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 or if an action would generate more than 10,000 pounds per week of solid waste. This chapter discloses the Proposed Project's anticipated solid waste generation rates and concludes that it would not result in significant adverse impacts on solid waste and sanitation services.

B. METHODOLOGY

Solid waste generation for the project has been analyzed according to the *CEQR Technical Manual*. This chapter will describe the existing solid waste management services at the Project Site and, using solid waste generation rates for typical land uses and activities provided in the *CEQR Technical Manual*, determine future solid waste demands with the Proposed Action for the two analysis years, and assess the effects of this incremental demand on municipal and private sanitation services. The rates used to calculate solid waste generation were taken from the *CEQR Technical Manual*, and are shown in Table 14-1.

Table 14-1
Solid Waste Generation Rates

	Use	Rate/Per
Solid Waste Generation	Residential	41 lbs/household/week
	Retail	79 lbs/employee/week
	Office	13 lbs/employee/week
	Elementary School	3 lbs/pupil/week
	Middle School	4 lbs/pupil/week
	High School	2 lbs/pupil/week
	Community Facility	.03 lbs/sf/week

Notes: * Energy generation information was not available for schools. It was conservatively assumed that it was equal to that of community facilities.
Source: *CEQR Technical Manual* (2001)

C. EXISTING CONDITIONS

In New York, 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. DSNY takes waste from curbside pick-up to transfer stations for sorting and transfer to larger trucks. From there, private carriers take the materials to out-of-city landfills

and waste-to-energy plants. DSNY collects over 12,000 tons of residential and institutional refuse and recyclables per day.[1] DSNY divides its service area into Community Districts (CDs). The Project Site is located within Brooklyn CD 5.

Private carters pick up waste from businesses and manufacturers and transport the materials to transfer stations where the recyclable materials are separated from solid waste. The solid waste is consolidated into larger trucks for transport and disposal in landfills outside New York City. The recyclable materials are sold and transported to manufacturing facilities. According to DSNY's website, private carriers handle 13,000 tons per day of recyclables and solid waste.

D. 2011 THE FUTURE WITHOUT THE PROPOSED ACTION

By 2011, absent approval of the Proposed Action, Phases I and II of Nehemiah housing will be completed, adding additional residents to the Project Site. The project study area will see an increase in retail use, with the construction of a shopping center at the intersection of Flatlands and Fountain Avenues, and three new residential developments. Absent the Proposed Action, solid waste generation will increase by approximately 15,498 pounds per week from the Project Site, and 60,354 from the project study area.

In 2011, without the Proposed Action, DSNY intends to modify the existing Greenpoint Marine Transfer Station (MTS) which serves DSNY's Brooklyn CD 5. Under the City's new Solid Waste Management Plan (SWMP) the Greenpoint MTS will be decommissioned and the City will enter into a contract with one or two private haulers for truck-to-rail or truck-to-barge disposal of all or part of the waste from Brooklyn's CD 5. It is assumed that this conversion will be completed by 2009.

E. 2011 PROBABLE IMPACTS OF THE PROPOSED ACTION

As shown in Table 14-2, by 2011 the Proposed Action would generate solid waste at a rate of 155,077 pounds per week (or approximately 78 tons). Of this amount, private carriers would handle 112,970 pounds per week, and DSNY would handle 42,107 pounds per week. Although this represents a 139,579 pound per week increase as compared to the No Build condition, it would be a relatively small increase in New York City's waste stream. Given that a truck can haul about 10 tons of solid waste, the Proposed Action coupled with project developments would generate an additional 10 truck trips per week.

Table 14-2
2011 Build Conditions: Projected Solid Waste Generation

Responsibility for Disposal	Use	Proposed Action	Other Projected Development Sites	Total
DSNY	Residential	42,107	11439	53,546
	Total	42,107	11,439	53,546
Private Carrier	Retail	112,970	33417	146,387
	Total	112,970	33,417	146,387
Grand Total		155,077	44,856	199,933

Source: *CEQR Technical Manual* (2001)

[1] DSNY Website: http://www.nyc.gov/html/dsny/html/about/about.shtml

According to the *CEQR Technical Manual*, the City's SWMP is based on projected rates of growth in the generation of solid waste. The measures proposed to be implemented by the City pursuant to the SWMP are, therefore, designed to meet the goals of the plan, notwithstanding further development within certain defined future conditions. In other words, the solid waste handling system assumed to be in place in the future analysis year was designed to accommodate future growth in the generation of solid waste, which includes growth from the Proposed Action. Under the Draft SWMP, the project study area would be served by modified DSNY routes. Adjustments would be made to ensure that diversions to the Project Site would not overburden or diminish service to the rest of the route. The projected solid waste generation by the Proposed Action would not overburden the waste collection system and would not result in a significant adverse impact on waste collection in the Borough of Brooklyn or New York City.

F. 2013 THE FUTURE WITHOUT THE PROPOSED ACTION

Absent the Proposed Action, solid waste generation is expected to increase by 109,293 lbs/week by 2013. Of this, approximately 106,005 lbs/week will be disposed of by DSNY, and the remainder will be handled by private carters.

G. 2013 PROBABLE IMPACTS OF THE PROPOSED ACTION

By 2013, the Proposed Action would generate approximately 108 tons per week of solid waste (see Table 14-3). Of this amount, private carters would handle approximately 112,970 pounds per week and DSNY would handle 102,597 pounds per week. Coupled with projected development sites in the project study area, total solid waste generation would increase by 260,423 pounds per week, or approximately 130 tons per week. Given that a truck can haul about 10 tons of solid waste, the Proposed Action would generate an additional 14 trucks per week in 2013 in the project study area.

Table 14-3
2013 Build Conditions: Projected Solid Waste Generation

Responsibility for Disposal	Use	Proposed Action	Other Projected Development Sites	Total
DSNY	Residential	97,785	11,439	109,224
	Intermediate/ High School	3,432	0	3,432
	Day care	480	0	480
	Community Facility	900	0	900
	Total	102,597	11,439	114,036
Private Carriers	Retail	112,970	33,417	146,387
	Total	112,970	33,417	146,387
Grand Total		215,567	44,856	260,423

Source: *CEQR Technical Manual* (2001)

According to the *CEQR Technical Manual*, the City's SWMP is based on projected rates of growth in the generation of solid waste. The measures proposed to be implemented by the City pursuant to the SWMP are, therefore, designed to meet the goals of the plan notwithstanding further development within certain defined future conditions. In other words, the solid waste handing system assumed to be in place in the future analysis year was designed to accommodate

future growth in the generation of solid waste, which includes growth from the Proposed Action. Under the Draft SWMP, the project study area would be served by modified DSNY routes. Adjustments would be made to ensure that diversions to the Project Site would not overburden or diminish service to the rest of the route. The projected solid waste generation by the Project Site would not overburden the waste collection system and would not result in a significant adverse impact on waste collection in Brooklyn or New York City. ✷