#### Chapter 13:

#### **Solid Waste and Sanitation Services**

### A. INTRODUCTION

The *City Environmental Quality Review (CEQR) Technical Manual* indicates that a detailed solid waste and sanitation services assessment is appropriate if an action enacts regulatory changes affecting the generation or management of the city's waste or if the action involves the construction, operation, or closing of any type of solid waste management facility. The manual also states that projects with a generation rate of less than 10,000 pounds per week are not considered large and do not require detailed analysis.

Because the proposed action would not trigger any of the CEQR thresholds, this chapter simply discloses the proposed action's anticipated solid waste generation rates. This chapter concludes that because the proposed action would not generate a large amount of solid waste, there would be no potential for significant adverse impacts on solid waste and sanitation services.

#### **B. EXISTING CONDITIONS**

In New York City, residential and institutional refuse is handled by the New York City Department of Sanitation (DSNY), while solid waste from commercial and manufacturing uses is collected by private carters. Disposal of residential refuse was handled principally by landfilling at the Fresh Kills Landfill in Staten Island, until it stopped accepting solid waste on March 22, 2001. DSNY continues to pick up residential and institutional solid waste and recyclables. These materials are taken to transfer stations for sorting and transfer to larger trucks. From there, private carters take it to out-of-city landfills. DSNY handles about 13,000 tons per day (about 91,000 tons per week) of recyclables and solid waste.

Commercial carters pick up from businesses, manufacturers and offices and take the waste materials to transfer stations where the recyclable materials are separated from the solid waste. The solid waste is consolidated into larger trucks for transport and disposal in landfills outside of New York City. The recyclable materials are sold and transported to manufacturing facilities. Private carters are believed to handle about 13,000 tons per day (about 91,000 tons per week) of recyclables and solid waste.

Most solid waste and recyclable material from Fordham is handled by DSNY; waste from the food service is removed by private carters. Based on the solid waste generation rates recommended in the *CEQR Technical Manual*, the dormitory and academic uses at Fordham are estimated to generate about 22,400 pounds per week for a total of just over 11 tons per week.<sup>1</sup> Based on 251 pounds per employee per week, the Fordham food service is estimated to generate about 3,765 pounds per week for a total of just under two tons per week.

<sup>&</sup>lt;sup>1</sup> Based on 1 pound per week, per student for academic uses, and 17 pounds per week, per bed for dormitory uses.

## C. THE FUTURE WITHOUT THE PROPOSED ACTION-2014

The initial phase of construction would result in new academic and dormitory facilities, which would place new demands on the city's infrastructure. Specifically, by 2014 the proposed action would create a new Law School, new dormitory space, and below-grade parking.

By New York State law, municipalities are required to revise their Solid Waste Management Plan (SWMP) every five years. In September 2006, DSNY's Comprehensive Solid Waste Management Plan for New York City was approved by the New York State Department of Environmental Conservation. This final SWMP addresses the three distinct but interconnected areas that comprise the city's solid waste management system: Waste Prevention and Recycling, Long-Term Export, and Commercial Waste. The goals of this SWMP are: (1) to improve DSNY's Curbside Recycling Program; (2) to implement the city's Long-Term Export program through the development of city-owned converted marine transfer stations and private transfer stations; and (3) to provide the capacity for barge export of commercial waste from the city. Any increase in production of solid waste is anticipated to be met with a concurrent increase in public and private hauling and shipping capacity, sufficient to meet demand. The SWMP will govern New York City's solid waste management from 2006 through 2025.

The SWMP's Long Term Export Program is anticipated to be implemented through: (1) the development of four converted marine transfer stations; (2) the award of up to five contracts with private transfer stations for barge or rail export of DSNY-managed waste for disposal; and (3) an intergovernmental agreement to dispose of a portion of Manhattan's DSNY-managed waste at a Port Authority waste-to-energy facility in New Jersey. As currently proposed, the SWMP would mandate the use of up to nine converted MTS facilities and private transfer stations within the five boroughs at which solid waste would be consolidated, containerized, and barged or railed out of the City. The barges currently used at MTS facilities would be replaced or retrofitted with new sealed containers or "intermodal containers" capable of being transported on barge or rail. The four converted MTS facilities would be designed to each process at least 4,290 tons per day and accommodate 30 collection vehicles per hour. In the interim, all municipal solid waste would be trucked out of the City.<sup>1</sup>

The SWMP also proposes three broad categories of action to address traffic issues associated with commercial waste handling as follows: (1) improve conditions at and around transfer stations; (2) facilitate a transition from a network heavily reliant on trucks to one that relies primarily on barge and rail; and (3) redistribute private transfer capacity from a small number of communities that have the largest proportion of the system's impacts.

# D. PROBABLE IMPACTS OF THE PROPOSED ACTION-2014

The proposed action would comply with the city's recycling program and would be designed to accommodate source separation of recyclables in conformance with city recycling regulations. This would include recycling paper, glass, metals, and certain plastics.

As shown in Table 13-1, the proposed development would generate solid waste at a rate of 14,115 pounds per week, or about 367 tons per year. Of this amount, approximately 13,362

<sup>&</sup>lt;sup>1</sup> DSNY, Comprehensive Solid Waste Management Plan, September 2006. Accessed online on November 20, 2007. http://www.nyc.gov/html/dsny/html/reports/swmp-4oct.shtml

Use		Size	DSNY	Private Carters	Total			
Dormitory		695 beds	11,815	0	11,815			
Academic		1,547 new students	1,547	0	1,547			
Food Service		3 new employees	0	753	753			
Total		NA	13,362	753	14,115			
Source:	Gene	eneration rates from the CEQR Technical Manual. For dormitory use a rate						
	of 17 pounds per week per bed was used. For academic use a rate of 1							
pound per week per student was used and for food service a rate of 251								
pounds per week per employee was used.								

# Table 13-12014 Estimated Solid Waste Generation

pounds per week (or about 347 tons per year) would be handled by DSNY. This represents a minimal increase in New York City's waste stream. As a result, the proposed action would not be expected to adversely affect solid waste streams or recycling in the city.

# E. THE FUTURE WITHOUT THE PROPOSED ACTION—2032

No major changes in solid waste and sanitation services systems are expected between 2015 and 2032. In addition, the level of solid waste generation is expected to remain at or about the current levels in the study area.

# F. PROBABLE IMPACTS OF THE PROPOSED ACTION-2032

As described in Chapter 1, "Project Description," full development of the Master Plan would create 1,450 new dormitory beds and approximately 1.26 million square feet of new academic space.

The proposed action would comply with the city's recycling program and would be designed to accommodate source separation of recyclables in conformance with City recycling regulations. This would include recycling paper, glass, metals, and certain plastics.

As shown in Table 13-2, the proposed development would generate solid waste at a rate of 29,414 pounds per week, or just under 765 tons per year. This represents a minimal increase in New York City's waste stream. Overall, the proposed action would not be expected to adversely affect solid waste streams or recycling in the city.

		2052 Estimated Solid Waste Generation					
Use		Size	DSNY	Private Carters	Total		
Dormitory		1,450 beds	24,650	0	24,650		
Academic		3,258 new students	3,258	0	3,258		
Food Service		6 new employees	0	1,506	1,506		
Total		NA	27,908	1,506	29,414		
Sources: Ge we for	: Generation rates from the <i>CEQR Technical Manual</i> . For dormitory use a rate of 17 pounds per week per bed was used. For academic use a rate of 1 pound per week per student was used and for food service a rate of 251 pounds per week per employee was used.						

#### Table 13-2 2032 Estimated Solid Waste Congration