside collection established.

- (a) The City of Long Beach as part of its comprehensive recycling program has established a curbside collection plan for recyclables which shall encompass all residential, commercial, industrial and institutional entities within the jurisdictional limits of the city. Excluded from the mandatory provisions of this program will be all residents who can demonstrate physical disability.
- (b) All residential, commercial, industrial and institutional entities, unless excluded as per subsection (a), shall source separate from the solid waste stream, those recyclables designated by the City Council of Long Beach as being economically marketable, and place them at curbside in a manner as prescribed in [section 12-35](#) of this article, on the day(s) specified for collection by the city.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-35. - Preparation of recyclable materials for curbside collection.

- (a) Upon the effective date of this article [September 1, 1992], a mandatory curbside program is established for the separate collection of components of the solid waste stream designated by the City Council of Long Beach as being recyclable. The recyclable items for collection, delineated herein, may by city council resolution be expanded or shortened depending upon the current financial marketability of each material.
- (b) It shall be the responsibility of each resident and/or occupant within the jurisdiction of the City of Long Beach to ensure that all recyclable materials are properly separated from other discarded materials, are cleaned of contaminants, and are otherwise prepared for collection in accordance with the procedures detailed in this section. All recyclables are to be placed in designated recyclable containers. When the amount of recyclable materials exceeds the capacity of the designated container(s), excess materials shall be placed securely in separate containers alongside designated container(s) at curbside.
- (c) Recyclable materials shall be placed at curbside consistent with the recycling schedule established by the City Council of Long Beach.
- (d) The city will only collect recyclable materials at curbside that are prepared for pickup consistent within the requirements specified herein. In all cases recyclables must be rinsed clean of all food residue or chemical contamination. Each container, bag, bundle and/or receptacle that is used for the curbside storage of recyclables shall not exceed thirty-five (35) pounds in total weight when filled.
- (e) Newspaper recyclables may be placed in brown paper bags or tied with twine in bundles not to exceed thirty-five (35) pounds in weight nor one (1) foot in thickness. Such bundles shall be placed within or on top of the designated recycling containers or adjacent to the container. Papers are not to be secured with wire or plastic bindings and/or placed in plastic trash bags.
- (f) Corrugated boxes, cardboard, cardboard cartons, pasteboard or similar paper materials are to be broken down and tied securely with twine. Wire or plastic binding should not be used. All bundles should be not larger than thirty-five (35) pounds in weight or four (4) feet in length. The residential community will not be required to

separate corrugated materials from their solid waste stream. This provision applies to all commercial, industrial and institutional entities within the jurisdiction of the City of Long Beach.

- (g) Those plastic bottles and containers deemed as being recyclable shall be placed within designated recycling container(s) and shall be devoid of lids or caps.
- (h) All clear, amber, brown and green glass bottles and jars shall be placed within the designated recycling container(s) and shall be devoid of caps.
- (i) Metal containers comprised of aluminum, tin, ferrous or bi-metal components shall be placed within the designated recycling container.
- (j) Scrap (bulk) metal shall be placed at curbside on days scheduled. The city will accept no more than four (4) items per location per pickup day. All metal pipes put out for recycling must be no more than four (4) feet in length.
- (k) In the event that the City of Long Beach determines that additional or revised measures and/or preparation are necessary in order to properly market recyclable materials, the city reserves the power to require city residents and occupants to undertake such actions. Such changes would be subject to reasonable advance notice by the city.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-36. - Containers designated for recyclable materials.

- (a) *Residential structures; One- and Two-Family Structures:*
 - (1) All residents or occupants of one- and two-family structures within the City of Long Beach shall be required to utilize red, five-gallon plastic containers embossed with the recycling logo, for the placement of recyclable materials for curbside collection. These containers must be kept in a clean condition at all times and should not be utilized for any purpose other than as delineated within this article.
 - (2) Residents or occupants shall affix their respective street addresses to any recycling container, in a manner that is legible and permanent.
 - (3) In the event that such containers are lost, damaged, stolen or additional receptacles are needed, containers can be purchased for a fee of five dollars (\$5.00) per unit from the department of public works. The containers will be delivered to the purchaser by the city upon receipt of payment.
 - (4) Physically disabled residents of the City of Long Beach will be excluded from the mandatory provisions of this article.
- (b) *Multifamily Residential Complexes:*
 - (1) For purposes of this article, all single properties or contiguous properties under common ownership, control or management which possess three (3) or more residential units shall be considered multifamily residences.
 - (2) Where the use of individual recyclable containers is practicable, the curbside collection of recyclable materials should proceed consistent with [section 12-36\(a\)](#).
 - (3) Where the use of individual recyclable containers is not feasible, multifamily residential complexes shall establish private collection programs, capable of source separating, collecting and placing those designated recyclable materials at curbside, in a manner prescribed in this article, for pickup by the city.
 - The owner, manager and/or superintendent of each multifamily residential complex shall provide and maintain, in a neat and sanitary condition, recycling collection areas to receive and prepare designated recyclables generated within the complex.
 - (4) Where recyclable materials are to be placed at curbside adjacent to non-recyclable refuse, the recyclables shall be contained or packaged in a manner that is easily identifiable by city sanitation forces. To facilitate the identification of recyclables at curbside, the city has designated that "clear" plastic trash bags only shall be utilized for these materials. Where the use of such bags is not feasible, recyclables shall be placed in bins or receptacles labeled with a "LONG BEACH RECYCLABLES" sticker. Stickers can be obtained from the city at no cost.
 - (5) Physically disabled residents of the City of Long Beach will be excluded from the mandatory provisions of this article.
- (c) *Commercial, Industrial and Institutional Establishments:*
 - (1) All commercial, industrial and institutional establishments within the jurisdiction of the City of Long Beach shall be subject to the source separation requirements designated in this article. As of the effective date of this article [September 1, 1992], such establishment must remove designated recyclable materials from the solid waste stream and prepare them for curbside collection by the city. The arrangements for the internal handling of recyclables shall be the owner, manager and/or operator of the establishment or his contractor and must include all materials generated at that location. All recyclable materials must be prepared consistent with the requirements delineated in this article.
 - (2) Where recyclable materials are to be placed at curbside adjacent to non-recyclable refuse, the recyclables shall be contained or packaged in a manner that is easily identifiable by city sanitation forces. To facilitate the identification of recyclables at curbside, the city has designated that "clear" plastic trash bags only shall

be utilized for these materials. Where the use of such bags is not feasible, recyclables shall be placed in bins or receptacles labeled with a "LONG BEACH RECYCLABLES" sticker. Stickers can be obtained from the city at no cost.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-37. - Collection of recyclable materials.

Collection days for recyclables will be established by the City Council of Long Beach. The city reserves the right to alter schedules; however, ample prior notification of affected parties will be made when such changes are proposed.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-38. - Unlawful and nuisance activities.

(a) The following acts shall be deemed as violations to the City Code of Ordinance and shall be subject to the enforcement provisions specified within this article. It shall be unlawful for:

- (1) Any person to collect, remove or dispose of solid waste generated within the jurisdiction of the City of Long Beach which consists of recyclable materials combined with other forms of solid waste as per the effective date of this article [September 1, 1992].
- (2) Any person, other than those persons lawfully authorized, to collect any designated recyclable or scavenge or remove any articles from any recyclable container which has been placed at the curbside for collection or at drop-off point.

Each such collection in violation hereof, from one (1) or more property locations, shall constitute a separate and distinct offense.

- (3) Any person, having custody or control of residential, commercial, industrial and/or institutional premises within the City of Long Beach shall permit or cause any garbage, refuse, rubbish as well as recyclable materials, under their jurisdiction, to become a hazard or potential hazard to health and/or safety; or impede pedestrian or vehicular travel; or become a nuisance of any sort.
- (4) Any person to place or cause to be placed any non-recyclable material in or near a designated recycling container or drop-off point.
- (5) Any person to place recyclables at curbside not more than one (1) hour before sunset on the day prior to the regularly scheduled collection; or keep emptied receptacles or containers at curbside more than twelve (12) hours after collection.
- (6) Any person to hinder, obstruct, prevent or otherwise interfere with City of Long Beach employees or any authorized persons in the performance of their duties under this article and/or in the enforcement of this article.
- (7) Any person to violate or to cause to assist in the published violation of any provision of this article or any rules and regulations promulgated by the City Council of Long Beach concerning recycling.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-39. - Enforcement: Promulgation of additional rules and regulations.

The City Council of Long Beach authorizes the city manager and duly appointed representative(s) to enforce the mandatory provisions of this article and to administer the recycling program elements established herein. The same individuals may adopt and promulgate, amend and repeal rules and regulations implementing this article in order to carry out and enforce the intent and purposes thereof.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-40. - Discontinuing solid waste collection.

The City of Long Beach or any other person collecting solid waste generated within this city reserves the right to refuse the collection of solid waste, rubbish or refuse from any person who has clearly failed to source separate recyclables designated under an applicable section of this article.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-41. - Private solid waste collection contracts.

- (a) Nothing contained in this article shall be construed to interfere with or in any way modify the provisions of any existing contract in force in the city on the effective date of this article [September 1, 1992].
- (b) No renewal of any existing contract upon the expiration of the original term thereof and no new contract for the

collection, transportation, processing or purchase of solid waste or recyclables shall be entered into after the effective date of this article unless renewal of such contract shall conform to the requirements of this article.
(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-42. - Penalties for Offense.

- (a) In the event that an owner or occupant of a dwelling within the City of Long Beach fails to separate and prepare recyclable materials for collection in accordance with the provisions set forth in this article after being given reasonable notice of these requirements; collection of solid waste, refuse and/or rubble from these premises may be suspended at the discretion of the city manager or an authorized representative. Such suspension will be in effect until such time as the offender can demonstrate compliance. Concurrently, the offending owner or occupant is subject to fines and/or imprisonment as denoted in subsection (b) below.
- (b) Any person committing an offense against the provisions set forth in this article shall be guilty of a violation. Each occurrence shall constitute a separate violation. Such an offense shall be punishable by a fine and/or imprisonment in accordance with the following schedule:
- (1) For a first conviction, by a fine not to exceed one hundred dollars (\$100.00) per violation.
 - (2) For a second conviction within one (1) year of the initial infraction, by a fine not to exceed two hundred fifty dollars (\$250.00) per violation.
 - (3) For a third conviction within one (1) year of the initial infraction, by a fine not less than one thousand dollars (\$1,000.00) per violation.
 - (4) For a fourth conviction within one (1) year of the initial infraction, by a fine not less than one thousand dollars (\$1,000.00) and not more than twenty-five hundred dollars (\$2,500.00) per violation; at the discretion of a court of competent jurisdiction, a sentence of imprisonment for a term not to exceed fifteen (15) days or a comparable time served in community service related to the purposes of this article.
 - (5) All fines and/or imprisonment for subsequent violations will be at the discretion of the courts, but will not be less than the sentence as prescribed under subsection (4).
- (c) Each continuing day of violation of this article shall constitute a separate offense.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-43. - Miscellaneous.

- (a) *Construal:* The terms and provisionals of this article are to be liberally construed so as best to achieve and effectuate the goals and purposes hereof.
- (b) *Severability:* The provisions of this article are severable. If any provision of this article or its application to any person or circumstance is held invalid, said invalidity shall not affect any other provision or application of this article which can be given effect without the invalid provision or application of the article.
- (c) *Recyclable Materials (Inclusion and Deletion):* The City Council of Long Beach reserves the right to periodically add or delete recyclable materials for curbside collection.
- (d) *Exclusions:*
- (1) The City Council of Long Beach has excluded physically disabled residents from the mandatory provisions of this article.
 - (2) Where hardship can be demonstrated, establishments within the city may be relieved of mandatory compliance of the provisions of this article.

(Ord. No. 1787/92, § 1, 9-1-92)

Sec. 12-44. - Effective date.

The effective date for mandatory recycling shall be September 1, 1992.

(Ord. No. 1787/92, § 1, 9-1-92)

Appendix D – Solid Waste Reports and Contracts, 2010

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**CITY OF LONG BEACH
GUIDE TO RESIDENTIAL RECYCLING**

RECYCLE	WHERE? WHEN?	DO NOT RECYCLE
PAPER: office paper, newspaper, magazines, junk mail, phone books, cardboard, cereal & other food boxes, brown & white paper bags	Place in Recycle Bin or tie with string for curbside pick up. Do not put in plastic bags Wednesday by 7 a.m.	foam packaging, frozen food boxes, soiled pizza boxes, plastic cards & stickers from junk mail
PLASTIC: beverage, food & detergent bottles imprinted with #1 thru #5 inside the recycling symbol – rinsed)	Place in Recycle Bin For curbside pick up Do not put in plastic bags Wednesday by 7 a.m.	bottle caps, toys, plastic utensils, straws, plastic bags, containers without a recycle symbol
GLASS: jars & bottles Rinsed (labels ok)	Place in Recycle Bin For curbside pick up Wednesday by 7 a.m.	lids & caps, windshields, pane glass, light bulbs, mirrors, ceramics
METAL: tin cans, aluminum cans, clean aluminum foil, rinsed take out tins	Place in Recycle Bin For curbside pick up Wednesday by 7 a.m.	coat hangers, wire rings from cans, aerosol, motor oil & paint cans
APPLIANCES & LARGE METAL: Refrigerators, washers, dryers, stoves, dishwashers, (take doors off) bicycles, metal pipes (not to exceed four feet)	<u>Bulk pick up by appointment only Call 432-3132</u> Place curbside after 9 p.m. the day prior to and by 7 a.m. on the appointment day	Boilers, oil/gas tanks barbecue tanks
ELECTRONICS: computers and computer components, radios, VCRs, DVD Players, televisions, stereo equipment, fax machines, cell phones	Place in the Blue Bin located in front of the Recreation Center on Magnolia Blvd.	Microwaves, blenders, toasters, hairdryers & other small kitchen appliances
BATTERIES: rechargeable	STOP Program- 516 378-2200 Retail stores: Staples, Radio Shack, Best Buy	Regular batteries (non-rechargeable) can go in the garbage

**Do not place recyclables in plastic bags. You can place glass, cans, and plastic together in one bin. Please keep paper in a separate bin or tied with string.
Recycling bins can be purchased for \$5 in the Tax Dept. 3rd floor City Hall**

Take these Tips from the City of Long Beach Environmental Advisory Board:

**Recycle plastic bags at grocery stores. Coat hangers can often be taken to dry cleaning stores. Styrofoam peanuts can often be taken to mailbox stores for re-use. Donate your usable clothing and working appliances to charity.
CFL light bulbs- take to the STOP Program or Home Depot. Questions about recycling- please call the Dept. of Public Works 431-1000 ext. 1011**



Why Recycle?

- **Saves Taxpayer \$\$\$**
- **Saves Energy**
- **Reduces Emissions of Greenhouse Gases**
- **Conserves Natural Resources**
- **Prevents Pollution**



City of Long Beach Curbside Recycling

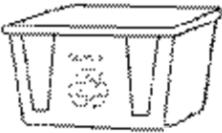


PLASTIC GLASS METAL

<p>PLACE TOGETHER IN RECYCLE BIN (DO NOT MIX WITH PAPER)</p>  <p>RECYCLE Place Curbside Wednesday by 7:00 a.m.</p> 	 <p>DO NOT RECYCLE</p>
<p>Rinsed Plastic Containers- # 1 thru # 5 Imprinted in Recycling Logo, Rinsed Metal Cans, Rinsed Glass Jars & Bottles, Clean Aluminum Foil, Clean Aluminum Take Out Tins</p>	<p>Caps, Lids and Tops Chemical Containers, Straws, *Plastic Bags, Utensils, Toys, **Styrofoam & Peanuts Window Glass, Mirrors Drinking Glasses, Ceramics Aerosol Cans, ***Coat Hangers</p>

Bins may be purchased for \$5.00 Mon-Fri in the Tax Dept. 3rd floor City Hall

CARDBOARD & PAPER

<p>PLACE TOGETHER IN A <u>SEPERATE</u> RECYCLE BIN OR TIE WITH STRING.</p>  <p>RECYCLE Place Curbside Wednesday by 7:00 a.m.</p> 	 <p>DO NOT RECYCLE</p>
<p>Newspapers, Magazines, Catalogs, Books, Phonebooks, Cardboard, Office & other Paper, Cereal and other Food Boxes, Brown & White Paper Bags, Junk Mail (including envelopes with windows), Unsoiled Pizza Boxes</p>	<p>Frozen Food Boxes Paper Plates, Napkins, Plastic Cards & Stickers from Junk Mail</p>

Recycle Plastic Bags at Grocery Stores. **Styrofoam peanuts can often be taken to local mailbox stores for reuse. ***Coat Hangers can often be taken to dry cleaning stores. Take Electronics to the Blue Collection Bin in front of the Recreation Center on Magnolia Blvd. Dispose of Hazardous Waste at S.T.O.P. Program 516 378-2200. For Recycling Questions Contact the Dept. of Public Works 431-1011

You MAY Bring:

aerosol cans	kerosene**
ammonia	lacquer
antifreeze**	latex and oil-based paint
asbestos (double bagged)	oven cleaners
bleach	paint stripper
bug & rodent killers*	paint thinner, brush cleaner
car batteries	photography chemicals
cell phones	polishes & wood
chemistry sets	preservatives
degreasers	solvents
disinfectants	spot remover
drain cleaners	swimming pool chemicals
fertilizer with herbicides	telephone books
flammable liquids	thermostats+
(fire starter)	tires (car-off rims)
fluorescent lamps, ballasts	varnish
(in shatterproof containers)	waste oil**
household batteries	weed killers
& prescription and over-the-counter medications	

*Especially pesticides which have been banned or restricted
 ** Limit 6 in 5 gallon containers
 +Thermostats with mercury are accepted. Bring to STOP & receive a \$5 gift card for a local home center compliments of Covanta Energy

You May NOT Bring:

ammunition	infectious or medical waste
explosives	propane or oxygen tanks
fireworks	radioactive materials
fire extinguishers	unlabeled materials
electronics	

Steps For Disposing of Hazardous Waste:

- ✦ Wrap leaking containers in newspaper and place in a plastic bag or larger container.
- ✦ Make sure all caps and lids are tight.
- ✦ Place items securely in a box for transportation.
- ✦ Use newspaper or cardboard to keep items from tipping or hitting each other.
- ✦ Place chemicals which may react with each other in separate areas of the vehicle.
- ✦ Do not leave products in a hot, unventilated vehicle for an extended period of time.
- ✦ Do not smoke near chemical products.
- ✦ Wear rubber gloves when handling containers.

****NO COMMERCIAL VEHICLES ALLOWED****

****WASTE FROM COMMERCIAL ESTABLISHMENTS, SCHOOLS, CHURCHES, SYNAGOGUES OR HOME BUSINESSES WILL NOT BE ACCEPTED****

Visit our website at www.longbeachny.org

2010 Household Hazardous Waste Schedule & Locations



Many products that are used around the home contain hazardous chemicals. These products can contaminate groundwater and drinking water if they are not properly handled. Please help our ecosystem by bringing your household hazardous waste to one of the S.T.O.P. Program events listed below:

Sunday, May 16
 Newbridge Road Park,
 Newbridge Road, South Bellmore

Saturday, June 19
 Bay Park, 1st Avenue, East Rockaway

Saturday, July 31
 Town of Hempstead Parking Field L2
 Division Avenue, Levittown

Sunday, August 22
 Hempstead Village Dept. of Public Works
 Milburn Avenue Entrance, Hempstead

Saturday, September 25
 Newbridge Road Park
 2600 Newbridge Road, Bellmore

Sunday, October 17
 North Woodmere Park
 Branch Boulevard, North Woodmere

Saturday, November 20
 Baldwin Park
 3232 South Grand Avenue, Baldwin

Sunday, December 12
 Eisenhower Park, Parking Field 3, East Meadow

For More Information Call 516-378-2200 or 516-431-1000 ext. 1011

City Council

Thomas R. Sofield, Jr., *President*
Mona Goodman, *Vice President*
John C. McLaughlin
Michael Fagen
Len Torres



City Manager
Charles T. Theofan

& IW RI / RQJ %HDEK 2 IIIFID&RP P XQIW 8SGDW

April 2010

Stop Throwing Out Pollutants Program

www.longbeachny.org

**S.T.O.P. Program Comes to Long Beach April 18;
Bring Your Harmful Household Materials and
Discarded Prescription and
Over-the-counter Medications for Safe Disposal**

Spring is here and that means it's time to safely dispose of your household chemicals, paint, fertilizers and other harmful household products. The S.T.O.P. (Stop Throwing Out Pollutants) program, sponsored by the Town of Hempstead, will collect items on Sunday, April 18 from 8am to 3pm in the parking lot behind Long Beach City Hall.

This year the Long Beach Police Department will participate in the program with "Operation Prescription Medication/Drug Drop Off," collecting prescription and over-the-counter medications that people wish to discard.

"With reports of antibiotics, pain killers and other drugs being found in water systems around the nation, it is important that we dispose of medications properly," said Long Beach Police Commissioner Thomas R. Sofield, Sr.

Members of the LBPD's Community Relations Unit will be available at the S.T.O.P site to accept discarded drugs and to answer questions and concerns from the community. Drugs should be

placed in clear plastic bags, which are closed and secured before depositing them at the drop-off site.

Needles and syringes will **NOT** be accepted.

"Any persons participating in the drug collection will remain anonymous, and no questions will be asked," Sofield added.

"While the EPA seeks to find more information about the level of contaminants in our waterways, we need to take preventative measures to reduce pollutants now," said City Manager Charles T. Theofan. "We can all do our part by bringing harmful household contaminants and discarded drugs to the S.T.O.P. site on April 18."

It is suggested that citizens wear plastic gloves when disposing of chemicals and medications.

For a complete list of items that can be brought to S.T.O.P., please see reverse side of this newsletter.

For further information on the S.T.O.P. program, please call S.T.O.P. at the Town of Hempstead at 516-378-2200.



S.T.O.P. does not accept certain electronics such as radios, computers, CD players, video game systems, cell phones, etc. Those items can be dropped at the "Big Blue" receptacle in front of the Recreation Center on Magnolia Blvd.

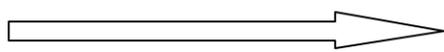
Big Blue does not accept kitchen appliances, blenders, toasters, microwaves, hair dryers, curling irons or batteries.

S.T.O.P. does accept these types of electronics.



"Big Blue"

SEE THE BACK OF THIS NEWSLETTER FOR A LIST OF ITEMS THAT S.T.O.P. WILL ACCEPT





FACT SHEET

Long Beach city, New York

2005-2009 American Community Survey 5-Year Estimates - what's this?

Data Profile Highlights:

Note:The following links are to data from the American Community Survey and the Population Estimates Program.

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Estimate	Percent	U.S.	Margin of Error
Social Characteristics - show more >>				
Average household size	2.25	(X)	2.60	+/-0.07
Average family size	3.07	(X)	3.19	+/-0.11
Population 25 years and over	27,754			+/-676
High school graduate or higher	(X)	92.9	84.6%	(X)
Bachelor's degree or higher	(X)	44.3	27.5%	(X)
Civilian veterans (civilian population 18 years and over)	2,103	7.0	10.1%	+/-334
With a Disability	(X)	(X)	(X)	(X)
Foreign born	4,403	12.3	12.4%	+/-693
Male, Now married, except separated (population 15 years and over)	6,584	44.5	52.3%	+/-398
Female, Now married, except separated (population 15 years and over)	6,556	40.4	48.4%	+/-397
Speak a language other than English at home (population 5 years and over)	5,398	15.7	19.6%	+/-703
Household population	34,084			+/-1,359
Group quarters population	(X)	(X)	(X)	(X)
Economic Characteristics - show more >>				
In labor force (population 16 years and over)	19,772	64.4	65.0%	+/-1,169
Mean travel time to work in minutes (workers 16 years and over)	40.5	(X)	25.2	+/-2.1
Median household income (in 2009 inflation-adjusted dollars)	77,909	(X)	51,425	+/-3,289
Median family income (in 2009 inflation-adjusted dollars)	99,672	(X)	62,363	+/-5,949
Per capita income (in 2009 inflation-adjusted dollars)	43,612	(X)	27,041	+/-3,038
Families below poverty level	(X)	4.1	9.9%	+/-1.9
Individuals below poverty level	(X)	9.0	13.5%	+/-2.2
Housing Characteristics - show more >>				
Total housing units	16,998			+/-885
Occupied housing units	15,162	89.2	88.2%	+/-801
Owner-occupied housing units	9,467	62.4	66.9%	+/-554
Renter-occupied housing units	5,695	37.6	33.1%	+/-548
Vacant housing units	1,836	10.8	11.8%	+/-351
Owner-occupied homes	9,467			+/-554
Median value (dollars)	526,500	(X)	185,400	+/-23,292
Median of selected monthly owner costs				
With a mortgage (dollars)	2,661	(X)	1,486	+/-78
Not mortgaged (dollars)	975	(X)	419	+/-85

ACS Demographic Estimates - show more >>	Estimate	Percent	U.S.	Margin of Error
Total population	35,815			+/-70
Male	17,360	48.5	49.3%	+/-629
Female	18,455	51.5	50.7%	+/-633
Median age (years)	44.7	(X)	36.5	+/-1.9
Under 5 years	1,475	4.1	6.9%	+/-285
18 years and over	30,076	84.0	75.4%	+/-553
65 years and over	6,637	18.5	12.6%	+/-1,225
One race	35,321	98.6	97.8%	+/-306
White	29,582	82.6	74.5%	+/-873
Black or African American	2,279	6.4	12.4%	+/-635
American Indian and Alaska Native	77	0.2	0.8%	+/-73
Asian	1,581	4.4	4.4%	+/-549
Native Hawaiian and Other Pacific Islander	0	0.0	0.1%	+/-123
Some other race	1,802	5.0	5.6%	+/-541
Two or more races	494	1.4	2.2%	+/-292
Hispanic or Latino (of any race)	3,254	9.1	15.1%	+/-668

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Explanation of Symbols:

'***' - The median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

'*****' - The estimate is controlled. A statistical test for sampling variability is not appropriate.

'N' - Data for this geographic area cannot be displayed because the number of sample cases is too small.

'(X)' - The value is not applicable or not available.

The letters PDF or symbol  indicate a document is in the Portable Document Format (PDF). To view the file you will need the Adobe® Acrobat® Reader, which is available for free from the Adobe web site.

Sanitation & Recycling Collection Information

All Garbage & Recyclables must be placed curbside **AFTER 9:00 p.m. the day prior to collection and BEFORE 7:00 a.m. on the collection day.** The Sanitation Department recommends purchasing two bins: One for paper & cardboard, and one for cans & bottles. Bins may be purchased for \$5 Mon-Fri in the Tax Dept., 3rd floor City Hall. Please do not use brown paper bags, plastic grocery bags or cardboard boxes for trash, as they can easily rip open spilling onto streets and sidewalks. Please use sturdy plastic bags which fitting snug into your outdoor trash receptacles.

GARBAGE PICKUP

Household Garbage: (excludes Bulk, Metal, Appliances)

East Side: Mondays & Thursdays

West Side: Tuesdays & Fridays

Exceptions: When the City does not pick up garbage due to a holiday, it will be picked up the next day unless otherwise noted in this calendar.

BULK GARBAGE

By appointment only. Call 432-3132. (four items per pickup)

Call for special pickup of bulk items, such as furniture, mattresses, bedsprings, carpeting and tires. Wood must not exceed 4 feet and must be tied in bundles weighing less than 40 lbs. The City will not pick up automotive or boat batteries, auto tires, nor any construction materials or debris. Please make certain that any home improvement contractor you hire agrees to dispose of debris.

METAL ITEMS & APPLIANCES

By appointment only. Call 432-3132. (four items per pickup)

Call for a special pickup of metals and appliances. Metal items include: washers, dryers, stoves, dishwashers, bikes, refrigerators & metal pipes (not to exceed 4 feet). Please remove doors from all appliances. The City will not pickup barbecue tanks, boilers or oil/gas tanks. Please be certain that any plumber or installer you hire agrees to dispose of debris.

HOUSEHOLD HAZARDOUS WASTE

All hazardous household materials should be disposed of at the S.T.O.P. program on **April 10th behind City Hall.** Materials include: household batteries, car batteries, aerosol cans, antifreeze, bug killer, drain cleaners, degreasers, disinfectants, fertilizer, flammable liquid, kerosene, oven cleaners, paint stripper & thinner, photography chemicals, solvents & waste oil. Call the Town of Hempstead S.T.O.P. program at 378-2200 for a comprehensive list or for more information.

E-CYCLING DROP-OFF

Computers, computer components, TV's, VCR's, DVD players, fax machines and stored equipment can be dropped off at the blue e-cycling container in front of the Recreation Center on Magnolia Boulevard.

NEWSPAPERS, JUNK MAIL & CARDBOARD

Place curbside on Wednesdays by 7:00am. Items must be placed in a red recycle bin or tied with string.

Do Recycle:

-Newspapers, magazines, junk mail, hard and soft covered books, binders, catalogs, photo books, journals, office & computer paper, plain envelopes & envelopes with plastic windows.

-Cardboard, cereal boxes and unopened pizza boxes, brown & white paper bags.

Do Not Recycle:

-Foam packaging, plastic cards & stickers from junk mail.

GLASS CANS-PLASTIC

Place glass, cans and plastic containers in recycling bins and put outside by 7:00am. Please do not place recyclables in plastic bags.

Recycle:

Glass

-Rinsed glass, jars & bottles.

-Discard caps & lids.

-Labels may be left on.

Cans

-Metal cans rinsed clean.

-Labels may be left on.

-Take-out tins, rinsed (discard lids)

-Aluminum foil, rinsed if soiled.

Plastic

-All plastic beverage, food & detergent bottles imprinted with #1 thru #5 inside caps, chemical containers, straws and plastic utensils

-Do not recycle plastic bags, toys, and plastic containers that do not have a recycling logo.

-Do not recycle plastic containers that do not have a recycling logo.

-Discard all caps and lids.

Do Not Recycle:

Glass

-Lids & caps, broken glass, light bulbs, windshields, window pane glass and laminated glass.

Cans

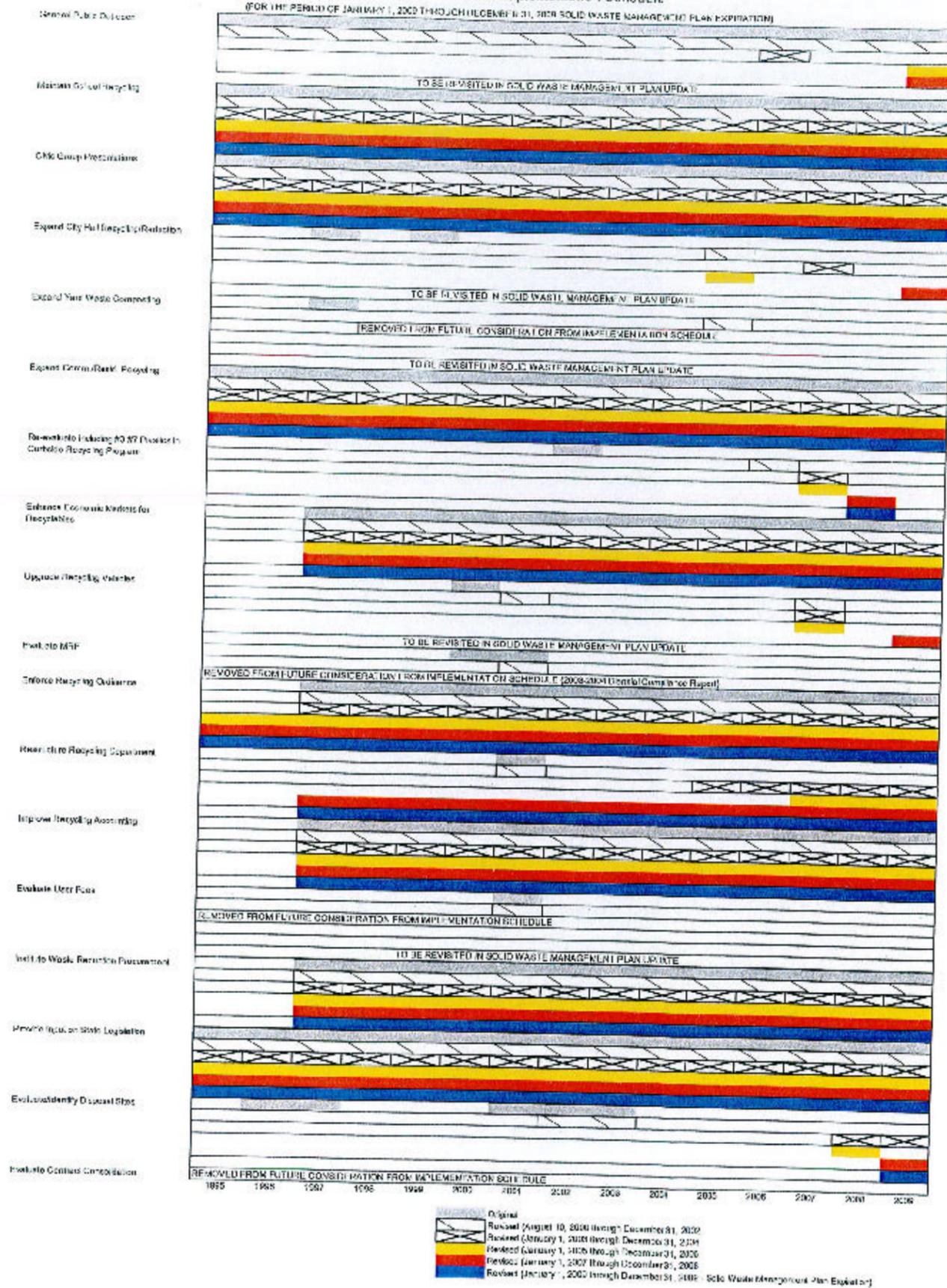
-Wire rings from cans, coat hangers.

-Pesticide/herbicide, paint cans, empty aerosol and motor oil cans.

For Sanitation & Recycling questions please contact 432-3132

Under New York State Law, recycling is mandatory. Failure to separate glass, metal, newspapers and plastics from your regular trash will result in a fine.

**Exhibit 6-1
Revised Long Beach SWMP Implementation Schedule**





CITY OF LONG BEACH

Department of Public Works
1 West Chester Street
Long Beach, N.Y. 11561
(516) 431-1011
Fax: (516) 431-5008

December 15, 2010

Pier One
220 E. Park Ave.
Long Beach, NY 11561

Re: Refuse and Recyclables Collections

Gentlemen:

As you may be aware, the New York State Department of Environmental Conservation (NYSDEC) requires municipalities to record the quantities of refuse and recyclables collected within its boundaries and subsequently prepare summary reports on an annual basis. In compliance with same, the City requests from commercial establishments using **private carters**, a quantitative summary of refuse and recyclables collected and their subsequent disposal destination. By law, your carting firm must maintain detailed records regarding such items. This information, broken down by various waste categories should therefore be readily available.

For your convenience we have prepared a brief table to be completed by a representative of your establishment with the **quantities for 2010**. Please return the completed form to the City **no later than January 15, 2011**.

The information required is as follows:

Waste Description	2010 Quan.	2010 Carting Firm - Name & Address
Garbage		
Newspaper		
Commingled -plastic, glass, cans		
Corrugated Cardboard		
Scrap Metal		
Other		

List quantity in tons.

PLEASE FAX COMPLETED SURVEY TO 431-5008

SECTION 3 - Disposal Destination or Transfer for Disposal Destination

Identify the transfer or disposal destination of waste removed by indicating the name of the transfer or disposal facility to which solid waste was sent from your facility, the type of solid waste transferred from your facility, the corresponding NYS Planning Unit, and the County/Province and State/Country of the transfer or disposal destination facility, and the amount transferred or disposed, includes only waste sent off-site for disposal or further transfer prior to disposal, not recovered for reuse or recycling. Exclude Materials Recovered amounts reported in Section 4. Refer to the list of NYS Planning Units that can be found at the end of this report. DO NOT REPORT IN CUBIC YARDS!

Transport (specify percentages):

____ % Road _____ % Rail

____ % Water

____ % Other (specify: _____)

Explain which waste types and service areas below are included in these transport methods _____

Please report the facility to which you send the solid waste. Note: This is not the facility identified in Section 1.

Disposal Destination or Transfer for Disposal Destination							
Type of Solid Waste	NYS Planning Unit	County or Province	State or Country	Solid Waste Management Facility to which solid waste is sent (Name & Address)	Amount to Transfer Destination (tons)	Amount to Disposal Destination (tons)	Total Year (tons)
Asbestos	(Example)						
	(Monroe)	(Monroe)	(NY)	(High Acres Landfill, Fairport)		(2,500)	(2,500)
	(NYC)	(Richmond)	(NY)	(Vanbro Corp, Staten Island)	(4,000)		(4,000)
Construction & Demolition Debris (mixed)	(Monroe)	(Monroe)	(NY)	(High Acres Landfill, Fairport)			
	Long Beach	Nassau	NY	January - November 2010		(300)	(300)
				Jamaica Ash and Robbish			
Industrial Waste (including Industrial Process Sludges)				172 School St. Westbury, NY 11590			3,447.97
				Dec. 2010 Testoni Enterprises Inc. 117 Magnolia Ave., Westbury, NY 11590			

REPRINTED (12/10)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 DIVISION OF MATERIALS MANAGEMENT
 ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT

Print Form



(Use additional sheets if necessary)

REPORT YEAR: 2010	PLANNING UNIT NAME: City of Long Beach		
ADDRESS: One West Chester Street Long Beach, NY 11561			COUNTY: 50 - NASSAU
CONTACT PERSON: Joseph Febrizio	EMAIL: jfebrizo@longbeachny.org	TELEPHONE NUMBER: 516 431-1011	
SOURCES OF DISPOSAL AND RECYCLING DATA (check all appropriate boxes):			
<input checked="" type="checkbox"/> Scale Weights	<input type="checkbox"/> Hauler Surveys	<input type="checkbox"/> Estimates	
<input type="checkbox"/> Truck Counts	<input type="checkbox"/> Facility Surveys	<input type="checkbox"/> Other	
LIST FACILITIES IN YOUR PLANNING UNIT WHICH ARE INCLUDED IN THIS REPORT			
FACILITY NAMES			REGISTRATION / PERMIT NUMBER
1.	City of Long Beach Transfer Station	30M322	
2.	Town of Hempstead Merrick Transfer Station	1-2820 131 8000-01	
3.	Westbury Paper Stock Corporation	1-2822-00487 00001	
4.	Testani Enterprises Inc.	1-2822-01362 00001	
5.	Jamaica Ash & Rubbish	1-2822-00487 00001	
WASTE DISPOSED			
6. Metropolitan Paper Recycling	LANDFILLED		24 DM5-24 DM6 COMBUSTED
	WASTE STREAMS	Name & Address	Tons
Municipal Solid Waste (MSW)			Town of Hempstead Merrick Transfer Station 1000 Merrick Rd. Merrick NY 11566
			19,261.22
C & D Debris (C&D)			
Non-Hazardous Industrial Waste			
Biosolids Sewage Sludge Dry Tons	Hauler- Tully Construction 127-53 Northern Blvd., Flushing, NY 11368	542.25	

Revised 02/2010

ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT
(continued)

(Use additional sheets if necessary)

RECYCLABLES RECOVERED		
Do not report recyclables that result from the Recyclable Container Act or are part of a Beneficial Use Determination		
PAPER::	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Newspaper	1.	
	2.	
	3.	
Corrugated Cardboard	1.	Jan-Oct Metropolitan Paper Recycling 847 Shepherd Ave. Brooklyn, NY 11208 519.66
	2.	Nov-Dec Westbury Paper Stock Corp, PO Box 833 619-633 Dickens St. Westbury, NY 11590 31.87
	3.	
Paperboard / Boxboard (e.g. cereal, shoe, gift boxes & light cardboard)	1.	
	2.	
	3.	
Office Paper	1.	
	2.	
	3.	
Magazines	1.	
	2.	
	3.	
Junk Mail	1.	
	2.	
	3.	
Other Paper (specify): Mixed Paper _____	1.	Jan-Oct. Metropolitan Paper Recycling 847 Shepherd Ave. Brooklyn, NY 11208 881.98
	2.	Nov-Dec Westbury Paper Stock Corp, PO Box 833 619-633 Dickens St. Westbury, NY 11590 203.98
	3.	
GLASS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Glass Containers (all colors)	1.	
	2.	
Glass Non - Containers (e.g. vases, windows)	1.	
	2.	
Industrial Scrap Glass	1.	
	2.	
Other Glass (specify): _____	1.	
	2.	

ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT

(continued)
(Use additional sheets if necessary)

RECYCLABLES RECOVERED		
Do not report recyclables that result from the Returnable Container Act or are part of a Beneficial Use Determination		
METALS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Tin / Aluminum Containers	1.	
	2.	
Aluminum Foil / Trays	1.	
	2.	
Enameled Appliances / White Goods	1.	
	2.	
Bulk Metal (from residents)	1. Jan-Oct Metropolitan Paper Recycling 847 Shepherd Ave. Brooklyn, NY 11208	36
	2. Nov-Dec Westbury Paper Stock Corp. PO Box 833 619-633 Dickens St. Westbury, NY 11590	0
Metal Reported By (automobile dismantlers, junkyards, scrap metal processing)	1.	
	2.	
Metal Recovery from Municipal Waste Combustor	1.	
	2.	
Industrial Scrap Metal	1.	
	2.	
Other Metal (specify):	1.	
	2.	
PLASTICS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
PET (Plastic #1)	1.	
	2.	
HDPE (Plastic #2)	1.	
	2.	
Other Rigid Plastics (#3 - #7) (Identify quantity & type if available)	1.	
	2.	
Plastic Containers (#1 - #7) (if collected & marketed commingled)	1.	
	2.	
Plastic Film & Bags	1.	
	2.	
Industrial Scrap Plastic	1.	
	2.	
Other Plastic (specify):	1.	
	2.	

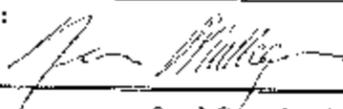
ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT
(continued)

(Use additional sheets if necessary)

RECYCLABLES RECOVERED		
Do not report recyclables that result from the Reusable Container Act or are part of a Beneficial Use Determination		
COMMINGLED:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Commingled (paper & containers)	1. _____ 2. _____	
Commingled (containers only)	1. Jan-Oct. Metropolitan Paper Recycling 847 Shephard Ave., Brooklyn, NY 11268 2. Nov.-Dec. Westbury Paper Stock Corp. PO Box 833, 619-633 Dickens St. Westbury, NY 11590	871.27 183.18
ORGANICS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility) Do NOT use CUBIC YARDS
Leaves & Grass	1. _____ 2. _____	
Brush / Branches / Trees / Stumps	1. _____ 2. _____	
Food Scraps (e.g. kitchen scraps, grocery & restaurant food waste)	1. _____ 2. _____	
Food Processing Waste (e.g. brewery waste, fish, fruit, vegetable & dairy processing waste)	1. _____ 2. _____	
Biosolids	1. _____ 2. _____	
Other Organics (specify): _____	1. _____ 2. _____	
MISCELLANEOUS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Textiles	1. _____ 2. _____	
Electronics	1. E-Revival LLC, 141 Lanza Ave. Bldg. 5, Garfield, NJ 07026 2. _____	1.63
Tires	1. Varies 2. _____	4.3
Wood Pallets	1. _____ 2. _____	
Other Miscellaneous (specify): _____	1. Anti-Freeze - Varies 2. Car Batteries - Varies	4.56 9.45
	waste Oil - Varies	12.37

ANNUAL REPORT FORM – PLANNING UNIT RECYCLING REPORT
(continued)

(Use additional sheets if necessary)

RECYCLABLES RECOVERED		
Do not report recyclables that result from the Returnable Container Act or are part of a Beneficial Use Determination		
C & D DEBRIS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Asphalt / Pavement	1.	
	2.	
Brick	1.	
	2.	
Concrete	1.	
	2.	
Drywall	1.	
	2.	
Other Masonry Materials	1.	
	2.	
Petroleum Contaminated Soil (PCS)	1.	
	2.	
Rock	1.	
	2.	
Soil (Clean)	1.	
	2.	
Roofing Shingles	1.	
	2.	
Wood	1.	
	2.	
Land Clearing Debris (including brush, branches, trees, & stumps NOT included in Organics Section)	1.	
	2.	
Other (specify): Mixed C&D	1. Jan.-Nov. - Jamaica Ash Rubbish Removal 172 School St., Westbury, NY 11590	3,273.03
	2. Dec.- Teslani Enterprises Inc. 117 Magnolia Ave. Westbury, NY 11590	174.94
NAME: Kevin C. Mulligan, P.E.		DATE:
SIGNATURE: 		TITLE & ORGANIZATION: City of Long Beach

Send Completed Forms to the Addresses Listed in Appendix A

ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT

(continued)

APPENDIX A - NYS DEC REGIONAL AND CENTRAL OFFICE ADDRESSES
PLEASE SEND A COPY OF THIS REPORT TO YOUR REGIONAL OFFICE AND A COPY TO THE DEC CENTRAL OFFICE

REGIONAL OFFICE ADDRESSES	COUNTY	TELEPHONE	CENTRAL OFFICE ADDRESS
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 1 50 CIRCLE ROAD STONY BROOK, NY 11790-3409	Nassau, Suffolk	(631) 444-0375	NYS Department of Environmental Conservation Division of Materials Management Attn: Bureau of Permitting & Planning 625 Broadway, 9 th Floor Albany, NY 12233-7233 (518) 402-8678 (518) 402-9041 Fax Email: planning@www.dec.state.ny.us
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 2 1 HUNTERS POINT PLAZA 47-40 21 ST STREET LONG ISLAND CITY, NY 11101-5407	New York City (Bronx, Kings, New York, Queens, Richmond)	(718) 482-4894	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 3 21 SOUTHUIT CORNERS ROAD NEW PALTZ, NY 12561-1696	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	(845) 256-3136	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 4 1130 NORTH WESTCOTT ROAD SCIENECTADY, NY 12306-2014	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	(518) 357-2346	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 5 1115 ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	(518) 897-1241	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 6 317 WASHINGTON STREET WATERTOWN, NY 13601-3787	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	(315) 785-2522	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 7 615 ERIE BOULEVARD WEST SYRACUSE, NY 13204-2400	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	(315) 426-7419	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 8 6274 EAST AVON-JAMA ROAD AVON, NY 14414-9519	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	(585) 226-5408	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 9 270 MICHIGAN AVENUE BUFFALO, NY 14203-2999	Allegany, Cattaraugus, Chautauque, Erie, Niagara, Wyoming	(716) 851-7220	



**INTER-OFFICE MEMO
CITY OF LONG BEACH, NEW YORK 11561**

TO: Files
FROM: Joseph Febrizio, Deputy Commissioner of Public Works
SUBJECT: 2010 Recycling Figures/Evaluation
DATE: February 28, 2011

The information contained in this annual report represents a summary of the City's Integrated Solid Waste Management Program for the 2010 Calendar Year. Table 1 (Solid Waste Management Summary) and Table 5 (Waste Generation) present a synopsis of solid waste quantities collected in the City of Long Beach in 2010. According to our records the City recycled 23.81% of its waste stream in 2010 which translates into 6188.22 tons of material. Excluding C&D (construction and demolition) material from the totals the City achieved a 12.16% recycling rate or 2740.25 tons.

As part of this report there are an array of tables (20) that depict quantitatively the solid waste stream. These tables are described briefly herein and are enclosed for your reference. However, for your convenience we have listed highlights of 2010 in the following "points of interest" segment:

I. POINTS OF INTEREST

- In 2010, the City generated and disposed of 19,261.22 tons of refuse. Based upon a review of the records it is the lowest annual total realized in recent history (20+years).
- One hundred and thirty five drums of household hazardous wastes were collected from City of Long Beach Residents through the 2010 STOP program (Table 20). Participation in the Long Beach program was the best since inception of the event.
- The agreement with the Town of Hempstead to dispose of refuse resulted in the City spending significantly less on waste disposal in 2010 when compared to prior years (exclusive of labor & equipment). The \$1.58 million spent on refuse disposal in 2010 was the lowest annual total spent on refuse since 2002 when \$1.54 million was expended. In 2008 and 2009, the City expended \$1.78 and 1.65 million on refuse disposal respectively.
- The City of Long Beach incurred an avoided cost savings (exclusive of labor & equipment as well as construction and demolition debris) of \$247,066 by recycling (see Table 4).
- The average resident generates 1460 lbs/person/year or 4.0 lbs. of waste/day in the City of Long Beach.
- In 2010, City residents recycled over 5.4 million lbs. of material (excluding C&D) and over 12.3 million lbs. of material (including C&D).

II. OVERVIEW – CALENDAR YEAR 2010

The following narratives represent relevant topics and issues that have affected our solid waste management program over the past year:

- **Solid Waste Disposal Contract**

The City entered into an interim agreement with the Town of Hempstead for municipal solid waste disposal. The agreement commenced on July 1 2008 and expired in August 2009. The City extended this agreement until December 31, 2009 while a long term agreement was negotiated. The disposal destination for City of Long Beach refuse (and bulk waste) is the Merrick Transfer Station in the Town of Hempstead. Waste is temporarily stored at the Merrick facility and ultimately hauled to the Covanta Waste to Energy facility in Westbury.

There are numerous benefits to utilizing the Merrick Transfer Station for refuse disposal. The close proximity to the City minimizes wear and tear on the Sanitation fleet significantly and reduces overtime costs. Further, the proximity of the City to the Merrick Transfer Station is key to operating an efficient, cost effective, sanitation program. The Sanitation Department is able to complete collection of its routes quicker resulting in garbage being off the streets in a timely manner.

The City entered into a ten (10) year agreement with the Town of Hempstead that commenced on January 1, 2010 and expires on December 31, 2020.

- **S.T.O.P. PROGRAM (STOP THROWING OUT POLLUTANTS - HOUSEHOLD HAZARDOUS WASTE COLLECTION AND DISPOSAL PROGRAM)**

In 1998, the City of Long Beach entered into an agreement with the Town of Hempstead to participate in their household hazardous waste collection (Stop Throwing Out Pollutants - S.T.O.P) program. The program provides residents with a disposal option for commonly generated household hazardous wastes i.e., ammonia, drain cleaners, fertilizers, oil based paint, weed killers, etc., that should be not disposed of with normal refuse.

The agreement allowed the City to participate in ten (10) STOP events held throughout the Town annually. Of the ten events one was required to be held in the City of Long Beach. The first STOP program was held in the City of Long Beach on April 18th 1999.

Under the agreement the City is responsible for 7% of the total Town of Hempstead program costs i.e., labor, administrative etc. The following represents the annual costs to the City of Long Beach for the STOP program:

<u>YEAR</u>	<u>TOTAL COST</u>
1999	\$19,586.50
2000	\$18,982.96
2001	\$17,923.19
2002	\$24,031.29
2003	\$35,529.03
* 2004	\$22,817.99
**2005	\$25,991.39
***2006	\$33,565.18
****2007	\$31,884.68
*****2008	\$36,457.00
2009	\$51,316.06
*****2010	\$29,169.06

*Actual cost is \$32,110.69. However, the Town of Hempstead received a grant in the amount of \$132,752.90 for the period of which the City received 7% or \$9,292.70.

** Actual cost is \$35,049.09. However, the Town of Hempstead received a grant in the amount of \$129,395.71 for the period of which the City received 7% or \$9,057.70.

*** Actual cost is \$42,620.88. However, the Town of Hempstead received a grant in the amount of approximately \$129,367 for the period of which the City received 7% or \$9,055.70.

**** Actual cost is \$40,940.38. However, the Town of Hempstead received a grant of which the City was entitled to 7% (City's cost of program) reimbursement which totaled \$9,055.70.

*****Actual cost is \$52,190.20. However, the Town of Hempstead received a grant of which the City was entitled to 7% (City's cost of program) reimbursement which totaled \$15,733.20.

***** Received \$28,667.50 credit from the Town of Hempstead because they receive a grant for the program. Paid only \$573.83 to the Town of Hempstead for the 2010 program.

Please note that if the City elected to pursue hosting a one day program without the Town of Hempstead's involvement, the costs would far exceed the annual expenditures currently incurred. Further, City residents would be unable to attend the STOP events held in the Town of Hempstead throughout the year.

The program has been extremely successful since its introduction in 1999. A breakdown of the annual participation rate at the City of Long Beach STOP program site is as follows:

<u>DATE OF PROGRAM</u>	<u>*QUANTITY OF CARS THAT CAME TO LONG BEACH SITE</u>	<u>**ANNUAL PARTICIPATION RATE (ALL TEN STOP PROGRAM EVENTS)</u>
April 18 th , 1999	363	140 Long Beach Residents
April 9 th , 2000	286	350 Long Beach Residents
April 22, 2001	603	375 Long Beach Residents
April 14, 2002	825	550 Long Beach Residents
April 5, 2003	655	514 Long Beach Residents
April 9, 2004	807	625 Long Beach Residents
April 16, 2005	751	766 Long Beach Residents
April 30, 2006	1103	557 Long Beach Residents
April 22, 2007	986	557 Long Beach Residents
April 13, 2008	977	621 Long Beach Residents
April 4, 2009	832	600 Long Beach Residents
April 18, 2010	1422	1348 Long Beach Residents

* Represents all cars that dropped off household hazardous waste at the STOP program on the day the event was held in Long Beach. Cars that are operated by residents of the Town of Hempstead and the City of Long Beach are permitted to participate in the program.

** Represents participation by Long Beach Residents for the entire year (all ten STOP events).

The 2010 S.T.O.P. program was extremely successful. The 2010 event was held on Sunday, April 18, 2010 and was met with enthusiasm by the public. A total of 1422 (711 from Long Beach) people dropped off household hazardous wastes at the program site during the event. It is noted that participation in 2010 is a record for this Long Beach event.

On February 15, 2011 the City Council approved a resolution (8/11) authorizing a one year extension with the Town of Hempstead through December 31, 2011.

- **BATTERY RECYCLING**

Recent regulatory requirements prohibit rechargeable and lithium batteries from being commingled with other batteries, i.e., alkaline, Carbon Zinc etc. Apparently there is the potential for combustion to occur when rechargeable and/or lithium batteries come into contact with other i.e. alkaline batteries. Therefore, the battery drop off program has been eliminated. Residents are encouraged to dispose of all batteries at the STOP program. Signage is posted at all previous battery drop areas informing the public regarding this change.

- **RECYCLABLES**

Metropolitan Paper Recycling, 847 Shepherd Avenue, Brooklyn, New York 11208 processed the City's recyclables through October 31, 2010. Westbury Paper Stock Corporation, P.O. Box 833, 619-633 Dickens Street, Westbury, New York 11590 was awarded a two year contract to process the City's recyclables that commenced November 1, 2010 (Resolution # 111/10).

Under the current agreement the City receives revenue for old corrugated cardboard, mixed paper, and scrap metal. Revenue for cardboard and mixed paper is determined based upon a percentage of the stock price as listed in the Official Board Markets publication. Revenue for scrap metal is determined based upon a percentage of the stock price listed in the Iron Age Scrap Metal Bulletin publication. The City pays \$11 per ton to dispose of commingled material.

- **C&D**

The contract to process the City's C&D with Jamaica Ash and Rubbish Removal, 172 School Street, Westbury, New York expired November 2010. The City Council approved a resolution that awarded a contract to Testani Enterprises, Inc., 117 Magnolia Avenue, Westbury, New York 11590 to process C&D which commenced December 2010. The contract duration is one year.

Under the new agreement the City pays \$475, \$375, and \$275 for the disposal of a 20, 15, and 10 cubic yard containers respectively.

- **FLOURESCENT LIGHT BULBS**

As of July 12, 2005 entities that possess over 100 employees and discard more than 15 fluorescent light bulbs must designate a separate disposal option for the material other than solid waste because they contain mercury. The City falls within this category and is required to comply with this new requirement. Residents are permitted to dispose of fluorescent light bulbs at the STOP program.

The Resource Conservation Department set up a program to comply with the regulations and maintains records regarding same. In 2010, 223 pounds (266 lamps) of fluorescent lamps were processed from City facilities.

- **E-CYCLING**

The City initiated an E-CYCLING drop off program in 2009. The program provides residents an avenue to safely recycle their unwanted computer and electronic equipment. These products potentially contain toxic materials such as lead, cadmium, and mercury that can be harmful to the environment if disposed of improperly.

The City currently utilizes E-Revival LLC, 141 Lanza Avenue, Building 5, Garfield, New Jersey 07026 to properly dispose of all material collected. The program resulted in the collection and proper disposal of 3,260 lbs of mixed electronics.

III. TABLES AND GRAPHS – CALENDAR YEAR 2010

Tables 1-20 quantify recyclable material collected for the 2010 Calendar Year. Highlights of each table are as follows:

- **TABLE 1 - SOLID WASTE MANAGEMENT SUMMARY**

The information shown in this table summarizes the quantity of material collected throughout the City for the 2010 Calendar year. The City's wastestream is broken down into eleven material classifications. Corresponding tonnages collected as well as the percent of total wastestream are listed. According to the information contained in this table the City recycled 12.16% of its wastestream (excluding C&D). Including C&D the City achieved a recycling rate of 23.81%, for the year 2010. The following shows the recycling rates (with and without C&D) for 1990 – 2010.

<u>YEAR</u>	<u>RECYCLING RATE (EXCLUDING C&D)</u>	<u>RECYCLING RATE (INCLUDING C&D)</u>
1990	11.07%	NA
1991	11.54%	NA
1992	10.93%	NA
1993	13.29%	NA
1994	13.0%	NA
1995	12.53%	NA
1996	12.41%	30.17%
1997	12.82%	36.50%
1998	13.83%	22.41%
1999	16.18%	25.53%
2000	15.71%	27.14%
2001	13.12%	26.03%
2002	12.81%	22.33%
2003	13.65%	29.25%
2004	13.06%	22.62%
2005	12.10%	20.65%
2006	11.90%	27.02%
2007	12.05%	33.41%
2008	13.83%	37.66%
2009	12.62%	38.14%
2010	12.16%	23.81%

- **TABLE 2 - RECYCLING FIGURES (1990-2010)**

This table shows the quantities of recyclables collected in each year and the corresponding percent change from the subsequent year for the period of 1990 – 2010.

- **TABLE 3 - DISPOSAL COSTS 1998-2010**

- The information shown in this table illustrates the City's annual waste disposal costs (exclusive of labor and equipment). The quantities of the primary (those that make up a majority of the wastestream) materials disposed of by the City are listed as well as the average unit price per ton to dispose of them. This information is utilized to obtain the dollars spent on solid waste disposal for the calendar year 2010. In total, \$1,852,447 was expended in 2010. This represents a modest 4% increase to the 2009 figures, however is otherwise the lowest annual total spent on disposal since 2003 when \$1,775,068 was expended. Costs were mitigated due to the decrease in waste generation. In 2010, the City generated and disposed of 19,261.22 tons of refuse. Based upon a review of the records it is the lowest annual total realized in recent history (20+years).

- **TABLE 4 - ACTUAL SAVINGS (RECYCLING)**

The information obtained in this table represents the avoided cost savings that is realized by recycling. Avoided cost refers to savings associated with disposing of solid waste as recyclables rather than refuse. Since disposal of recyclables is significantly cheaper than garbage, a cost savings is realized for every ton of material diverted from the wastestream and recycled. In 2010, (including C&D) a cost savings of over \$65 per ton was realized and approximately 13070 tons of material was recycled. Thus, a net avoided cost of \$39/ton x 6155 tons or over \$240,000 was saved/avoided by recycling post consumer waste. Excluding C & D, the net avoided cost is approximately \$91/ton x 2707 or over \$246,000.

- **TABLE 5 - CITY OF LONG BEACH WASTE GENERATION**

Table 5 represents a detailed summary of all solid waste generated in the City of Long Beach in 2010. Also listed is the per capita waste generation (with and without C&D) for the calendar year 2010. The City's per capita waste generation in tons/person/year (without C&D) is .81 respectively. This calculates to 1460 lbs/person/year or 4.0 lbs of waste/day generated by City of Long Beach residents.

- **TABLES 6-10 - SOLID WASTE COLLECTED (1992-2010)**

Table 6 through 10 illustrates graphically and numerically the quantity of the primary types of solid waste collected i.e, mixed paper, old corrugated cardboard, commingled, scrap metal, and refuse from 1992 through 2010.

- **TABLES 11-16 COST BREAKDOWN (EACH INDIVIDUAL SOLID WASTE)**

Tables 11 through 16 illustrates graphically and numerically a monthly breakdown of solid waste tonnages collected for 2010. Also listed are the monthly disposal costs/revenue for all elements of the solid waste stream including refuse, newspaper, commingled, old corrugated cardboard, scrap metal, and C&D. Perusing these tables can give valuable insight regarding seasonal fluctuations that are typically associated with solid waste collection.

- **TABLE 17 - MONTHLY BREAKDOWN - TOTAL QUANTITY OF RECYCLABLES COLLECTED (EXCLUDING C&D)**

Table 17 shows a comparison of the total monthly quantities of the major recyclable materials collected i.e., commingled, corrugated cardboard, mixed paper and scrap metal for the period 1996 through 2010.

- **TABLE 18 - RECYCLABLES COLLECTED FROM COMMERCIAL ESTABLISHMENTS THAT UTILIZE THE CITY OF LONG BEACH TO COLLECT THEIR REFUSE**

Table 18 lists the quantities of waste oil, tires, antifreeze, and batteries generated by service stations that utilize the City for waste disposal. The information is contained in this report because the City collects refuse from these establishments. The quantity of material recycled by these entities amounts to approximately 30.69 tons.

- **TABLE 19 - RECYCLABLES COLLECTED FROM COMMERCIAL ESTABLISHMENTS THAT UTILIZE PRIVATE CARTERS TO COLLECT THEIR REFUSE**

Surveys were sent out to all commercial establishments that utilized private carters to dispose of refuse. The purpose was to ascertain the quantities of refuse and recyclables generated by these establishments. The information is displayed in Table 19. Unfortunately, numerous establishments did not respond to our survey, thus, little quantifiable information was obtained.

- **TABLE 20 - HOUSEHOLD HAZARDOUS WASTE COLLECTED FROM CITY OF LONG BEACH RESIDENTS**

Table 20 contains the quantities of household hazardous waste disposed of by City of Long Beach residents at the various STOP program in 2010. In total, 135 drums of waste were collected and 1348 Long Beach residents participated in the program.

IV. UPCOMING ISSUES

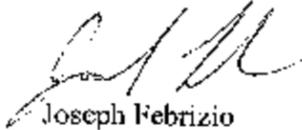
- Expiration of City's Solid Waste Management Plan

The City's existing Solid Waste Management Plan expired in December 2009. The City solicited proposals from qualified consulting engineering firms to prepare the Solid Waste Management Plan Update for Long Beach for the period of 2010 through 2020. On December 21, 2010 the City Council approved Council Resolution # 137/10 awarding a contract to CDM, 100 Crossways Park West, Suite 415, Woodbury, New York 11797 for engineering services to prepare a Solid Waste Management Plan Update for the City of Long Beach.

- Beyond Waste - A Sustainable Materials Management Strategy for New York State

On December 27, 2010 New York State adopted new Solid Waste Management regulations. The regulation set the framework for all future solid waste management practices, planning, etc. in New York State. The goals and objectives set forth in the document are required to be incorporated in the Solid Waste Management Plan Update for the City.

If you have any questions and/or require any additional information please contact this office.



Joseph Febrizio

cc: Kevin C. Mulligan, Commissioner of Public Works

TABLE 1
SOLID WASTE MANAGEMENT SUMMARY
2010

<u>MATERIAL</u>	<u>TONS COLLECTED</u>	<u>% OF WASTESTREAM</u>
NEWSPAPER	1085.96	4.18%
SCRAP METAL	37.63	0.14%
COMMINGLED	1034.45	3.98%
CORRUGATED CARDBOARD	551.53	2.12%
CONSTRUCTION AND DEMOLITION DEBRIS	3447.97	13.27%
WASTE OIL	12.37	0.05%
TIRES	4.3	0.0165%
ANTIFREEZE	4.56	0.0175%
BATTERIES (AUTO MOBILE)	9.45	0.04%
WASTEWATER TREATMENT PLANT RESIDUALS	542.25	2.09%
REFUSE	19261.22	74.11%
TOTAL	25991.69	100%
TONS RECYCLED (WITH C&D)		6188.22
TONS RECYCLED (WITHOUT C&D)		2740.25
TONS INCINERATED		19261.22
TOTAL WASTE HANDLED (IN TONS - WITH C&D)		25991.69
TOTAL WASTE HANDLED (IN TONS - WITHOUT C&D)		22543.72
% RECYCLED (WITH C&D)		23.81%
% RECYCLED (WITHOUT C&D)		12.18%

METAL - INCLUDES WHITE GOODS AND MISCELLANEOUS METALS i.e., STEEL, TIN, ALUMINUM, COPPER, ETC.

COMMINGLED - INCLUDES GLASS (GREEN, AMBER, AND CLEAR), PLASTICS (#1 - #5) AND CANS (FERROUS AND NON FERROUS)

NEWSPAPER - INCLUDES MIXED OFFICE PAPER, JUNK MAIL, TELEPHONE DIRECTORIES, OLD CORRUGATED CARDBOARD, AND COMPUTER PAPER

WASTE OIL - REPRESENTS USED MOTOR OIL

POPULATION (ESTIMATE 2000 U.S. CENSUS) = 55111

* 1.63 TONS OF ELECTRONICS RECYCLED THROUGH ILLINOIS VALLEY INC. INCLUDED IN DEC. 2010 SCRAP METAL MONTHLY TONNAGE.

Table 3
Disposal Costs 1998-2010
(Material disposed only, exclusive of labor and equipment)

MATERIAL	1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		2011			
	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON	QUANT. (in tons)	AVG. UNIT PRICE PER TON		
MIXED WASTE	7,927.76	\$510.43	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77	8,025.66	\$529.77
SQUARE METAL	138.43	\$311.71	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77	53,449.31	\$46.77
COMMINGLED	842.81	\$41.56	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68
CRACKED	75.77	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
WOOD	2,043.9	\$51.12	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75
ROTTEN	21,833.3	\$72.51	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27
TOTAL	11,971.26	\$451.12	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68
MATERIAL	2,542.15	\$52,084	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63
IRON & METAL	542.71	\$35.87	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63
COMMINGLED	516.52	\$41.56	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63	\$13,237.16	\$4,520.63
CARDBOARD	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
WASTE	24,833.3	\$72.51	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27	6,134,000	\$2,208.27
TOTAL	11,971.26	\$451.12	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68	84,722.22	\$41.68

TABLE 5
CITY OF LONG BEACH
WASTE GENERATION
2010

MONTH	MSW	NEWSPAPER	COMMINGLED	SCRAP METAL	CARDBOARD	WASTE OIL	C&D	TIRES	ANTI-FREEZE	WWTP RESIDUALS	BATTERIES
JANUARY	1447.05	113.04	97.49	4.47	82.91		275.9				
FEBRUARY	1267.15	36.6	64.52	2.98	29.82		271.04			22.35	
MARCH	1553.26	102.75	36.8	1.08	30.63		410.28			30.37	
APRIL	1593.75	101.7	89.23	5.48	52.95		260.31			67.68	
MAY	1028	75.51	61.44	3.88	43.65		241.38			35.27	
JUNE	1832.87	143.02	97.44	3.79	47.70		340.72			37.47	
JULY	1773.1	71.5	87.18	3.74	67.04		375.48			51.15	
AUGUST	1829.55	88.1	128.4	3.49	62.05		377.12			45.20	
SEPTEMBER	1625.51	83.12	97.15	6.40	58		316.10			54.28	
OCTOBER	1581.71	63.64	73.57	0.00	34.82		402.12			38.26	
NOVEMBER	1494.66	107.59	99.36	0.00	25.9		192.78			33.60	
DECEMBER	1395.6	96.39	63.82	1.63	5.97		174.94			52.72	
SUBTOTAL	19261.22	1085.96	1034.45	37.63	551.53	12.37	3447.97	4.30	4.55	542.25	1.45
% OF WASTE-STREAM	74.11%	4.18%	3.98%	0.14%	2.12%	0.05%	13.27%	0.0105%	0.018%	2.09%	0.04%
TOTAL TONS RECYCLED (WITH C&D)			5166.22								
TOTAL TONS RECYCLED (WITHOUT C&D)			2740.25								
TOTAL TONS INCINERATED			19261.22								
TOTAL CITY WASTE GENERATED (WITH C&D)			25991.89								
TOTAL CITY WASTE GENERATED (WITHOUT C&D)			22543.72								
% RECYCLED (WITH C&D)			23.81%								
% RECYCLED (WITHOUT C&D)			12.16%								
POPULATION (US CENSUS 2006 ESTIMATE)			35111								
PER CAPITA WASTE GENERATION			0.74								
TON/PER YEAR (WITH C&D)			0.64								
TON/PER YEAR (WITHOUT C&D)											

* 1.45 TONS OF ELECTRONICS RECYCLED THROUGH E-SKRAP DESTRUCT ON INCLUDED IN DEC 2010 SCRAP METAL MONTHLY TOTAL (NOTE - NO SCRAP METAL RECYCLED IN DEC. 2010)

TABLE 6

MIXED PAPER COLLECTED (1991-2010)

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1808.54	1829.7	1800.2	1815.41	1687.31	1712.11	2272.1	2522.4	2820.7	2468	1987.79	1705.71	2608.88	2342.15	2191	1874	1506	1338	1466	1395.95

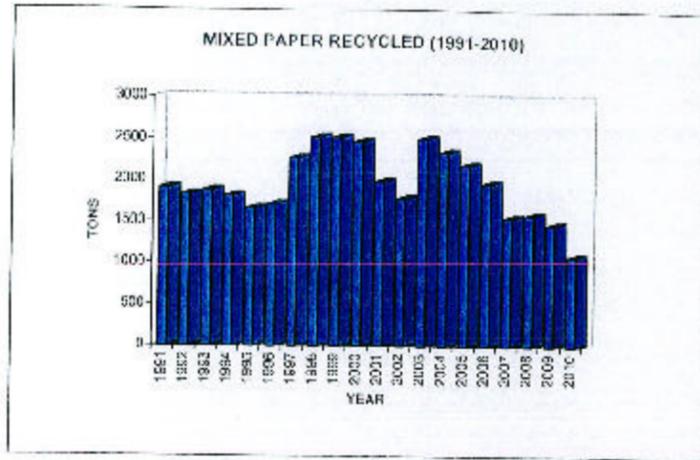
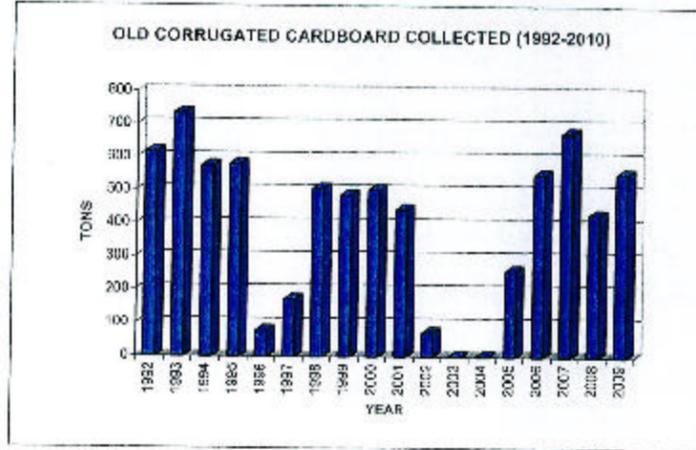


TABLE 7

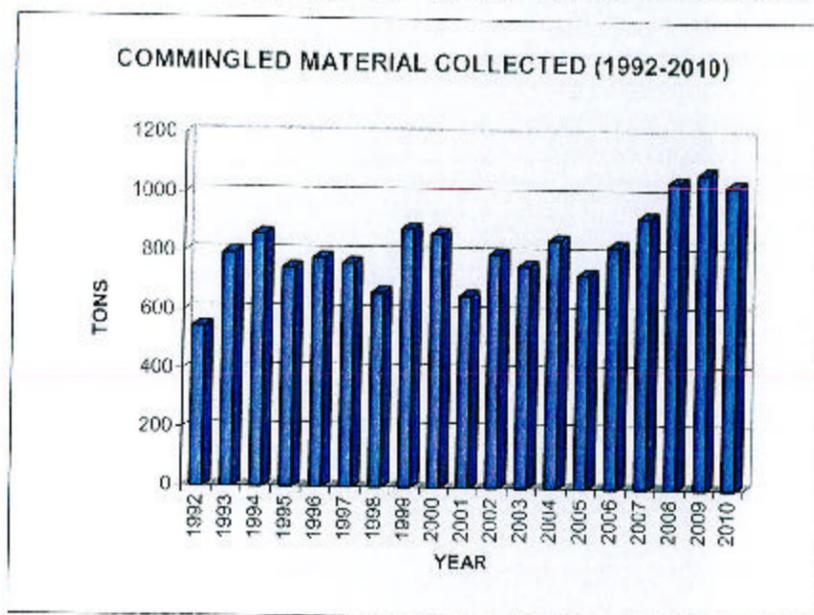
OLD CORRUGATED CARDBOARD COLLECTED (1992-2010)

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
118.88	616.36	735.70	573.75	550.07	76.43	170.77	505.57	485.47	500.32	442.57	71.02	0	0	267.6	540.6	674.8	428.2	551.5



**TABLE 8
COMMINGLED MATERIAL COLLECTED (1992-2010)**

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
545	796	860	747	781	763	664	852	864	655	798	757	846	728	824.72	924.24	1047	1077.53	1034.45



**TABLE 9
SCRAP METAL COLLECTED (1992-2010)**

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
347	321	233	300	204	150	188	308	443	407	451	566	583	396	198	115.89	47	59.95	37.63

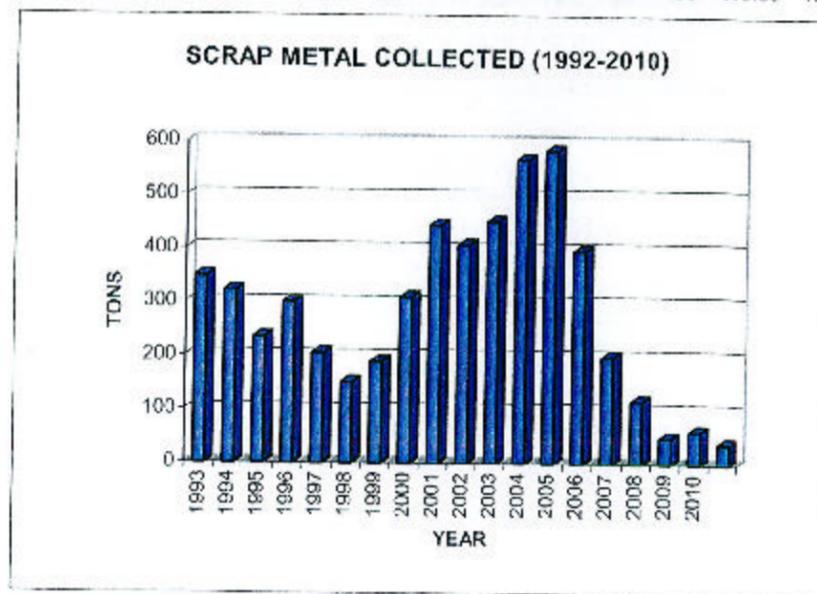


TABLE 10

REFUSE GENERATED (1992-2010)

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
23138	23638	24471	23255	23230	22188	21854	22204	22408	23257	23288	23993	24850	24547	23560	22798	21661	20758	19261

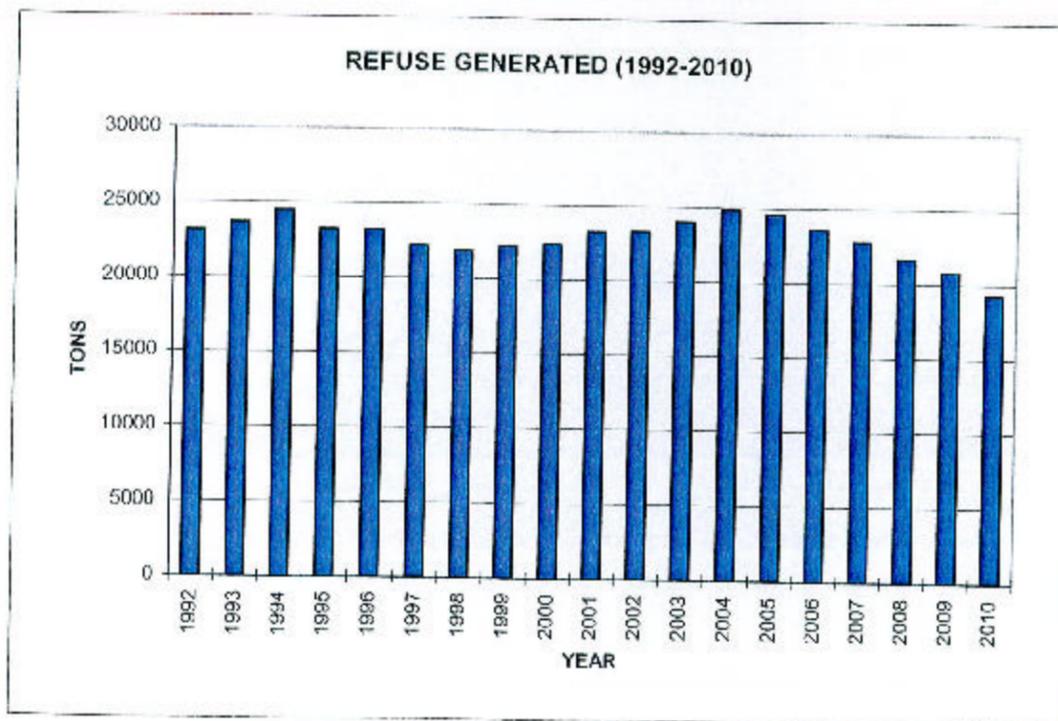


TABLE 11
CITY OF LONG BEACH
SCRAP METAL AND APPLIANCES RECYCLING PROGRAM
2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	4.47	\$86.09	\$ 384.82
FEB.	2.98	\$136.83	\$ 407.75
MAR.	1.68	\$156.770	\$ 263.37
APR.	5.48	\$167.780	\$ 919.43
MAY	3.88	\$152.460	\$ 591.54
JUNE	3.79	\$281.100	\$ 1,065.37
JULY	3.74	\$131.770	\$ 492.82
AUG.	3.49	\$147.690	\$ 515.44
SEPT.	6.49	\$155.43	\$ 1,008.74
OCT.	0.00	na	\$ -
NOV.	0.00	na	
DEC.	0.00	na	
TOTAL	36.00		\$ 5,649.30

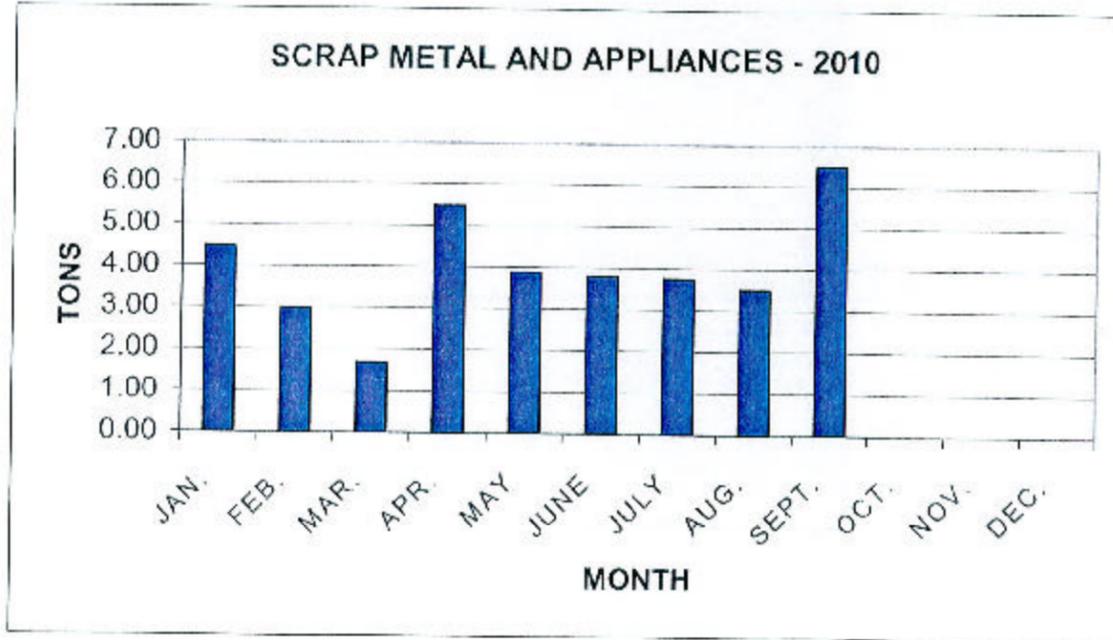


TABLE 12
CITY OF LONG BEACH
COMMINGLED MATERIAL RECYCLING PROGRAM
2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	97.49	(\$25.00)	\$ (2,437.25)
FEB.	64.52	(\$25.00)	\$ (1,613.00)
MAR.	86.8	(\$25.00)	\$ (2,170.00)
APR.	89.33	(\$25.00)	\$ (2,233.25)
MAY	61.44	(\$25.00)	\$ (1,536.00)
JUN	91.44	(\$25.00)	\$ (2,286.00)
JULY	81.19	(\$25.00)	\$ (2,029.75)
AUG.	128.4	(\$25.00)	\$ (3,210.00)
SEPT.	97.15	(\$25.00)	\$ (2,428.75)
OCT.	73.51	(\$25.00)	\$ (1,837.75)
NOV.	99.36	(\$11.00)	\$ (1,092.96)
DEC.	63.82	(\$11.00)	\$ (702.02)
TOTAL	1034.45		\$ (23,576.73)

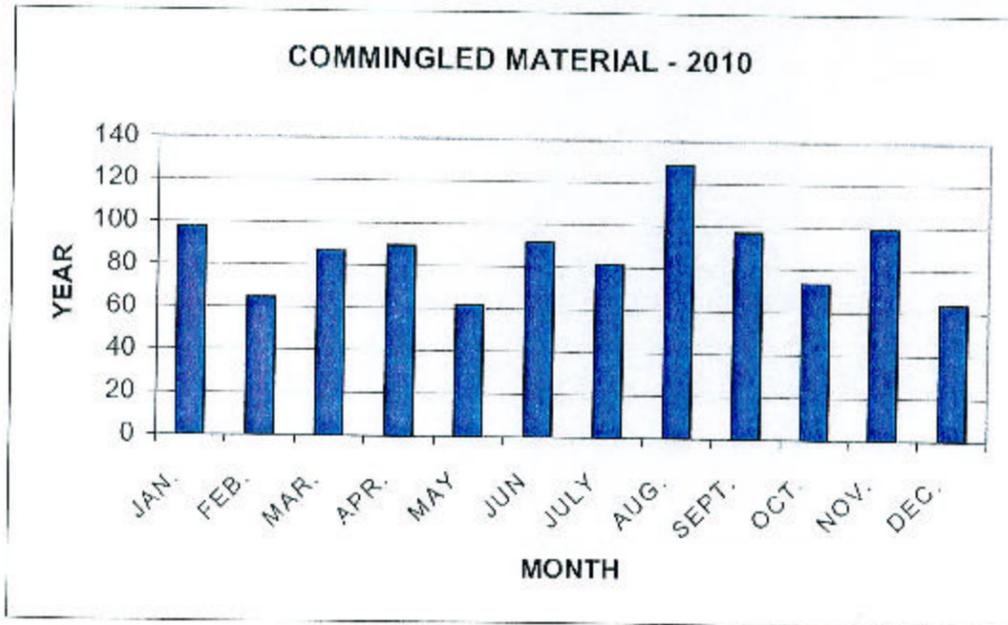


TABLE 13
 CITY OF LONG BEACH
 CARDBOARD, NEWSPAPER, MAGAZINES, JUNK MAIL, TELEPHONE BOOKS
 AND MIXED PAPER RECYCLING PROGRAM
 2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	113.04	\$10.00	\$ 1,130.40
FEB.	36.6	\$10.00	\$ 366.00
MAR.	102.75	\$10.00	\$ 1,027.50
APR.	101.7	\$10.00	\$ 1,017.00
MAY	75.51	\$10.00	\$ 755.10
JUNE	143.02	\$10.00	\$ 1,430.20
JULY	71.5	\$10.00	\$ 715.00
AUG.	86.1	\$10.00	\$ 861.00
SEPT.	88.12	\$10.00	\$ 881.20
OCT.	63.64	\$10.00	\$ 636.40
NOV.	107.59	\$25.00	\$ 2,689.75
DEC.	96.39	\$25.00	\$ 2,409.75
TOTAL	1085.96		\$ 13,919.30

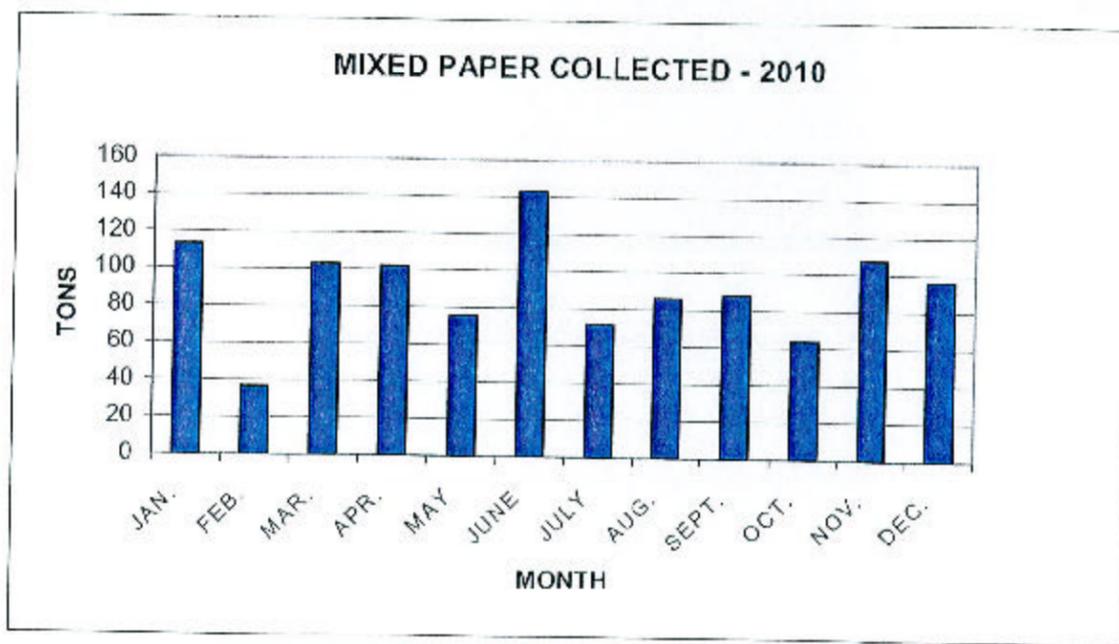


TABLE 14
CITY OF LONG BEACH
OLD CORRUGATED CARDBOARD RECYCLING PROGRAM
2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	82.91	\$32.50	\$ 2,694.58
FEB.	29.82	\$57.50	\$ 1,714.65
MAR.	36.63	\$83.75	\$ 3,067.76
APR.	59.95	\$61.25	\$ 3,671.94
MAY	40.65	\$53.75	\$ 2,184.94
JUNE	47.79	\$46.25	\$ 2,210.29
JULY	67.04	\$38.75	\$ 2,597.80
AUG.	62.05	\$38.75	\$ 2,404.44
SEPT.	58	\$46.25	\$ 2,682.50
OCT.	34.82	\$53.75	\$ 1,871.58
NOV.	25.0	\$77.50	\$ 2,007.25
DEC.	5.97	\$81.25	\$ 485.06
TOTAL	551.53		\$ 27,592.78

**OLD CORRUGATED CARDBOARD RECYCLED -
2010**

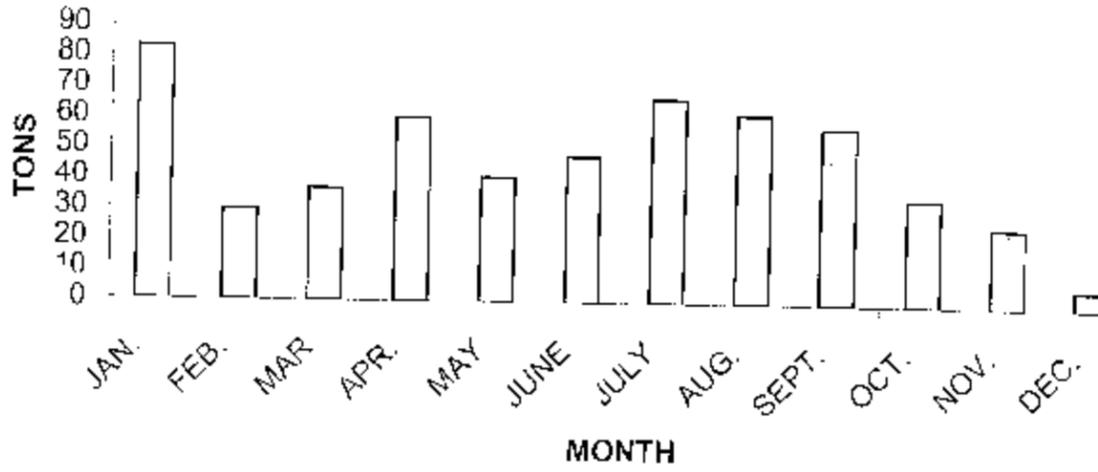
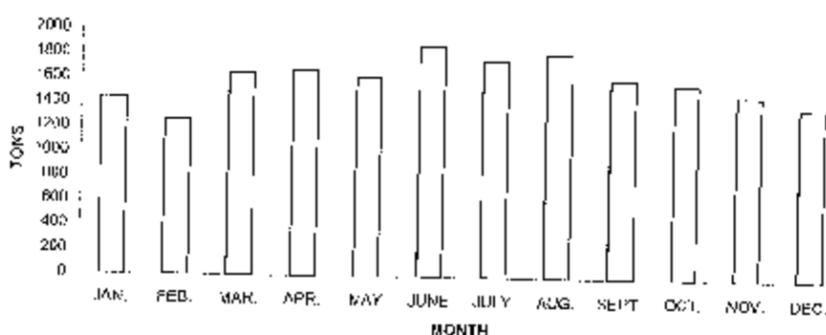


TABLE 15
 CITY OF LONG BEACH
 REFUSE DISPOSAL
 GARBAGE AND BULK
 2010

MONTH	GARBAGE TONS	PRICE PER TON	COST	BULK TONS	PRICE PER TON	COST	TOTAL WASTE GARBAGE AND BULK	TOTAL COST
JAN.	1429.74	\$82.00	\$ 117,238.68	17.31	\$ 83.00	\$ 1,436.73	1447.05	\$ 118,675.41
FEB.	1253.52	\$82.00	\$ 102,788.64	13.64	\$ 83.00	\$ 1,132.12	1267.16	\$ 103,920.76
MAR.	1639.5	\$82.00	\$ 134,463.60	13.46	\$ 83.00	\$ 1,117.18	1652.96	\$ 135,580.78
APR.	1661.96	\$82.00	\$ 136,280.72	21.79	\$ 83.00	\$ 1,808.57	1683.75	\$ 138,089.29
MAY	1597.65	\$82.00	\$ 131,007.30	28.36	\$ 83.00	\$ 2,353.05	1626.00	\$ 133,360.35
JUNE	1641.15	\$82.00	\$ 134,374.30	41.72	\$ 83.00	\$ 3,462.76	1682.87	\$ 137,837.06
JULY	1719.34	\$82.00	\$ 141,005.88	24.76	\$ 83.00	\$ 2,055.08	1744.1	\$ 143,060.96
AUG.	1811.40	\$82.00	\$ 148,534.80	18.06	\$ 83.00	\$ 1,498.98	1829.46	\$ 150,033.78
SEPT.	1605.09	\$83.00	\$ 133,222.47	20.47	\$ 84.00	\$ 1,719.26	1625.56	\$ 134,941.73
OCT.	1554.38	\$83.00	\$ 129,013.54	27.33	\$ 84.00	\$ 2,296.72	1581.71	\$ 131,310.26
NOV.	1473.57	\$83.00	\$ 122,306.31	21.09	\$ 84.00	\$ 1,771.56	1494.66	\$ 124,077.87
DEC.	1381.64	\$83.00	\$ 114,676.12	13.71	\$ 84.00	\$ 1,151.64	1395.35	\$ 115,827.76
TOTAL	18999.58		\$ 1,563,980.49	125.37		\$ 10,488.26	19124.93	\$ 1,574,468.75

REFUSE DISPOSAL - 2010



TAB. E-16
 CITY OF LONG BEACH
 CONSTRUCTION AND DEMOLITION DEBRIS
 2010

MONTH	QUANTITY COLLECTED (IN TONS)	# OF CONTAINERS	AVG. COST PER CONTAINER	TOTAL COST
JAN.	275.0	22	\$568.04	\$ 12,510.00
FEB.	271.04	18	\$639.7	\$ 9,715.00
MAR.	410.98	45	\$913.00	\$ 28,595.00
APR.	200.31	4	\$500.00	\$ 2,000.00
MAY	221.48	37	\$598.04	\$ 23,510.00
JUNE	349.72	70	\$500.00	\$ 29,440.00
JULY	375.48	44	\$840.00	\$ 28,160.00
AUG.	377.12	56	\$640.00	\$ 37,120.00
SEPT.	316.10	48	\$660.00	\$ 30,720.00
OCT.	202.12	38	\$540.00	\$ 24,120.00
NOV.	195.78	36	\$655.43	\$ 22,245.00
DEC.	174.94	33	\$545.50	\$ 17,965.00
TOTAL	3447.87	465		\$ 290,260.00

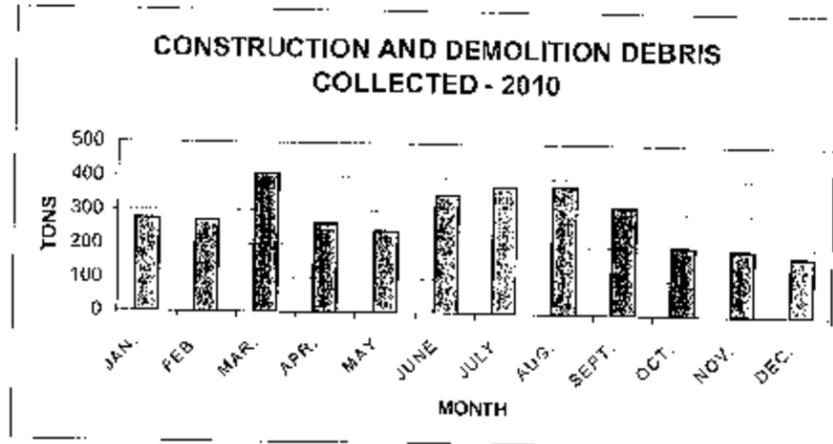


TABLE 17
CITY OF LONG BEACH
RECYCLABLES COLLECTED MONTHLY

MONTH	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
JAN.	264.49	193.197	255.72	301.99	270.51	360.46	280.04	333.06	403.74	272.65	289.32	241.92	282.28	289.16	287.81
FEB.	246.25	220.07	287.5	255.1	318.75	203.61	198.82	253.32	278.63	774.77	284.32	177.53	248.07	201.95	133.92
MAR.	250.22	214.12	296.97	292.37	397.48	347.78	299.37	280.27	363.85	248.8	238.65	242.90	234.41	242.55	237.85
APR.	288.46	311.67	308.01	347.55	344.68	218.71	287.09	284.41	238.65	265.55	254.11	227.24	287.24	246.13	236.48
MAY	230.73	280.08	291.85	301.57	409.17	313.95	371.09	274.07	278.66	254.28	266.22	332.84	278.38	224.27	214.48
JUNE	271.42	283.12	304.04	370.96	424.45	275.77	211.51	375.09	198.57	337.28	345.66	310.67	332.87	288.85	286.04
JULY	315.82	245.92	280.04	361.78	350.03	341.23	333.57	367.9	270.43	271.79	266.14	263.29	293.3	291.57	223.47
AUG.	284.04	230.55	284.79	364.51	387.83	258.11	385.98	426.86	249.33	234.23	267.16	322.55	324.27	264.7	286.54
SEPT.	266.31	388.85	270.83	421.1	343.87	236.87	320.53	370.14	494.05	340.2	238.62	249	302.15	254.37	249.76
OCT.	302.54	268.33	333.88	407.12	301.4	261.85	339.51	418.28	309.52	237.89	252.43	270.11	266.03	231.75	171.87
NOV.	254.22	284.36	285.98	345.59	411.38	275.25	235.5	304.05	360.99	314.92	239.93	253.22	250.52	212.55	232.85
DEC.	325.77	334.54	358.9	444.28	266.68	327.98	199.67	286.38	337.63	310.99	288.90	287.31	305.61	283.91	47.81
TOTAL	3277.21	3279.047	3519.94	4216.72	4239.1	3560.37	3473.35	3,901.86	3771.25	3315.69	3,253.82	3144.78	3356.77	3632.06	2709.37

** MIXED PAPER, CORRUGATED, OLD CORRUGATED CARDBOARD, AND SCRAP METAL ONLY

**TABLE 18
WASTE OIL, TIRES, ANTIFREEZE, AND AUTOMOBILE BATTERIES
FROM ESTABLISHMENTS THAT UTILIZE THE CITY FOR WASTE DISPOSAL**

ESTABLISHMENT	WASTE OIL (in gal.)	2010 TIRES (units)	ANTIFREEZE (in gal.)	BATTERIES (units)	SCRAP (in pounds)	****DISPOSAL FACILITY O T A B \$ 1 3 1 4 **
L.B. CITY GARAGE	650			40		
SURF GLASS	1028	0	409	325	0	5 5 4
MOBIL	DID NOT RESPOND					
MANN AUTO	DID NOT RESPOND					
AUTO SERVICE CENTER	1857	360	402	115	0	10 11 1 4
MERRICK TRANSFER STATION		258				
TOTAL	3535	358	937	480	0	
TOTAL (IN TONS)	12.37	4.30	4.56	3.46	0	

CONVERSIONS

- 1 WASTE TIRE = .012 TONS
- 1 GAL. WASTE OIL = .0035 TONS
- 1 GAL. ANTIFREEZE = .0049 TONS
- 1 CAR BATTERY = 39.4 LBS

** ALL SCRAP METAL GENERATED BY THE CITY OF LONG BEACH IS DISPOSED OF THROUGH THE CITY'S RECYCLING PROGRAM.
SCRAP METAL IS CURRENTLY PROCESSED BY JAMAICA ASH AND RUBBISH REMOVAL, 172 SCHOOL STREET, WESTBURY, NEW YORK (516)333-2211
*** DISPOSAL FACILITY: O=OIL, T=TIRES, A=ANTIFREEZE, B=BATTERIES, S=SCRAP METAL

1. Planet Earth Recycling Services
199 Sunrise Highway
Amityville, New York
2. County Garling Company
3550 Hampton Road
Oceanside, New York
3. Jamaica Ash and Rubbish Removal
172 School Street
Westbury, New York
4. Interstate Batteries of Southwestern Nassau
3551 Lawson Blvd.
Oceanside, New York
5. Safety Kleen Corp.
80 Seabro Avenue
Amityville, New York
6. C & L Tire Service
7. Novak
8. Ganin Tire Company Inc.
699 Burnside Avenue
Lawrence, New York
9. Omni of Babylon
114 Alder Street
West Babylon, New York
10. Waste Oil Solutions
109 Jersey Street
W. Babylon, New York
11. S&M Rubbish
7 Columbus Ave.
Oceanside, NY 11572
12. Worldwide Tire Distributors
103 W. Sunrise Highway
Lindenhurst, New York

TABLE 2U
HOUSEHOLD HAZARDOUS WASTE COLLECTED
FROM CITY OF LONG BEACH RESIDENTS
AT STOP PROGRAMS
2010

CATEGORY	QUANTITY COLLECTED
BATTERIES (DRY CELL)	0.5 DRUMS
AEROSOLS	10.5 DRUMS
POISONS	1 DRUMS
ASBESTOS	4 DRUMS
CORROSIVES	6 DRUMS
OXIDIZERS	3.5 DRUM
FLAMMABLE LIQUID (BULK)	16.5 DRUMS
MOTOR OIL	9 DRUMS
PESTICIDES	14 DRUMS
FLAMMABLE LIQUID (LBS PACK)	17.5 DRUMS
ANTIFREEZE	3 DRUMS
FLUORESCENT BULBS	7.5 BOXES 0 DRUMS
FIRE EXTINGUISHERS	2 DRUM
FLAMMABLE LIQUID (SOLIDS)	1.5 5 GAL PAIL 0 DRUMS
MERCURY	0 DRUMS
OIL PAINT	40.5 DRUMS
PROPANE	2 DRUM
TOTAL	135 DRUMS

*** see below

NOTE** THE TOWN OF HEMPSTEAD SPONSORS TEN HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM PER YEAR AS PER AGREEMENT ONE IS HELD IN THE CITY OF LONG BEACH. IN TOTAL FOR 2010 THERE WERE 1348 (FROM THE CITY) PARTICIPANTS THAT GENERATED 135 DRUMS OF HOUSEHOLD HAZARDOUS WASTE

THE STOP PROGRAM WAS HELD IN THE CITY OF LONG BEACH ON SUNDAY, APRIL 18TH, 2010 IN THE CITY HALL REAR PARKING LOT. 1422 CARS DROPPED OFF HOUSEHOLD HAZARDOUS WASTE AT THE EVENT (711 FROM THE CITY OF LONG BEACH).

*** The following was recycled through the program to safely dispose of fluorescent light bulbs in City buildings:

8 LFL	Recycling 8' fluorescent lamps	32 lamps	48 lbs
4 LFL	Recycling 4' fluorescent lamps	231 lamps	173.25 lbs
3 LFL	Recycling 3' fluorescent lamps	3 lamps	1.888 lbs

Disposed of through Northeast Lamp Recycling, 250 Main Street, PO Box 680, East Windsor, CT 06088 866-57-5287

In addition 282 High Pressure Sodium lamps were recycled by Welsbach Electric Corp. of Long Island, 300 Newtown Road, Plainview, New York 11803, in accordance with the City's street lighting contract.

EXHIBIT 2-3
 (REVISED) CITY OF LONG BEACH PER CAPITA SOLID WASTE GENERATION RATES
 (REPORTING PERIOD JANUARY 1, 2009 THROUGH DECEMBER 31, 2009 EXPIRATION OF SOLID WASTE MANAGEMENT

YEAR	TONS PER CAPITA PER YEAR (PROJECTED)	TONS PER CAPITA PER YEAR (ACTUAL)
1990	-	0.75
1991	-	0.73
1992	-	0.77
1993	-	0.80
1994	-	0.81
1995	-	0.81
1996	-	0.95
1997	-	1.02
1998	-	0.83
1999	-	0.89
2000	0.90	0.93
2001	0.92	0.96
2002	0.93	0.99
2003	0.95	1.08
2004	0.97	1.02
2005	0.98	1.00
2006	1.00	1.06
2007	1.01	1.13
2008	1.03	1.17
2009	1.04	1.14

APPENDIX 12

EXHIBIT 2-4 (REVISED)

**CITY OF LONG BEACH WASTE GENERATION
(PROJECTED VS. ACTUAL)**

(January 1, 2009 through December 31, 2010)

EXHIBIT 2.4
 (REVISED) CITY OF LONG BEACH WASTE GENERATION
 (REPORTING PERIOD JANUARY 1, 2000 THROUGH DECEMBER 31, 2009 EXPIRATION OF SOLID WASTE MANAGEMENT PLAN)

YEAR	TOTAL MUNICIPAL SOLID WASTE (INCLUDING RECYCLABLES) ORIGINAL	TOTAL MUNICIPAL SOLID WASTE (INCLUDING RECYCLABLES) ACTUAL
1990	-	24,831
1991	-	24,820
1992	-	26,302
1993	-	27,672
1994	-	28,478
1995	-	28,536
1996	-	33,339
1997	-	25,509
1998	-	28,663
1999	-	30,190
2000	30,586	31,494
2001	30,459	32,116
2002	30,789	30,710
2003	31,042	35,192
2004	31,283	32,982
2005	31,195	31,836
2006	31,386	33,115
2007	31,256	35,124
2008	31,428	35,684
2009	31,289	34,385

APPENDIX 13

**EXHIBIT 2-7 REVISED
QUANTITIES OF WASTE MATERIALS GENERATED IN LONG
BEACH (1995 – 2009)**

(January 1, 2009 through December 31, 2010)

APPENDIX 5

**RESIDENTIAL AND COMMERCIAL
SANITATION/RECYCLING SCHEDULE**

(January 1, 2009 through December 31, 2010)

Sanitation & Recycling Collection Information

All Garbage & Recyclables must be placed curbside **AFTER 9:00 p.m. the day prior to collection and BEFORE 7:00 a.m. on the collection day.** The Sanitation Department recommends purchasing two bins: One for paper & cardboard, and one for cans & bottles. Bins may be purchased for \$5 Mon-Fri in the Tax Dept., 3rd floor City Hall. Please do not use brown paper bags, plastic grocery bags or cardboard boxes for trash, as they can easily rip open spilling onto streets and sidewalks. Please use sturdy plastic bags which fitting snug into your outdoor trash receptacles.

GARBAGE PICKUP

Household Garbage: (excludes Bulk, Metal, Appliances)

East Side: Mondays & Thursdays

West Side: Tuesdays & Fridays

Exceptions: When the City does not pick up garbage due to a holiday, it will be picked up the next day unless otherwise noted in this calendar.

BULK GARBAGE

By appointment only. Call 432-3132. (four items per pickup)

Call for special pickup of bulk items, such as furniture, mattresses, bedsprings, carpeting and tires. Wood must not exceed 4 feet and must be tied in bundles weighing less than 40 lbs. The City will not pick up automotive or boat batteries, auto tires, nor any construction materials or debris. Please make certain that any home improvement contractor you hire agrees to dispose of debris.

METAL ITEMS & APPLIANCES

By appointment only. Call 432-3132. (four items per pickup)

Call for a special pickup of metals and appliances. Metal items include: washers, dryers, stoves, dishwashers, bikes, refrigerators & metal pipes (not to exceed 4 feet). Please remove doors from all appliances. The City will not pickup barbecue tanks, boilers or oil/gas tanks. Please be certain that any plumber or installer you hire agrees to dispose of debris.

HOUSEHOLD HAZARDOUS WASTE

All hazardous household materials should be disposed of at the S.T.O.P. program on **April 10th behind City Hall.** Materials include: household batteries, car batteries, aerosol cans, antifreeze, bug killer, drain cleaners, degreasers, disinfectants, fertilizer, flammable liquid, kerosene, oven cleaners, paint stripper & thinner, photography chemicals, solvents & waste oil. Call the Town of Hempstead S.T.O.P. program at 378-2200 for a comprehensive list or for more information.

E-CYCLING DROP-OFF

Computers, computer components, TV's, VCR's, DVD players, fax machines and stored equipment can be dropped off at the blue e-cycling container in front of the Recreation Center on Magnolia Boulevard.

NEWSPAPERS, JUNK MAIL & CARDBOARD

Place curbside on Wednesdays by 7:00am. Items must be placed in a red recycle bin or tied with string.

Do Recycle:

-Newspapers, magazines, junk mail, hard and soft covered books, binders, catalogs, photo books, journals, office & computer paper, plain envelopes & envelopes with plastic windows.

-Cardboard, cereal boxes and unopened pizza boxes, brown & white paper bags.

Do Not Recycle:

-Foam packaging, plastic cards & stickers from junk mail.

GLASS CANS-PLASTIC

Place glass, cans and plastic containers in recycling bins and put outside by 7:00am. Please do not place recyclables in plastic bags.

Recycle:

Glass

-Rinsed glass, jars & bottles.

-Discard caps & lids.

-Labels may be left on.

Cans

-Metal cans rinsed clean.

-Labels may be left on.

-Take-out tins, rinsed (discard lids)

-Aluminum foil, rinsed if soiled.

Plastic

-All plastic beverage, food & detergent bottles imprinted with #1 thru #5 inside chaps, chemical containers, straws & plastic utensils

-Do not recycle plastic bags, toys, and plastic containers that

Do not have a recycling logo.

Discard all caps and lids.

Do Not Recycle:

Glass

-Lids & caps, broken glass, light bulbs, windshields, window pane glass and laminated glass.

Cans

-Wire rings from cans, coat hangers.

-Pesticide/herbicide, paint cans, empty aerosol and motor oil cans.

For Sanitation & Recycling questions please contact 432-3132

Under New York State Law, recycling is mandatory. Failure to separate glass, metal, newspapers and plastics from your regular trash will result in a fine.

APPENDIX 6

REVISED IMPLEMENTATION SCHEDULE

(January 1, 2009 through December 31, 2010)

APPENDIX 7

CITY OF LONG BEACH TYPICAL MONTHLY REPORTING
FORM

(January 1, 2009 through December 31, 2010)

APPENDIX 8

**CITY OF LONG BEACH
CORRESPONDENCE SENT TO COMMERCIAL
ESTABLISHMENTS ANNUALLY**

(January 1, 2009 through December 31, 2010)



CITY OF LONG BEACH

Department of Public Works
1 West Chester Street
Long Beach, N.Y. 11561
(516) 431-1011
Fax: (516) 431-5008

December 15, 2010

Pier One
220 E. Park Ave.
Long Beach, NY 11561

Re: Refuse and Recyclables Collections

Gentlemen:

As you may be aware, the New York State Department of Environmental Conservation (NYSDEC) requires municipalities to record the quantities of refuse and recyclables collected within its boundaries and subsequently prepare summary reports on an annual basis. In compliance with same, the City requests from commercial establishments using **private carters**, a quantitative summary of refuse and recyclables collected and their subsequent disposal destination. By law, your carting firm must maintain detailed records regarding such items. This information, broken down by various waste categories should therefore be readily available.

For your convenience we have prepared a brief table to be completed by a representative of your establishment with the **quantities for 2010**. Please return the completed form to the City **no later than January 15, 2011**.

The information required is as follows:

Waste Description	2010 Quan.	2010 Carting Firm - Name & Address
Garbage		
Newspaper		
Commingled -plastic, glass, cans		
Corrugated Cardboard		
Scrap Metal		
Other		

List quantity in tons.

PLEASE FAX COMPLETED SURVEY TO 431-5008

APPENDIX 9
REFUSE AND RECYCLABLES DISPOSAL DESTINATIONS
(January 1, 2009 through December 31, 2010)

SECTION 3 - Disposal Destination or Transfer for Disposal Destination

Identify the transfer or disposal destination of waste removed by indicating the name of the transfer or disposal facility to which solid waste was sent from your facility, the type of solid waste transferred from your facility, the corresponding NYS Planning Unit, and the County/Province and State/Country of the transfer or disposal destination facility, and the amount transferred or disposed, includes only waste sent off-site for disposal or further transfer prior to disposal, not recovered for reuse or recycling. Exclude Materials Recovered amounts reported in Section 4. Refer to the list of NYS Planning Units that can be found at the end of this report. DO NOT REPORT IN CUBIC YARDS!

Transport (specify percentages):

____ % Road _____ % Rail

____ % Water

____ % Other (specify: _____)

Explain which waste types and service areas below are included in these transport methods _____

Please report the facility to which you send the solid waste. Note: This is not the facility identified in Section 1.

Disposal Destination or Transfer for Disposal Destination							
Type of Solid Waste	NYS Planning Unit	County or Province	State or Country	Solid Waste Management Facility to which solid waste is sent (Name & Address)	Amount to Transfer Destination (tons)	Amount to Disposal Destination (tons)	Total Year (tons)
Asbestos	(Example)						
	(Monroe)	(Monroe)	(NY)	(High Acres Landfill, Fairport)		(2,500)	(2,500)
	(NYC)	(Richmond)	(NY)	(Vanbro Corp, Staten Island)	(4,000)		(4,000)
Construction & Demolition Debris (mixed)	(Monroe)	(Monroe)	(NY)	(High Acres Landfill, Fairport)			
	Long Beach	Nassau	NY	January - November 2010		(300)	(300)
				Jameica Ash and Robbish			
Industrial Waste (including Industrial Process Sludges)				172 School St. Westbury, NY 11590			3,447.97
				Dec. 2010 Testoni Enterprises Inc. 117 Magnolia Ave., Westbury, NY 11590			

REPRINTED (12/10)

Disposal Destination or Transfer for Disposal Destination							
Type of Solid Waste	NYS Planning Unit	County or Province	State or Country	Solid Waste Management Facility to which solid waste is sent (Name & Address)	Amount to Transfer Destination (tons)	Amount to Disposal Destination (tons)	Total Year (tons)
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)	Long Beach	Nassau	NY	Town of Hempstead Merrick			
				Transfer Station, 1600 Merrick Road, NY 11566			
Oil/Gas Drilling Waste				Not Applicable			
Petroleum Contaminated Soil				Not Applicable			
Sewage Treatment Plant Sludge	Long Beach	Nassau	NY	Hauler-Jully Construction Co., Inc. 127-50 Northern Blvd. Flushing, NY 11368		542.25	
Treated Regulated Medical Waste			PA	Disposal Not Applicable			
Other (Please specify)	Long Beach	Nassau	NY	January-October 2010-Metropolitan Paper Recycling, 847 Sheperd Ave. Brooklyn, NY 11208			
Recyclables				November-December 2010 Westbury Paper Stock Corp.		2707.94	
				177 School St., Westbury, NY 11590			
						Total Tons	10,959.38

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APPENDIX 10

**NYSDEC ANNUAL RECYCLING REPORT
AND
CITY OF LONG BEACH INTERNAL REPORT SUMMARIZING
2010 SOLID WASTE MANAGEMENT ACTIVITIES**

(January 1, 2009 through December 31, 2010)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 DIVISION OF MATERIALS MANAGEMENT
 ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT

Print Form



(Use additional sheets if necessary)

REPORT YEAR: 2010	PLANNING UNIT NAME: City of Long Beach		
ADDRESS: One West Chester Street Long Beach, NY 11561			COUNTY: 50 - NASSAU
CONTACT PERSON: Joseph Febrizio	EMAIL: jfebrizo@longbeachny.org	TELEPHONE NUMBER: 516 431-1011	
SOURCES OF DISPOSAL AND RECYCLING DATA (check all appropriate boxes):			
<input checked="" type="checkbox"/> Scale Weights	<input type="checkbox"/> Hauler Surveys	<input type="checkbox"/> Estimates	
<input type="checkbox"/> Truck Counts	<input type="checkbox"/> Facility Surveys	<input type="checkbox"/> Other	
LIST FACILITIES IN YOUR PLANNING UNIT WHICH ARE INCLUDED IN THIS REPORT			
FACILITY NAMES			REGISTRATION / PERMIT NUMBER
1.	City of Long Beach Transfer Station	30M322	
2.	Town of Hempstead Merrick Transfer Station	1-2820 131 8000-01	
3.	Westbury Paper Stock Corporation	1-2822-00487 00001	
4.	Testani Enterprises Inc.	1-2822-01362 00001	
5.	Jamaica Ash & Rubbish	1-2822-00487 00001	
WASTE DISPOSED			
6. Metropolitan Paper Recycling	LANDFILLED		24 DM5-24 DM6 COMBUSTED
	WASTE STREAMS	Name & Address	Tons
Municipal Solid Waste (MSW)			19,261.22
C & D Debris (C&D)			
Non-Hazardous Industrial Waste			
Biosolids Sewage Sludge Dry Tons	Hauler- Tully Construction 127-53 Northern Blvd., Flushing, NY 11368	542.25	

Revised 02/2010

ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT
(continued)

(Use additional sheets if necessary)

RECYCLABLES RECOVERED		
Do not report recyclables that result from the Recyclable Container Act or are part of a Beneficial Use Determination		
PAPER::	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Newspaper	1.	
	2.	
	3.	
Corrugated Cardboard	1. Jan-Oct Metropolitan Paper Recycling 847 Shepherd Ave. Brooklyn, NY 11208	519.66
	2. Nov-Dec Westbury Paper Stock Corp, PO Box 833 619-633 Dickens St. Westbury, NY 11590	31.87
	3.	
Paperboard / Boxboard (e.g. cereal, shoe, gift boxes & light cardboard)	1.	
	2.	
	3.	
Office Paper	1.	
	2.	
	3.	
Magazines	1.	
	2.	
	3.	
Junk Mail	1.	
	2.	
	3.	
Other Paper (specify): Mixed Paper _____	1. Jan-Oct. Metropolitan Paper Recycling 847 Shepherd Ave. Brooklyn, NY 11208	881.98
	2. Nov-Dec Westbury Paper Stock Corp, PO Box 833 619-633 Dickens St. Westbury, NY 11590	203.98
	3.	
GLASS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Glass Containers (all colors)	1.	
	2.	
Glass Non - Containers (e.g. vases, windows)	1.	
	2.	
Industrial Scrap Glass	1.	
	2.	
Other Glass (specify): _____	1.	
	2.	

ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT

(continued)
(Use additional sheets if necessary)

RECYCLABLES RECOVERED		
Do not report recyclables that result from the Returnable Container Act or are part of a Beneficial Use Determination		
METALS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Tin / Aluminum Containers	1.	
	2.	
Aluminum Foil / Trays	1.	
	2.	
Enameled Appliances / White Goods	1.	
	2.	
Bulk Metal (from residents)	1. Jan-Oct Metropolitan Paper Recycling 647 Shepherd Ave. Brooklyn, NY 11208	36
	2. Nov-Dec Westbury Paper Stock Corp. PO Box 833 619-633 Dickens St. Westbury, NY 11590	0
Metal Reported By (automobile dismantlers, junkyards, scrap metal processing)	1.	
	2.	
Metal Recovery from Municipal Waste Combustor	1.	
	2.	
Industrial Scrap Metal	1.	
	2.	
Other Metal (specify):	1.	
	2.	
PLASTICS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
PET (Plastic #1)	1.	
	2.	
HDPE (Plastic #2)	1.	
	2.	
Other Rigid Plastics (#3 - #7) (Identify quantity & type if available)	1.	
	2.	
Plastic Containers (#1 - #7) (if collected & marketed commingled)	1.	
	2.	
Plastic Film & Bags	1.	
	2.	
Industrial Scrap Plastic	1.	
	2.	
Other Plastic (specify):	1.	
	2.	

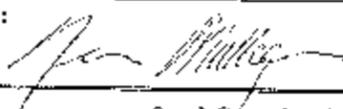
ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT
(continued)

(Use additional sheets if necessary)

RECYCLABLES RECOVERED Do not report recyclables that result from the Recyclable Container Act or are part of a Beneficial Use Determination		
COMMINGLED:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Commingled (paper & containers)	1. _____ 2. _____	
Commingled (containers only)	1. Jan-Oct. Metropolitan Paper Recycling 847 Shephard Ave., Brooklyn, NY 11268 2. Nov.-Dec. Westbury Paper Stock Corp. PO Box 833, 619-633 Dickens St. Westbury, NY 11590	871.27 183.18
ORGANICS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility) Do NOT use CUBIC YARDS
Leaves & Grass	1. _____ 2. _____	
Brush / Branches / Trees / Stumps	1. _____ 2. _____	
Food Scraps (e.g. kitchen scraps, grocery & restaurant food waste)	1. _____ 2. _____	
Food Processing Waste (e.g. brewery waste, fish, fruit, vegetable & dairy processing waste)	1. _____ 2. _____	
Biosolids	1. _____ 2. _____	
Other Organics (specify):	1. _____ 2. _____	
MISCELLANEOUS:	END USE OR DESTINATION FACILITY (Name and Complete Address)	TONS (to each facility)
Textiles	1. _____ 2. _____	
Electronics	1. E-Revival LLC, 141 Lanza Ave. Bldg. 5, Garfield, NJ 07026 2. _____	1.63
Tires	1. Varies 2. _____	4.3
Wood Pallets	1. _____ 2. _____	
Other Miscellaneous (specify):	1. Anti-Freeze - Varies 2. Car Batteries - Varies	4.56 9.45
	waste Oil - Varies	12.37

ANNUAL REPORT FORM – PLANNING UNIT RECYCLING REPORT
(continued)

(Use additional sheets if necessary)

RECYCLABLES RECOVERED		
Do not report recyclables that result from the Returnable Container Act or are part of a Beneficial Use Determination		
C & D DEBRIS:	END USE OR DESTINATION FACILITY <small>(Name and Complete Address)</small>	TONS <small>(to each facility)</small>
Asphalt / Pavement	1.	
	2.	
Brick	1.	
	2.	
Concrete	1.	
	2.	
Drywall	1.	
	2.	
Other Masonry Materials	1.	
	2.	
Petroleum Contaminated Soil (PCS)	1.	
	2.	
Rock	1.	
	2.	
Soil (Clean)	1.	
	2.	
Roofing Shingles	1.	
	2.	
Wood	1.	
	2.	
Land Clearing Debris <small>(including brush, branches, trees, & stumps NOT included in Organics Section)</small>	1.	
	2.	
Other (specify): Mixed C&D	1. Jan.-Nov. - Jamaica Ash Rubbish Removal 172 School St., Westbury, NY 11590	3,273.03
	2. Dec.- Teslani Enterprises Inc. 117 Magnolia Ave. Westbury, NY 11590	174.94
NAME: Kevin C. Mulligan, P.E.		DATE:
SIGNATURE: 		TITLE & ORGANIZATION: City of Long Beach

Send Completed Forms to the Addresses Listed in Appendix A

ANNUAL REPORT FORM - PLANNING UNIT RECYCLING REPORT

(continued)

APPENDIX A - NYS DEC REGIONAL AND CENTAL OFFICE ADDRESSES
PLEASE SEND A COPY OF THIS REPORT TO YOUR REGIONAL OFFICE AND A COPY TO THE DEC CENTRAL OFFICE

REGIONAL OFFICE ADDRESSES	COUNTY	TELEPHONE	CENTRAL OFFICE ADDRESS
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 1 50 CIRCLE ROAD STONY BROOK, NY 11790-3409	Nassau, Suffolk	(631) 444-0375	NYS Department of Environmental Conservation Division of Materials Management Attn: Bureau of Permitting & Planning 625 Broadway, 9 th Floor Albany, NY 12233-7233 (518) 402-8678 (518) 402-9041 Fax Email: planning@www.dec.state.ny.us
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 2 1 HUNTERS POINT PLAZA 47-40 21 ST STREET LONG ISLAND CITY, NY 11101-5407	New York City (Bronx, Kings, New York, Queens, Richmond)	(718) 482-4894	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 3 21 SOUTH FUZZ CORNERS ROAD NEW PALTZ, NY 12561-1696	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	(845) 256-3136	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 4 1130 NORTH WESTCOTT ROAD SCIENECTADY, NY 12306-2014	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	(518) 357-2346	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 5 1115 ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	(518) 897-1241	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 6 317 WASHINGTON STREET WATERTOWN, NY 13601-3787	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	(315) 785-2522	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 7 615 ERIE BOULEVARD WEST SYRACUSE, NY 13204-2400	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	(315) 426-7419	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 8 6274 EAST AVON-JAMA ROAD AVON, NY 14414-9519	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	(585) 226-5408	
REGIONAL MATERIALS MANAGEMENT ENGINEER NYS DEC - REGION 9 270 MICHIGAN AVENUE BUFFALO, NY 14203-2999	Allegany, Cattaraugus, Chautauque, Erie, Niagara, Wyoming	(716) 851-7220	



**INTER-OFFICE MEMO
CITY OF LONG BEACH, NEW YORK 11561**

TO: Files
FROM: Joseph Febrizio, Deputy Commissioner of Public Works
SUBJECT: 2010 Recycling Figures/Evaluation
DATE: February 28, 2011

The information contained in this annual report represents a summary of the City's Integrated Solid Waste Management Program for the 2010 Calendar Year. Table 1 (Solid Waste Management Summary) and Table 5 (Waste Generation) present a synopsis of solid waste quantities collected in the City of Long Beach in 2010. According to our records the City recycled 23.81% of its waste stream in 2010 which translates into 6188.22 tons of material. Excluding C&D (construction and demolition) material from the totals the City achieved a 12.16% recycling rate or 2740.25 tons.

As part of this report there are an array of tables (20) that depict quantitatively the solid waste stream. These tables are described briefly herein and are enclosed for your reference. However, for your convenience we have listed highlights of 2010 in the following "points of interest" segment:

I. POINTS OF INTEREST

- In 2010, the City generated and disposed of 19,261.22 tons of refuse. Based upon a review of the records it is the lowest annual total realized in recent history (20+years).
- One hundred and thirty five drums of household hazardous wastes were collected from City of Long Beach Residents through the 2010 STOP program (Table 20). Participation in the Long Beach program was the best since inception of the event.
- The agreement with the Town of Hempstead to dispose of refuse resulted in the City spending significantly less on waste disposal in 2010 when compared to prior years (exclusive of labor & equipment). The \$1.58 million spent on refuse disposal in 2010 was the lowest annual total spent on refuse since 2002 when \$1.54 million was expended. In 2008 and 2009, the City expended \$1.78 and 1.65 million on refuse disposal respectively.
- The City of Long Beach incurred an avoided cost savings (exclusive of labor & equipment as well as construction and demolition debris) of \$247,066 by recycling (see Table 4).
- The average resident generates 1460 lbs/person/year or 4.0 lbs. of waste/day in the City of Long Beach.
- In 2010, City residents recycled over 5.4 million lbs. of material (excluding C&D) and over 12.3 million lbs. of material (including C&D).

II. OVERVIEW – CALENDAR YEAR 2010

The following narratives represent relevant topics and issues that have affected our solid waste management program over the past year:

- **Solid Waste Disposal Contract**

The City entered into an interim agreement with the Town of Hempstead for municipal solid waste disposal. The agreement commenced on July 1 2008 and expired in August 2009. The City extended this agreement until December 31, 2009 while a long term agreement was negotiated. The disposal destination for City of Long Beach refuse (and bulk waste) is the Merrick Transfer Station in the Town of Hempstead. Waste is temporarily stored at the Merrick facility and ultimately hauled to the Covanta Waste to Energy facility in Westbury.

There are numerous benefits to utilizing the Merrick Transfer Station for refuse disposal. The close proximity to the City minimizes wear and tear on the Sanitation fleet significantly and reduces overtime costs. Further, the proximity of the City to the Merrick Transfer Station is key to operating an efficient, cost effective, sanitation program. The Sanitation Department is able to complete collection of its routes quicker resulting in garbage being off the streets in a timely manner.

The City entered into a ten (10) year agreement with the Town of Hempstead that commenced on January 1, 2010 and expires on December 31, 2020.

- **S.T.O.P. PROGRAM (STOP THROWING OUT POLLUTANTS - HOUSEHOLD HAZARDOUS WASTE COLLECTION AND DISPOSAL PROGRAM)**

In 1998, the City of Long Beach entered into an agreement with the Town of Hempstead to participate in their household hazardous waste collection (Stop Throwing Out Pollutants - S.T.O.P) program. The program provides residents with a disposal option for commonly generated household hazardous wastes i.e., ammonia, drain cleaners, fertilizers, oil based paint, weed killers, etc., that should be not disposed of with normal refuse.

The agreement allowed the City to participate in ten (10) STOP events held throughout the Town annually. Of the ten events one was required to be held in the City of Long Beach. The first STOP program was held in the City of Long Beach on April 18th 1999.

Under the agreement the City is responsible for 7% of the total Town of Hempstead program costs i.e., labor, administrative etc. The following represents the annual costs to the City of Long Beach for the STOP program:

<u>YEAR</u>	<u>TOTAL COST</u>
1999	\$19,586.50
2000	\$18,982.96
2001	\$17,923.19
2002	\$24,031.29
2003	\$35,529.03
* 2004	\$22,817.99
**2005	\$25,991.39
***2006	\$33,565.18
****2007	\$31,884.68
*****2008	\$36,457.00
2009	\$51,316.06
*****2010	\$29,169.06

*Actual cost is \$32,110.69. However, the Town of Hempstead received a grant in the amount of \$132,752.90 for the period of which the City received 7% or \$9,292.70.

** Actual cost is \$35,049.09. However, the Town of Hempstead received a grant in the amount of \$129,395.71 for the period of which the City received 7% or \$9,057.70.

*** Actual cost is \$42,620.88. However, the Town of Hempstead received a grant in the amount of approximately \$129,367 for the period of which the City received 7% or \$9,055.70.

**** Actual cost is \$40,940.38. However, the Town of Hempstead received a grant of which the City was entitled to 7% (City's cost of program) reimbursement which totaled \$9,055.70.

*****Actual cost is \$52,190.20. However, the Town of Hempstead received a grant of which the City was entitled to 7% (City's cost of program) reimbursement which totaled \$15,733.20.

***** Received \$28,667.50 credit from the Town of Hempstead because they receive a grant for the program. Paid only \$573.83 to the Town of Hempstead for the 2010 program.

Please note that if the City elected to pursue hosting a one day program without the Town of Hempstead's involvement, the costs would far exceed the annual expenditures currently incurred. Further, City residents would be unable to attend the STOP events held in the Town of Hempstead throughout the year.

The program has been extremely successful since its introduction in 1999. A breakdown of the annual participation rate at the City of Long Beach STOP program site is as follows:

<u>DATE OF PROGRAM</u>	<u>*QUANTITY OF CARS THAT CAME TO LONG BEACH SITE</u>	<u>**ANNUAL PARTICIPATION RATE (ALL TEN STOP PROGRAM EVENTS)</u>
April 18 th , 1999	363	140 Long Beach Residents
April 9 th , 2000	286	350 Long Beach Residents
April 22, 2001	603	375 Long Beach Residents
April 14, 2002	825	550 Long Beach Residents
April 5, 2003	655	514 Long Beach Residents
April 9, 2004	807	625 Long Beach Residents
April 16, 2005	751	766 Long Beach Residents
April 30, 2006	1103	557 Long Beach Residents
April 22, 2007	986	557 Long Beach Residents
April 13, 2008	977	621 Long Beach Residents
April 4, 2009	832	600 Long Beach Residents
April 18, 2010	1422	1348 Long Beach Residents

* Represents all cars that dropped off household hazardous waste at the STOP program on the day the event was held in Long Beach. Cars that are operated by residents of the Town of Hempstead and the City of Long Beach are permitted to participate in the program.

** Represents participation by Long Beach Residents for the entire year (all ten STOP events).

The 2010 S.T.O.P. program was extremely successful. The 2010 event was held on Sunday, April 18, 2010 and was met with enthusiasm by the public. A total of 1422 (711 from Long Beach) people dropped off household hazardous wastes at the program site during the event. It is noted that participation in 2010 is a record for this Long Beach event.

On February 15, 2011 the City Council approved a resolution (8/11) authorizing a one year extension with the Town of Hempstead through December 31, 2011.

- **BATTERY RECYCLING**

Recent regulatory requirements prohibit rechargeable and lithium batteries from being commingled with other batteries, i.e., alkaline, Carbon Zinc etc. Apparently there is the potential for combustion to occur when rechargeable and/or lithium batteries come into contact with other i.e. alkaline batteries. Therefore, the battery drop off program has been eliminated. Residents are encouraged to dispose of all batteries at the STOP program. Signage is posted at all previous battery drop areas informing the public regarding this change.

- **RECYCLABLES**

Metropolitan Paper Recycling, 847 Shepherd Avenue, Brooklyn, New York 11208 processed the City's recyclables through October 31, 2010. Westbury Paper Stock Corporation, P.O. Box 833, 619-633 Dickens Street, Westbury, New York 11590 was awarded a two year contract to process the City's recyclables that commenced November 1, 2010 (Resolution # 111/10).

Under the current agreement the City receives revenue for old corrugated cardboard, mixed paper, and scrap metal. Revenue for cardboard and mixed paper is determined based upon a percentage of the stock price as listed in the Official Board Markets publication. Revenue for scrap metal is determined based upon a percentage of the stock price listed in the Iron Age Scrap Metal Bulletin publication. The City pays \$11 per ton to dispose of commingled material.

- **C&D**

The contract to process the City's C&D with Jamaica Ash and Rubbish Removal, 172 School Street, Westbury, New York expired November 2010. The City Council approved a resolution that awarded a contract to Testani Enterprises, Inc., 117 Magnolia Avenue, Westbury, New York 11590 to process C&D which commenced December 2010. The contract duration is one year.

Under the new agreement the City pays \$475, \$375, and \$275 for the disposal of a 20, 15, and 10 cubic yard containers respectively.

- **FLOURESCENT LIGHT BULBS**

As of July 12, 2005 entities that possess over 100 employees and discard more than 15 fluorescent light bulbs must designate a separate disposal option for the material other than solid waste because they contain mercury. The City falls within this category and is required to comply with this new requirement. Residents are permitted to dispose of fluorescent light bulbs at the STOP program.

The Resource Conservation Department set up a program to comply with the regulations and maintains records regarding same. In 2010, 223 pounds (266 lamps) of fluorescent lamps were processed from City facilities.

- **E-CYCLING**

The City initiated an E-CYCLING drop off program in 2009. The program provides residents an avenue to safely recycle their unwanted computer and electronic equipment. These products potentially contain toxic materials such as lead, cadmium, and mercury that can be harmful to the environment if disposed of improperly.

The City currently utilizes E-Revival LLC, 141 Lanza Avenue, Building 5, Garfield, New Jersey 07026 to properly dispose of all material collected. The program resulted in the collection and proper disposal of 3,260 lbs of mixed electronics.

III. TABLES AND GRAPHS – CALENDAR YEAR 2010

Tables 1-20 quantify recyclable material collected for the 2010 Calendar Year. Highlights of each table are as follows:

- **TABLE 1 - SOLID WASTE MANAGEMENT SUMMARY**

The information shown in this table summarizes the quantity of material collected throughout the City for the 2010 Calendar year. The City's wastestream is broken down into eleven material classifications. Corresponding tonnages collected as well as the percent of total wastestream are listed. According to the information contained in this table the City recycled 12.16% of its wastestream (excluding C&D). Including C&D the City achieved a recycling rate of 23.81%, for the year 2010. The following shows the recycling rates (with and without C&D) for 1990 – 2010.

<u>YEAR</u>	<u>RECYCLING RATE (EXCLUDING C&D)</u>	<u>RECYCLING RATE (INCLUDING C&D)</u>
1990	11.07%	NA
1991	11.54%	NA
1992	10.93%	NA
1993	13.29%	NA
1994	13.0%	NA
1995	12.53%	NA
1996	12.41%	30.17%
1997	12.82%	36.50%
1998	13.83%	22.41%
1999	16.18%	25.53%
2000	15.71%	27.14%
2001	13.12%	26.03%
2002	12.81%	22.33%
2003	13.65%	29.25%
2004	13.06%	22.62%
2005	12.10%	20.65%
2006	11.90%	27.02%
2007	12.05%	33.41%
2008	13.83%	37.66%
2009	12.62%	38.14%
2010	12.16%	23.81%

- **TABLE 2 - RECYCLING FIGURES (1990-2010)**

This table shows the quantities of recyclables collected in each year and the corresponding percent change from the subsequent year for the period of 1990 – 2010.

- **TABLE 3 - DISPOSAL COSTS 1998-2010**

- The information shown in this table illustrates the City's annual waste disposal costs (exclusive of labor and equipment). The quantities of the primary (those that make up a majority of the wastestream) materials disposed of by the City are listed as well as the average unit price per ton to dispose of them. This information is utilized to obtain the dollars spent on solid waste disposal for the calendar year 2010. In total, \$1,852,447 was expended in 2010. This represents a modest 4% increase to the 2009 figures, however is otherwise the lowest annual total spent on disposal since 2003 when \$1,775,068 was expended. Costs were mitigated due to the decrease in waste generation. In 2010, the City generated and disposed of 19,261.22 tons of refuse. Based upon a review of the records it is the lowest annual total realized in recent history (20+years).

- **TABLE 4 - ACTUAL SAVINGS (RECYCLING)**

The information obtained in this table represents the avoided cost savings that is realized by recycling. Avoided cost refers to savings associated with disposing of solid waste as recyclables rather than refuse. Since disposal of recyclables is significantly cheaper than garbage, a cost savings is realized for every ton of material diverted from the wastestream and recycled. In 2010, (including C&D) a cost savings of over \$65 per ton was realized and approximately 13070 tons of material was recycled. Thus, a net avoided cost of \$39/ton x 6155 tons or over \$240,000 was saved/avoided by recycling post consumer waste. Excluding C & D, the net avoided cost is approximately \$91/ton x 2707 or over \$246,000.

- **TABLE 5 - CITY OF LONG BEACH WASTE GENERATION**

Table 5 represents a detailed summary of all solid waste generated in the City of Long Beach in 2010. Also listed is the per capita waste generation (with and without C&D) for the calendar year 2010. The City's per capita waste generation in tons/person/year (without C&D) is .81 respectively. This calculates to 1460 lbs/person/year or 4.0 lbs of waste/day generated by City of Long Beach residents.

- **TABLES 6-10 - SOLID WASTE COLLECTED (1992-2010)**

Table 6 through 10 illustrates graphically and numerically the quantity of the primary types of solid waste collected i.e, mixed paper, old corrugated cardboard, commingled, scrap metal, and refuse from 1992 through 2010.

- **TABLES 11-16 COST BREAKDOWN (EACH INDIVIDUAL SOLID WASTE)**

Tables 11 through 16 illustrates graphically and numerically a monthly breakdown of solid waste tonnages collected for 2010. Also listed are the monthly disposal costs/revenue for all elements of the solid waste stream including refuse, newspaper, commingled, old corrugated cardboard, scrap metal, and C&D. Perusing these tables can give valuable insight regarding seasonal fluctuations that are typically associated with solid waste collection.

- **TABLE 17 - MONTHLY BREAKDOWN - TOTAL QUANTITY OF RECYCLABLES COLLECTED (EXCLUDING C&D)**

Table 17 shows a comparison of the total monthly quantities of the major recyclable materials collected i.e., commingled, corrugated cardboard, mixed paper and scrap metal for the period 1996 through 2010.

- **TABLE 18 - RECYCLABLES COLLECTED FROM COMMERCIAL ESTABLISHMENTS THAT UTILIZE THE CITY OF LONG BEACH TO COLLECT THEIR REFUSE**

Table 18 lists the quantities of waste oil, tires, antifreeze, and batteries generated by service stations that utilize the City for waste disposal. The information is contained in this report because the City collects refuse from these establishments. The quantity of material recycled by these entities amounts to approximately 30.69 tons.

- **TABLE 19 - RECYCLABLES COLLECTED FROM COMMERCIAL ESTABLISHMENTS THAT UTILIZE PRIVATE CARTERS TO COLLECT THEIR REFUSE**

Surveys were sent out to all commercial establishments that utilized private carters to dispose of refuse. The purpose was to ascertain the quantities of refuse and recyclables generated by these establishments. The information is displayed in Table 19. Unfortunately, numerous establishments did not respond to our survey, thus, little quantifiable information was obtained.

- **TABLE 20 - HOUSEHOLD HAZARDOUS WASTE COLLECTED FROM CITY OF LONG BEACH RESIDENTS**

Table 20 contains the quantities of household hazardous waste disposed of by City of Long Beach residents at the various STOP program in 2010. In total, 135 drums of waste were collected and 1348 Long Beach residents participated in the program.

IV. UPCOMING ISSUES

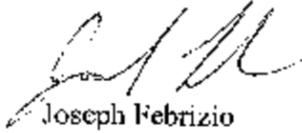
- Expiration of City's Solid Waste Management Plan

The City's existing Solid Waste Management Plan expired in December 2009. The City solicited proposals from qualified consulting engineering firms to prepare the Solid Waste Management Plan Update for Long Beach for the period of 2010 through 2020. On December 21, 2010 the City Council approved Council Resolution # 137/10 awarding a contract to CDM, 100 Crossways Park West, Suite 415, Woodbury, New York 11797 for engineering services to prepare a Solid Waste Management Plan Update for the City of Long Beach.

- Beyond Waste - A Sustainable Materials Management Strategy for New York State

On December 27, 2010 New York State adopted new Solid Waste Management regulations. The regulation set the framework for all future solid waste management practices, planning, etc. in New York State. The goals and objectives set forth in the document are required to be incorporated in the Solid Waste Management Plan Update for the City.

If you have any questions and/or require any additional information please contact this office.



Joseph Febrizio

cc: Kevin C. Mulligan, Commissioner of Public Works

TABLE 1
SOLID WASTE MANAGEMENT SUMMARY
2010

<u>MATERIAL</u>	<u>TONS COLLECTED</u>	<u>% OF WASTESTREAM</u>
NEWSPAPER	1085.96	4.18%
SCRAP METAL	37.63	0.14%
COMMINGLED	1034.45	3.98%
CORRUGATED CARDBOARD	551.53	2.12%
CONSTRUCTION AND DEMOLITION DEBRIS	3447.97	13.27%
WASTE OIL	12.37	0.05%
TIRES	4.3	0.0165%
ANTIFREEZE	4.56	0.0175%
BATTERIES (AUTO MOBILE)	9.45	0.04%
WASTEWATER TREATMENT PLANT RESIDUALS	542.25	2.09%
REFUSE	19261.22	74.11%
TOTAL	25991.69	100%
TONS RECYCLED (WITH C&D)		6188.22
TONS RECYCLED (WITHOUT C&D)		2740.25
TONS INCINERATED		19261.22
TOTAL WASTE HANDLED (IN TONS - WITH C&D)		25991.69
TOTAL WASTE HANDLED (IN TONS - WITHOUT C&D)		22543.72
% RECYCLED (WITH C&D)		23.81%
% RECYCLED (WITHOUT C&D)		12.18%

METAL - INCLUDES WHITE GOODS AND MISCELLANEOUS METALS i.e., STEEL, TIN, ALUMINUM, COPPER, ETC.

COMMINGLED - INCLUDES GLASS (GREEN, AMBER, AND CLEAR), PLASTICS (#1 - #5) AND CANS (FERROUS AND NON FERROUS)

NEWSPAPER - INCLUDES MIXED OFFICE PAPER, JUNK MAIL, TELEPHONE DIRECTORIES, OLD CORRUGATED CARDBOARD, AND COMPUTER PAPER

WASTE OIL - REPRESENTS USED MOTOR OIL

POPULATION (ESTIMATE 2000 U.S. CENSUS) = 55111

* 1.63 TONS OF ELECTRONICS RECYCLED THROUGH ILLINOIS VALLEY INC. INCLUDED IN DEC. 2010 SCRAP METAL MONTHLY TQ. A.

20-04-2017 to 20-04-2018 vs 2009-03-2010

ITEM	QTY	COLLECTED	TONS	COLLECTED	%
QTY	CHANGE	TONS	CHANGE	%	CHANGE
12.11	4.67%	227.67	8.03%	228.24	41.04%
12.21	-51.82%	1.95	-86.21%	138.47	28.72%
13.10	-2.94%	272.32	-2.42%	623.87	-1.28%
00.07	-2.25%	75.48	-658.26%	176.77	-28.47%
14.08	382.72%	6462.05	28.91%	5062.9	26.89%
17.2	-64.88%	21.9	-34.85%	1.07	62.88%
18.09	118.72%	12500.82	21.26%	6418.27	60.42%
21.07	6.89%	2122.83	-0.86%	2177.31	7.67%
22.21	-33.05%	22186.29	-4.29%	27633.51	-7.51%
24.22	14.02%	35801.76	4.86%	25438.62	-18.22%

ITEM	QTY	COLLECTED	TONS	COLLECTED	%	TONS	COLLECTED	%	TONS	COLLECTED	%		
QTY	CHANGE	TONS	CHANGE	%	TONS	CHANGE	%	TONS	CHANGE	%	TONS	CHANGE	
7.5	-6.57%	2189.87	-4.46%	1873.8	0.81%	1295.64	-21.16%	1187.82	2.02%	1486.64	-7.49%	1583.16	-20.91%
7.1	2.26%	399.4	-3.97%	157.82	-6.76%	17.29	-41.44%	47.2	69.23%	26.23	91.47%	31.63	37.22%
2.9	17.72%	121.66	-13.82%	87.72	12.26%	28.29	-12.05%	129.17	1.23%	157.93	2.85%	183.66	-1.82%
3	-105.00%	0	0.00%	237.82	N/A	348.87	-12.90%	674.82	23.01%	418.18	-94.27%	22.23	-21.1%
2.4	-42.50%	5086.15	-1.01%	5182.25	5.82%	8137.02	9.76%	8965.87	16.07%	10460.2	1.72%	2467.57	-61.67%
7.23	64.88%	1.13	-20.72%	6.79	-2.91%	12.11	17.87%	20.22	76.19%	2.19	-58.85%	49.37	-10.88%
12.17	-27.97%	693.1	-1.01%	684.51	98.75%	1726.62	31.86%	13491.86	14.52%	12072.88	-5.22%	8128.22	-15.60%
2.24	2.47%	3478.61	-9.27%	2885.29	-4.00%	2838.8	-1.80%	2317.7	11.40%	2122.81	-6.13%	2740.23	9.02%
0.15	0.87%	24827.81	-1.83%	24950.16	-4.32%	27028.88	-9.23%	27683.7	-4.20%	26158.21	-4.48%	32621.22	-7.21%
2.25	-4.26%	31847.7	-2.48%	20716.64	-6.02%	28734.13	6.08%	25042.88	1.82%	24344.7	-3.81%	26706.02	-26.41%

PAPER

Table 3
Disposal Costs 1998-2010
(Material disposed only, exclusive of labor and equipment)

MATERIAL	1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		2011			
	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON	QUANT. (TONS)	AVG. UNIT PRICE PER TON		
MIXED WASTE	7,927.76	\$510.43	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77	8,022.56	\$529.77
SQUARE METAL	138.43	\$311.71	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77	53,449.31	\$48.77
COMMINGLED	842.81	\$41.56	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68	65,228.97	\$41.68
CRACKERHART	75.77	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WOOD	2,043.9	\$51.12	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75	18,922.22	\$38.75
WASTE	21,833.3	\$72.51	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27	61,134,009	\$50.27
TOTAL	11,971.26	\$450.43	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27	120,642.55	\$45.27
MATERIAL	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87
ALUMINUM	2,542.15	\$50.084	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03	\$13,237.16	\$52.03
STEEL	460.85	\$35.487	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17	\$16,396.39	\$35.17
COMMINGLED	516.53	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CARBON	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WASTE	243.55	\$77.81	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31	11,449,840	\$40.31
TOTAL	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87	3,003	\$154.87

**TABLE 5
CITY OF LONG BEACH
WASTE GENERATION
2010**

MONTH	MSW	NEWSPAPER	COMMINGLED	SCRAP METAL	CARDBOARD	WASTE OIL	C&D	TIRES	ANTI-FREEZE	WWTP RESIDUALS	BATTERIES
JANUARY	1447.05	113.04	97.49	4.47	82.91		275.9				
FEBRUARY	1267.15	36.6	64.52	2.98	29.82		271.04			22.35	
MARCH	1553.26	102.75	36.8	1.08	30.63		410.28			30.37	
APRIL	1593.75	101.7	89.23	5.48	52.95		260.31			67.68	
MAY	1028	75.51	61.44	3.88	43.65		241.38			35.27	
JUNE	1832.87	143.02	97.44	3.79	47.70		340.72			37.47	
JULY	1773.1	71.5	87.18	3.74	67.04		375.48			51.15	
AUGUST	1829.55	88.1	128.4	3.49	62.05		377.12			45.20	
SEPTEMBER	1625.51	83.12	97.15	6.40	58		316.10			54.28	
OCTOBER	1581.71	63.64	73.57	0.00	34.82		402.12			38.25	
NOVEMBER	1494.66	107.59	99.36	0.00	25.9		192.78			33.60	
DECEMBER	1395.6	96.39	63.82	1.63	5.97		174.94			52.72	
SUBTOTAL	19261.22	1085.96	1034.45	37.63	551.53	12.37	3447.97	4.30	4.55	542.25	1.45
% OF WASTE-STREAM	74.11%	4.18%	3.98%	0.14%	2.12%	0.05%	13.27%	0.0105%	0.018%	2.09%	0.04%
TOTAL TONS RECYCLED (WITH C&D)	5166.22										
TOTAL TONS RECYCLED (WITHOUT C&D)	2740.25										
TOTAL TONS INCINERATED	19261.22										
TOTAL CITY WASTE GENERATED (WITH C&D)	25991.89										
TOTAL CITY WASTE GENERATED (WITHOUT C&D)	22543.72										
% RECYCLED (WITH C&D)	23.81%										
% RECYCLED (WITHOUT C&D)	12.16%										
POPULATION (US CENSUS 2006 ESTIMATE)	35111										
PER CAPITA WASTE GENERATION	0.74										
TON/PER YEAR (WITH C&D)											
TON/PER YEAR (WITHOUT C&D)	0.64										

* 1.45 TONS OF ELECTRONICS RECYCLED THROUGH E-SKRAP DESTRUCT ON INCLUDED IN DEC 2010 SCRAP METAL MONTHLY TOTAL (NOTE - NO SCRAP METAL RECYCLED IN DEC. 2010)

TABLE 6

MIXED PAPER COLLECTED (1991-2010)

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1808.54	1829.7	1800.2	1815.41	1687.31	1712.11	2272.1	2522.4	2820.7	2468	1987.79	1705.71	2608.88	2342.15	2191	1874	1506	1338	1466	1395.95

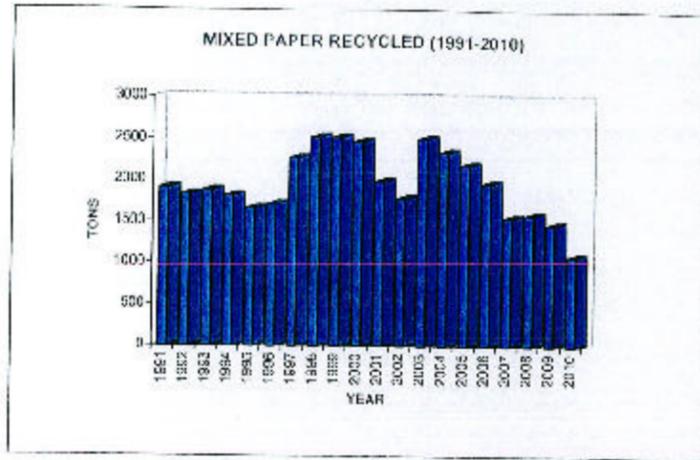
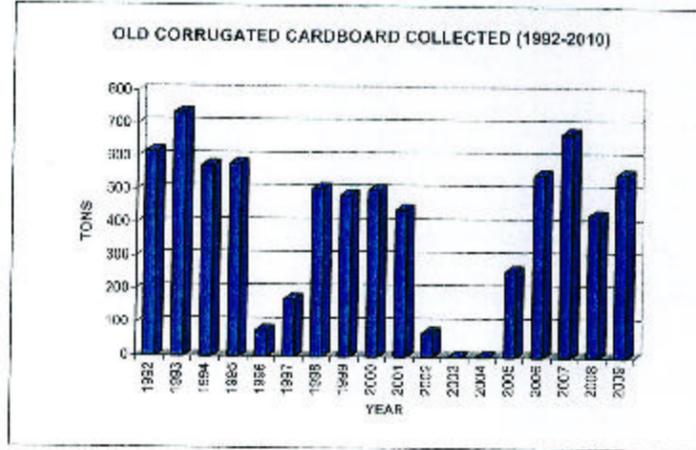


TABLE 7

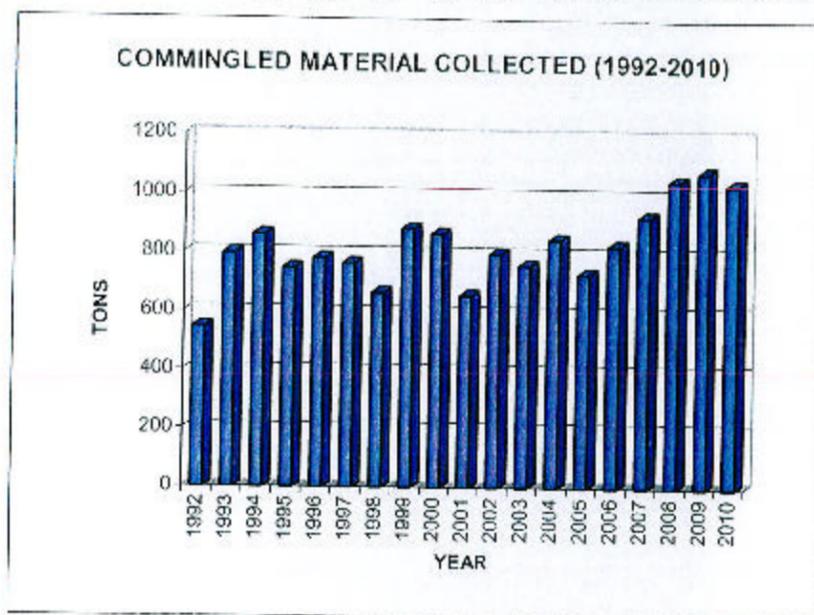
OLD CORRUGATED CARDBOARD COLLECTED (1992-2010)

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
118.88	616.36	725.75	573.75	550.07	76.43	170.77	505.57	485.47	500.32	442.57	71.02	0	0	267.6	540.6	674.8	428.2	551.5



**TABLE 8
COMMINGLED MATERIAL COLLECTED (1992-2010)**

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
545	796	860	747	781	763	664	852	864	655	798	757	846	728	824.72	924.24	1047	1077.53	1034.45



**TABLE 9
SCRAP METAL COLLECTED (1992-2010)**

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
347	321	233	300	204	150	188	308	443	407	451	566	583	396	198	115.89	47	59.95	37.63

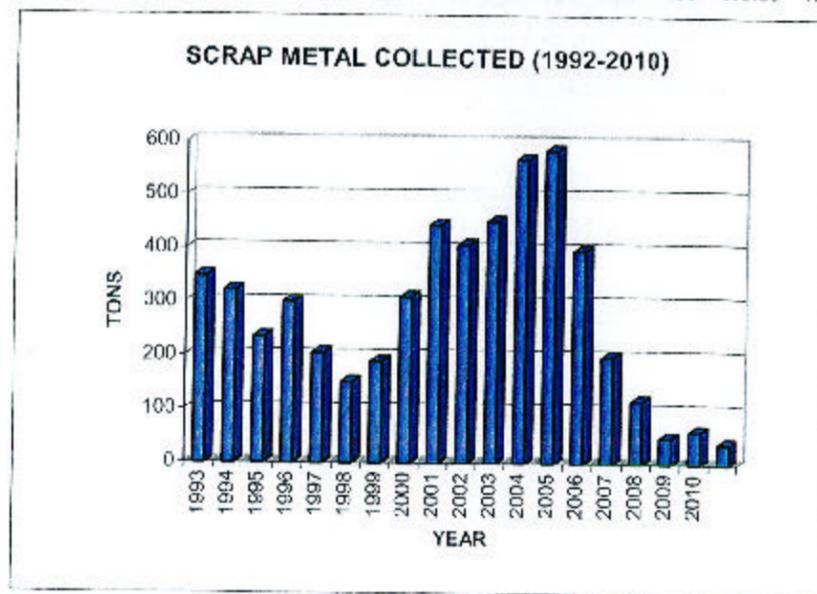


TABLE 10

REFUSE GENERATED (1992-2010)

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
23138	23638	24471	23255	23230	22188	21854	22204	22408	23257	23288	23993	24850	24547	23560	22798	21661	20758	19261

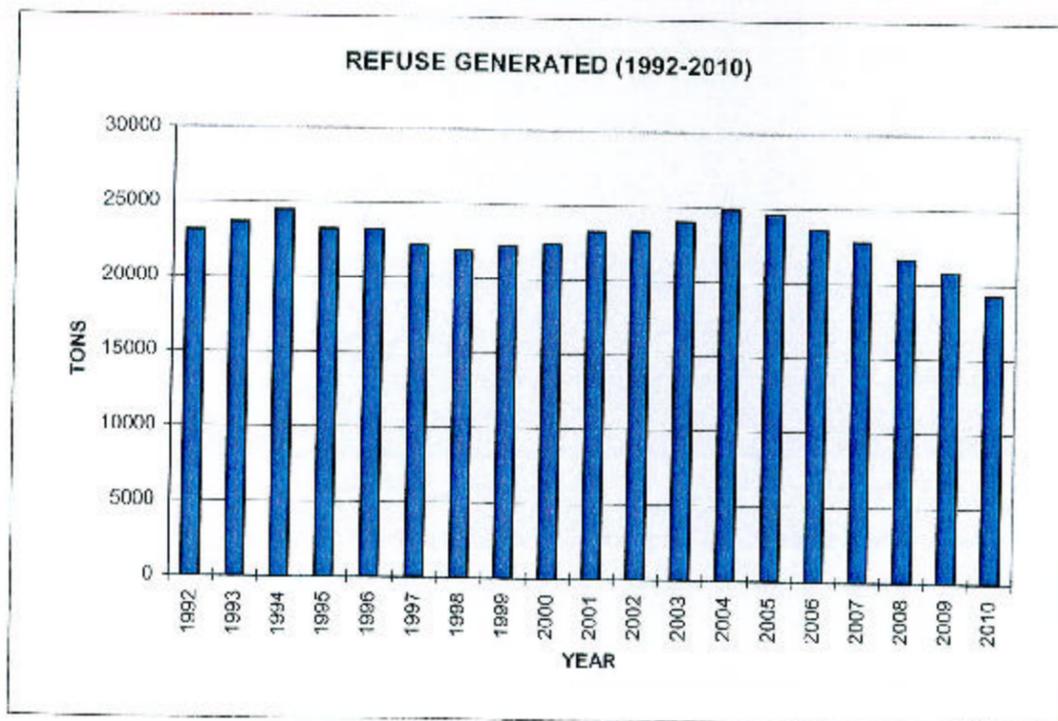


TABLE 11
CITY OF LONG BEACH
SCRAP METAL AND APPLIANCES RECYCLING PROGRAM
2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	4.47	\$86.09	\$ 384.82
FEB.	2.98	\$136.83	\$ 407.75
MAR.	1.68	\$156.770	\$ 263.37
APR.	5.48	\$167.780	\$ 919.43
MAY	3.88	\$152.460	\$ 591.54
JUNE	3.79	\$281.100	\$ 1,065.37
JULY	3.74	\$131.770	\$ 492.82
AUG.	3.49	\$147.690	\$ 515.44
SEPT.	6.49	\$155.43	\$ 1,008.74
OCT.	0.00	na	\$ -
NOV.	0.00	na	
DEC.	0.00	na	
TOTAL	36.00		\$ 5,649.30

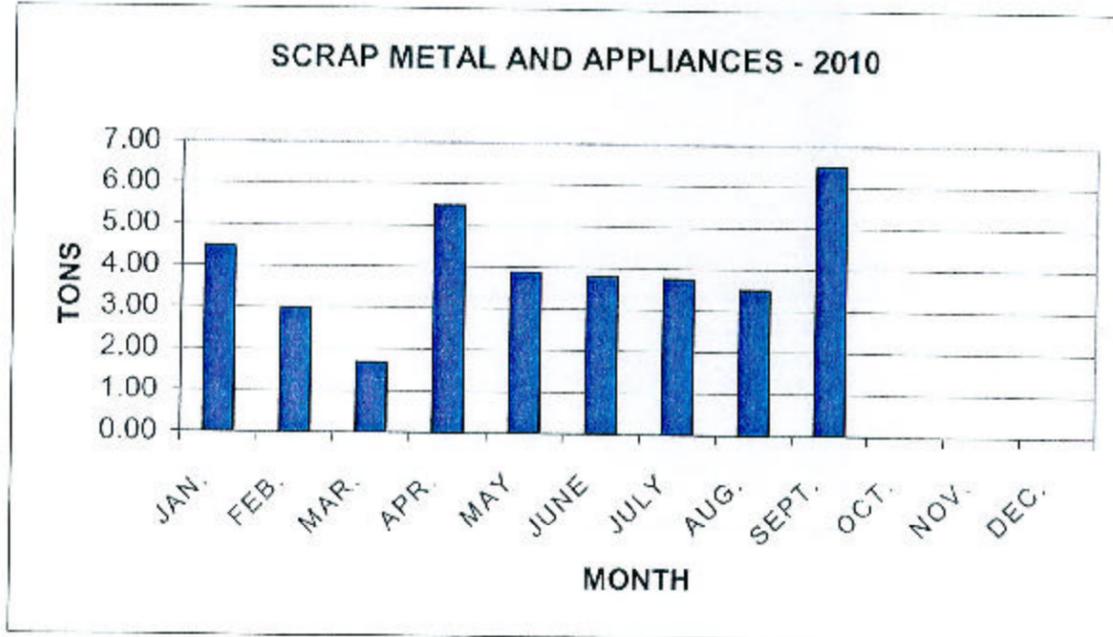


TABLE 12
CITY OF LONG BEACH
COMMINGLED MATERIAL RECYCLING PROGRAM
2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	97.49	(\$25.00)	\$ (2,437.25)
FEB.	64.52	(\$25.00)	\$ (1,613.00)
MAR.	86.8	(\$25.00)	\$ (2,170.00)
APR.	89.33	(\$25.00)	\$ (2,233.25)
MAY	61.44	(\$25.00)	\$ (1,536.00)
JUN	91.44	(\$25.00)	\$ (2,286.00)
JULY	81.19	(\$25.00)	\$ (2,029.75)
AUG.	128.4	(\$25.00)	\$ (3,210.00)
SEPT.	97.15	(\$25.00)	\$ (2,428.75)
OCT.	73.51	(\$25.00)	\$ (1,837.75)
NOV.	99.36	(\$11.00)	\$ (1,092.96)
DEC.	63.82	(\$11.00)	\$ (702.02)
TOTAL	1034.45		\$ (23,576.73)

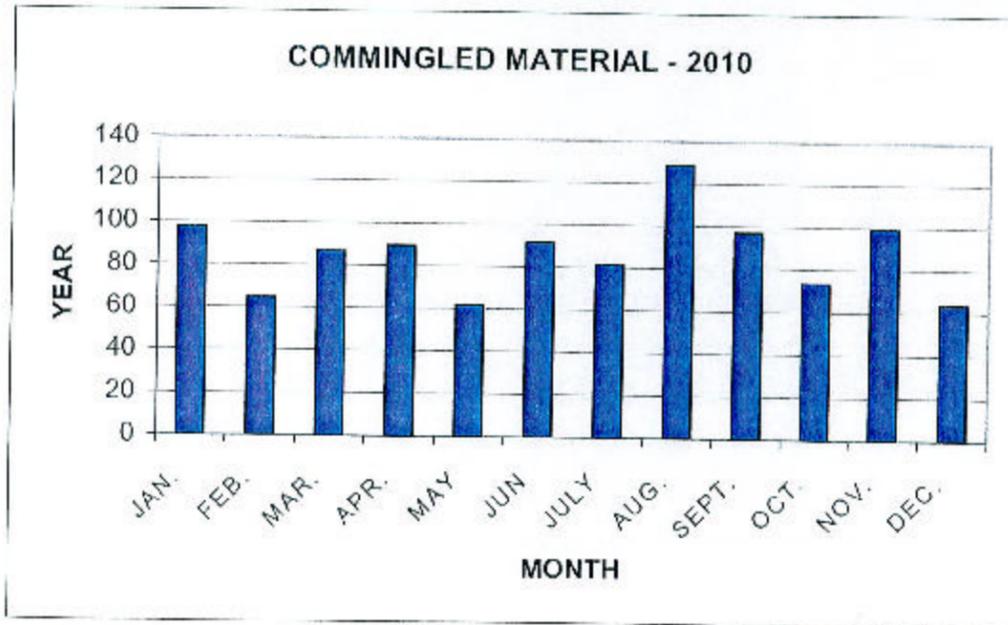


TABLE 13
 CITY OF LONG BEACH
 CARDBOARD, NEWSPAPER, MAGAZINES, JUNK MAIL, TELEPHONE BOOKS
 AND MIXED PAPER RECYCLING PROGRAM
 2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	113.04	\$10.00	\$ 1,130.40
FEB.	36.6	\$10.00	\$ 366.00
MAR.	102.75	\$10.00	\$ 1,027.50
APR.	101.7	\$10.00	\$ 1,017.00
MAY	75.51	\$10.00	\$ 755.10
JUNE	143.02	\$10.00	\$ 1,430.20
JULY	71.5	\$10.00	\$ 715.00
AUG.	86.1	\$10.00	\$ 861.00
SEPT.	88.12	\$10.00	\$ 881.20
OCT.	63.64	\$10.00	\$ 636.40
NOV.	107.59	\$25.00	\$ 2,689.75
DEC.	96.39	\$25.00	\$ 2,409.75
TOTAL	1085.96		\$ 13,919.30

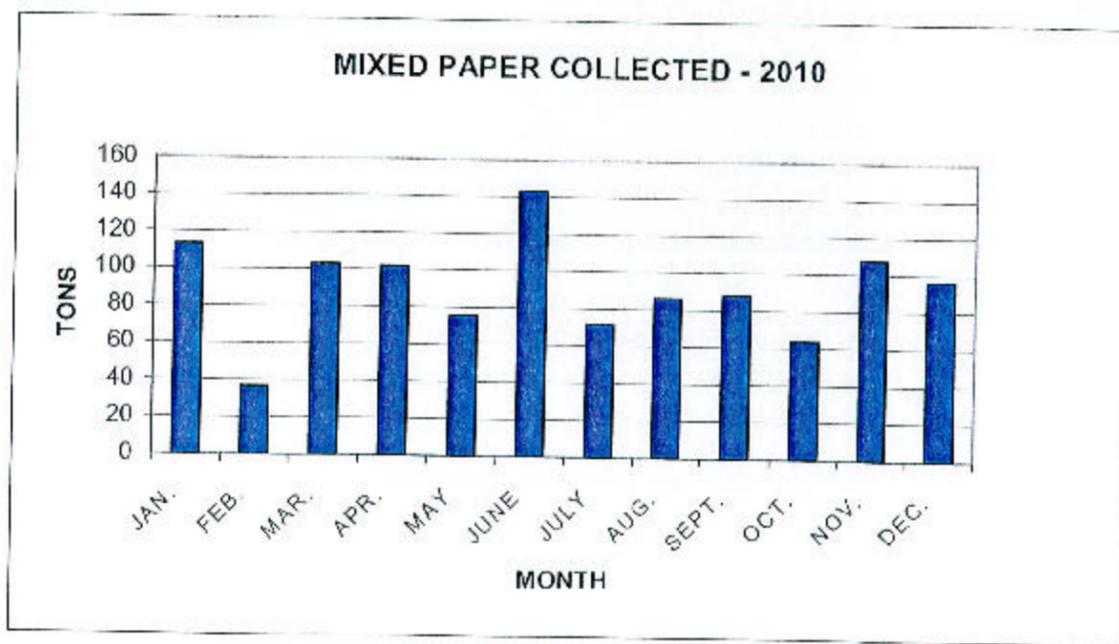


TABLE 14
CITY OF LONG BEACH
OLD CORRUGATED CARDBOARD RECYCLING PROGRAM
2010

MONTH	TONS COLLECTED	REVENUE PER TON	REVENUE GENERATED
JAN.	82.91	\$32.50	\$ 2,694.58
FEB.	29.82	\$57.50	\$ 1,714.65
MAR.	36.63	\$83.75	\$ 3,067.76
APR.	59.95	\$61.25	\$ 3,671.94
MAY	40.65	\$53.75	\$ 2,184.94
JUNE	47.79	\$46.25	\$ 2,210.29
JULY	67.04	\$38.75	\$ 2,597.80
AUG.	62.05	\$38.75	\$ 2,404.44
SEPT.	58	\$46.25	\$ 2,682.50
OCT.	34.82	\$53.75	\$ 1,871.58
NOV.	25.0	\$77.50	\$ 2,007.25
DEC.	5.97	\$81.25	\$ 485.06
TOTAL	551.53		\$ 27,592.78

**OLD CORRUGATED CARDBOARD RECYCLED -
2010**

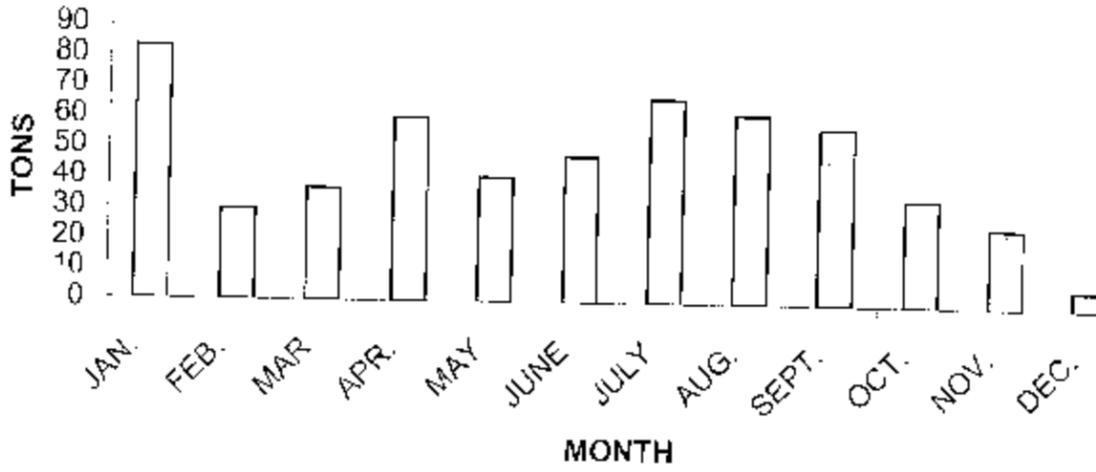
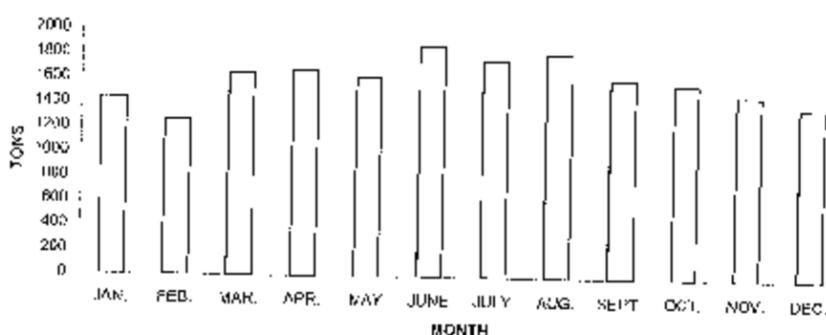


TABLE 15
 CITY OF LONG BEACH
 REFUSE DISPOSAL
 GARBAGE AND BULK
 2010

MONTH	GARBAGE TONS	PRICE PER TON	COST	BULK TONS	PRICE PER TON	COST	TOTAL WASTE GARBAGE AND BULK	TOTAL COST
JAN.	1429.74	\$82.00	\$ 117,238.68	17.31	\$ 83.00	\$ 1,436.73	1447.05	\$ 118,675.41
FEB.	1253.52	\$82.00	\$ 102,788.64	13.64	\$ 83.00	\$ 1,132.12	1267.16	\$ 103,920.76
MAR.	1639.5	\$82.00	\$ 134,463.60	13.46	\$ 83.00	\$ 1,117.18	1652.96	\$ 135,580.78
APR.	1661.96	\$82.00	\$ 136,280.72	21.79	\$ 83.00	\$ 1,808.57	1683.75	\$ 138,089.29
MAY	1597.65	\$82.00	\$ 131,007.30	28.36	\$ 83.00	\$ 2,353.05	1626.00	\$ 133,360.35
JUNE	1641.15	\$82.00	\$ 134,374.30	41.72	\$ 83.00	\$ 3,462.76	1682.87	\$ 137,837.06
JULY	1719.34	\$82.00	\$ 141,006.88	24.76	\$ 83.00	\$ 2,055.08	1744.1	\$ 143,061.96
AUG.	1811.40	\$82.00	\$ 148,534.80	18.06	\$ 83.00	\$ 1,498.98	1829.46	\$ 150,033.78
SEPT.	1605.09	\$83.00	\$ 133,222.47	20.47	\$ 84.00	\$ 1,719.26	1625.56	\$ 134,941.73
OCT.	1554.38	\$83.00	\$ 129,013.54	27.33	\$ 84.00	\$ 2,296.72	1581.71	\$ 131,310.26
NOV.	1473.57	\$83.00	\$ 122,306.31	21.09	\$ 84.00	\$ 1,771.56	1494.66	\$ 124,077.87
DEC.	1381.64	\$83.00	\$ 114,686.12	13.71	\$ 84.00	\$ 1,151.64	1395.35	\$ 115,837.76
TOTAL	18999.58		\$ 1,563,980.49	125.37		\$ 10,488.26	19124.93	\$ 1,574,468.75

REFUSE DISPOSAL - 2010



TAB. E-16
 CITY OF LONG BEACH
 CONSTRUCTION AND DEMOLITION DEBRIS
 2010

MONTH	QUANTITY COLLECTED (IN TONS)	# OF CONTAINERS	AVG. COST PER CONTAINER	TOTAL COST
JAN.	275.0	22	\$568.04	\$ 12,510.00
FEB.	271.04	18	\$639.7	\$ 9,715.00
MAR.	410.98	45	\$913.00	\$ 28,595.00
APR.	200.31	4	\$500.00	\$ 2,000.00
MAY	221.48	37	\$598.04	\$ 23,510.00
JUNE	349.72	70	\$500.00	\$ 29,440.00
JULY	375.48	44	\$840.00	\$ 28,160.00
AUG.	377.12	56	\$640.00	\$ 37,120.00
SEPT.	316.10	48	\$640.00	\$ 30,720.00
OCT.	202.12	38	\$540.00	\$ 24,120.00
NOV.	195.78	36	\$635.47	\$ 22,245.00
DEC.	174.94	33	\$545.50	\$ 17,965.00
TOTAL	3447.87	465		\$ 290,260.00

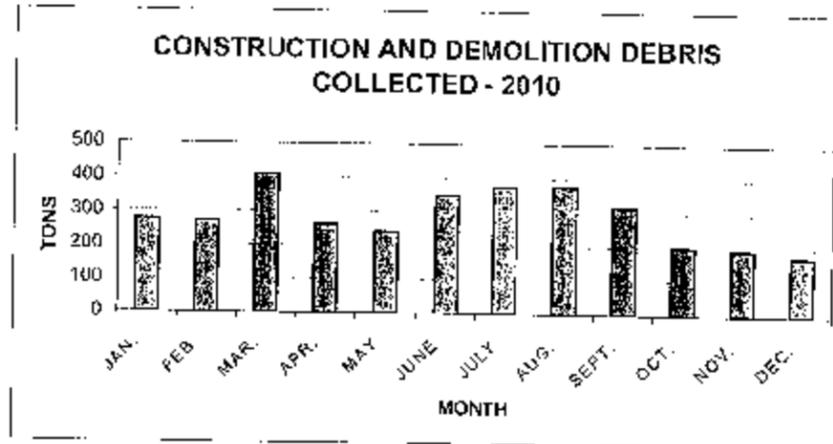


TABLE 17
CITY OF LONG BEACH
RECYCLABLES COLLECTED MONTHLY

MONTH	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
JAN.	264.49	193.197	255.72	301.99	270.31	360.46	280.04	333.06	403.74	272.65	289.32	241.92	282.28	289.16	287.81
FEB.	246.25	220.07	287.5	255.1	318.75	203.61	198.82	253.32	278.63	774.77	284.32	177.53	248.07	201.95	133.92
MAR.	250.22	214.12	298.97	292.37	397.48	347.78	299.37	280.27	363.85	248.8	238.65	242.90	234.41	242.55	237.85
APR.	288.46	311.67	308.01	347.55	344.68	218.71	287.08	284.41	238.65	265.55	254.11	227.24	287.24	246.13	236.48
MAY	230.73	280.08	291.85	301.57	409.17	313.95	371.09	274.07	278.66	254.28	266.22	332.84	278.38	224.27	214.48
JUNE	271.42	283.12	304.04	370.86	424.45	275.77	211.51	375.09	198.57	337.28	345.66	310.67	332.87	288.85	286.04
JULY	315.82	245.92	280.04	361.78	350.03	341.23	333.57	367.9	270.43	271.79	266.14	263.29	293.3	291.37	223.47
AUG.	284.04	230.55	284.79	364.51	387.83	258.11	385.98	426.86	249.33	234.23	267.16	322.55	324.27	264.7	286.54
SEPT.	286.31	388.85	270.83	421.1	343.87	236.87	320.33	370.14	494.05	340.2	238.62	249	302.15	254.37	249.76
OCT.	302.54	268.33	333.88	407.12	301.4	261.85	339.51	418.28	309.52	237.89	262.43	270.11	266.03	231.75	171.87
NOV.	284.22	284.30	285.98	345.59	411.38	275.25	235.5	304.05	360.99	314.92	239.93	253.22	252.52	212.55	232.85
DEC.	325.77	334.54	358.9	444.28	266.68	327.98	199.67	286.38	337.63	310.99	288.90	287.31	305.61	283.91	47.81
TOTAL	3277.21	3279.047	3619.94	4216.72	4239.1	3560.37	3473.35	3,901.86	3771.25	3315.69	3,253.82	3144.78	3356.77	3632.06	2709.37

** MIXED PAPER, CORRUGATED, OLD CORRUGATED CARDBOARD, AND SCRAP METAL ONLY

**TABLE 18
WASTE OIL, TIRES, ANTIFREEZE, AND AUTOMOBILE BATTERIES
FROM ESTABLISHMENTS THAT UTILIZE THE CITY FOR WASTE DISPOSAL**

ESTABLISHMENT	WASTE OIL (in gal.)	2010 TIRES (units)	ANTIFREEZE (in gal.)	BATTERIES (units)	SCRAP (in pounds)	****DISPOSAL FACILITY O T A B \$ 1 3 1 4 **
L.B. CITY GARAGE	650			40		
SURF GLASS	1028	0	409	325	0	5 5 4
MOBIL	DID NOT RESPOND					
MANN AUTO	DID NOT RESPOND					
AUTO SERVICE CENTER	1857	360	402	115	0	10 11 1 4
MERRICK TRANSFER STATION		258				
TOTAL	3535	358	937	480	0	
TOTAL (IN TONS)	12.37	4.30	4.56	3.46	0	

CONVERSIONS

- 1 WASTE TIRE = .012 TONS
- 1 GAL. WASTE OIL = .0035 TONS
- 1 GAL. ANTIFREEZE = .0049 TONS
- 1 CAR BATTERY = 39.4 LBS

** ALL SCRAP METAL GENERATED BY THE CITY OF LONG BEACH IS DISPOSED OF THROUGH THE CITY'S RECYCLING PROGRAM.
SCRAP METAL IS CURRENTLY PROCESSED BY JAMAICA ASH AND RUBBISH REMOVAL, 172 SCHOOL STREET, WESTBURY, NEW YORK (516)333-2211
*** DISPOSAL FACILITY: O=OIL, T=TIRES, A=ANTIFREEZE, B=BATTERIES, S=SCRAP METAL

1. Planet Earth Recycling Services
199 Sunrise Highway
Amityville, New York
2. County Garling Company
3550 Hampton Road
Oceanside, New York
3. Jamaica Ash and Rubbish Removal
172 School Street
Westbury, New York
4. Interstate Batteries of Southwestern Nassau
3551 Lawson Blvd.
Oceanside, New York
5. Safety Kleen Corp.
80 Seabro Avenue
Amityville, New York
6. C & L Tire Service
7. Novak
8. Ganin Tire Company Inc.
699 Burnside Avenue
Lawrence, New York
9. Omni of Babylon
114 Alder Street
West Babylon, New York
10. Waste Oil Solutions
109 Jersey Street
W. Babylon, New York
11. S&M Rubbish
7 Columbus Ave.
Oceanside, NY 11572
12. Worldwide Tire Distributors
103 W. Sunrise Highway
Lindenhurst, New York

TABLE 2U
HOUSEHOLD HAZARDOUS WASTE COLLECTED
FROM CITY OF LONG BEACH RESIDENTS
AT STOP PROGRAMS
2010

CATEGORY	QUANTITY COLLECTED
BATTERIES (DRY CELL)	0.5 DRUMS
AEROSOLS	10.5 DRUMS
POISONS	1 DRUMS
ASBESTOS	4 DRUMS
CORROSIVES	6 DRUMS
OXIDIZERS	3.5 DRUM
FLAMMABLE LIQUID (BULK)	16.5 DRUMS
MOTOR OIL	9 DRUMS
PESTICIDES	14 DRUMS
FLAMMABLE LIQUID (LBS PACK)	17.5 DRUMS
ANTIFREEZE	3 DRUMS
FLUORESCENT BULBS	7.5 BOXES 0 DRUMS
FIRE EXTINGUISHERS	2 DRUM
FLAMMABLE LIQUID (SOLIDS)	1.5 5 GAL PAIL 0 DRUMS
MERCURY	0 DRUMS
OIL PAINT	40.5 DRUMS
PROPANE	2 DRUM
TOTAL	135 DRUMS

*** see below

NOTE** THE TOWN OF HEMPSTEAD SPONSORS TEN HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM PER YEAR AS PER AGREEMENT ONE IS HELD IN THE CITY OF LONG BEACH. IN TOTAL FOR 2010 THERE WERE 1348 (FROM THE CITY) PARTICIPANTS THAT GENERATED 135 DRUMS OF HOUSEHOLD HAZARDOUS WASTE

THE STOP PROGRAM WAS HELD IN THE CITY OF LONG BEACH ON SUNDAY, APRIL 18TH, 2010 IN THE CITY HALL REAR PARKING LOT. 1422 CARS DROPPED OFF HOUSEHOLD HAZARDOUS WASTE AT THE EVENT (711 FROM THE CITY OF LONG BEACH).

*** The following was recycled through the program to safely dispose of fluorescent light bulbs in City buildings:

8 LFL	Recycling 8' fluorescent lamps	32 lamps	48 lbs
4 LFL	Recycling 4' fluorescent lamps	231 lamps	173.25 lbs
3 LFL	Recycling 3' fluorescent lamps	3 lamps	1.888 lbs

Disposed of through Northeast Lamp Recycling, 250 Main Street, PO Box 680, East Windsor, CT 06088 866-57-5287

In addition 282 High Pressure Sodium lamps were recycled by Welsbach Electric Corp. of Long Island, 300 Newtown Road, Plainview, New York 11803, in accordance with the City's street lighting contract.

APPENDIX II

EXHIBIT 2-3 (REVISED)

**CITY OF LONG BEACH PER CAPITA SOLID WASTE
GENERATION RATES (PROJECTED VS. ACTUAL)**

(January 1, 2009 through December 31, 2010)

EXHIBIT 2-3
 (REVISED) CITY OF LONG BEACH PER CAPITA SOLID WASTE GENERATION RATES
 (REPORTING PERIOD JANUARY 1, 2009 THROUGH DECEMBER 31, 2009 EXPIRATION OF SOLID WASTE MANAGEMENT

YEAR	TONS PER CAPITA PER YEAR (PROJECTED)	TONS PER CAPITA PER YEAR (ACTUAL)
1990	-	0.75
1991	-	0.73
1992	-	0.77
1993	-	0.80
1994	-	0.81
1995	-	0.81
1996	-	0.95
1997	-	1.02
1998	-	0.83
1999	-	0.89
2000	0.90	0.93
2001	0.92	0.96
2002	0.93	0.99
2003	0.95	1.08
2004	0.97	1.02
2005	0.98	1.00
2006	1.00	1.06
2007	1.01	1.13
2008	1.03	1.17
2009	1.04	1.14

APPENDIX 12

EXHIBIT 2-4 (REVISED)

**CITY OF LONG BEACH WASTE GENERATION
(PROJECTED VS. ACTUAL)**

(January 1, 2009 through December 31, 2010)

EXHIBIT 2.4
 (REVISED) CITY OF LONG BEACH WASTE GENERATION
 (REPORTING PERIOD JANUARY 1, 2000 THROUGH DECEMBER 31, 2009 EXPIRATION OF SOLID WASTE MANAGEMENT PLAN)

YEAR	TOTAL MUNICIPAL SOLID WASTE (INCLUDING RECYCLABLES) ORIGINAL	TOTAL MUNICIPAL SOLID WASTE (INCLUDING RECYCLABLES) ACTUAL
1990	-	24,831
1991	-	24,820
1992	-	26,302
1993	-	27,672
1994	-	28,478
1995	-	28,536
1996	-	33,339
1997	-	25,509
1998	-	28,663
1999	-	30,190
2000	30,586	31,494
2001	30,459	32,116
2002	30,789	30,710
2003	31,042	35,192
2004	31,283	32,982
2005	31,195	31,836
2006	31,386	33,115
2007	31,256	35,124
2008	31,428	35,684
2009	31,289	34,385

APPENDIX 13

**EXHIBIT 2-7 REVISED
QUANTITIES OF WASTE MATERIALS GENERATED IN LONG
BEACH (1995 – 2009)**

(January 1, 2009 through December 31, 2010)

