

A. INTRODUCTION

According to the *City Environmental Quality Review (CEQR) Technical Manual*, actions involving construction of housing or other development generally do not require an evaluation of solid waste impacts unless they are unusually large. For example, a generation rate of less than 10,000 pounds (or 5 tons) per week is not considered large. Although a detailed analysis is not required, consistent with CEQR, the Proposed Actions' demand for solid waste and sanitation services are disclosed and described below.

The Proposed Actions would result in the development of new residential units, retail space, and a public school. To assess the potential effects of the Proposed Actions on solid waste and sanitation services, a quantitative assessment was conducted. This entailed the calculation of existing solid waste generation at the Project Site, as well as a comparison of equivalent calculations in the future both with and without the proposed actions.

PRINCIPAL CONCLUSIONS

The Proposed Actions would not result in any significant adverse impacts on solid waste and sanitation services. While implementation of the Proposed Actions would create new demands on solid waste management and sanitation services, the municipal systems serving the Project Site would have adequate capacity to meet the projected increases in solid waste generation. The New York City Department of Sanitation (DSNY) would provide solid waste and sanitation services for the proposed residential units and school. Private carters provide solid waste and sanitation services to the proposed retail use. The Proposed Actions would increase the volume of solid waste and recyclables but would not put a substantial burden on New York City's public and private solid waste management services.

B. METHODOLOGY

As discussed below, this chapter:

- Describes the existing solid waste management services at the Project Site, using solid waste generation rates for typical land uses and activities provided in the *CEQR Technical Manual*;
- Determines future solid waste demands with and without the Proposed Actions for 2013; and
- Assesses the effects of this additional demand on municipal and private sanitation services.

C. EXISTING CONDITIONS**DESCRIPTION OF CURRENT SANITATION SERVICES**

In New York City, DSNY is the agency responsible for the collection and disposal of municipal solid waste and recyclable materials generated by residences, some nonprofit institutions, tax

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exempt properties, and City agencies. DSNY also collects waste from City litter baskets, street-sweeping operations, and lot cleaning activities. Under the current interim Solid Waste Management Plan (SWMP), most of the City's municipal solid waste is delivered to transfer stations for sorting and transfer to larger "hopper" trucks and then transported out of the City. It is estimated that DSNY collects over 12,000 tons of residential and institutional refuse and recyclables per day.¹

Commercial establishments (restaurants, retail facilities, offices, industries, etc.) in the City contract with private waste carters for waste and recyclables collection and disposal. Private carters charge a fee on a per-cubic-yard basis. Depending on the source, volume, and the collection route, private carters use either manual or containerized collection. Private carters typically deliver waste to solid waste management facilities located both inside and outside of the City. The collected waste is unloaded from trucks, processed, and then loaded onto larger trucks or rail cars for transport to out-of-city disposal facilities. Overall, the City's businesses, the waste of which is collected by private carting companies, generate another 13,000 tons of refuse each day.² Therefore, the total solid waste generated in the City averages approximately 25,000 tons per day (tpd).

The SWMP, which is the responsibility of DSNY, established a hierarchy of preferred solid waste management methods to reduce and process solid waste generated within the City. The SWMP mandates that solid waste be transferred to solid waste management facilities located in each borough, including special (hazardous materials) waste collection sites, composting facilities, and bulk residential waste sites. Local Law 19 of 1989 requires that DSNY and private carters collect recyclable materials and deliver them to material recovery facilities. New York City residents are required to separate aluminum foil, glass, plastic and metal containers, and newspapers and other paper wastes from household waste for separate collection. The SWMP also mandates that commercial establishments are subject to recycling requirements. Businesses must source-separate certain types of paper wastes, cardboard, metal items, and construction wastes. Food and beverage establishments must recycle metal, glass, and plastic containers, and aluminum foil, in addition to meeting the commercial recycling requirements.

As described in Chapter 1 "Project Description," the Project Site includes a 300-space public parking lot, a private parking lot, a school, a vacant warehouse, and horse stable. For the purposes of this analysis it was assumed that the parking lots and vacant warehouse do not generate solid waste. Water and sewage generations rates from *770 Eleventh Avenue Mixed-Use Development Rezoning Final Environmental Impact Statement* (CEQR No. 07DCP071M, March 2009), which is also located in Clinton and includes a proposed stable for the New York City Police Department, were used for the horse stables currently located on the Project Site..

As shown in **Table 13-1**, existing development on the Project Site generates an estimated 1.284 pounds (or 0.6 tons) per week of solid waste.

With the exception of the public school, all uses on the Project Site are serviced by private carters. Currently, the DSNY collects an estimated 984 pounds (or 0.5 tons) of solid waste per week from the school.

¹ DSNY website: <http://www.nyc.gov/html/dos/html/dosfact.html>

² Ibid.

**Table 13-1
Existing Solid Waste Generation**

Use	Area (square feet)	Solid Waste Generation (pounds per week) ¹
Horse Stable ²	10,000	300
Public School ³	29,930	984
Total		1,284

Notes:
 1 Solid waste generation rates based on the *CEQR Technical Manual*.
 2 770 Eleventh Avenue Mixed-Use Development Rezoning Final Environmental Impact Statement (CEQR No. 07DCP071M, March 2009)
 3 Assumes elementary student enrollment of 328 and waste generation rate of 3 lbs per week per pupil per week

D. THE FUTURE WITHOUT THE PROPOSED ACTIONS

In the Future without the Proposed Actions, no changes are anticipated to occur on the Project Site. Therefore, the Project Site is expected to generate the same amounts of solid waste as described in the existing condition.

E. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

As described in Chapter 1, it is anticipated that new development on the Project Site would result in a total of up to 1,350 residential units, 17,500 gross square feet (gsf) of retail, and a 630-seat public school. **Table 13-2** below provides the approximate amount of solid waste that would be generated by the Proposed Actions as well as the incremental change in comparison to the No Build condition.

**Table 13-2
Future With the Proposed Actions Solid Waste Generation**

Use	No Build		Build		Solid Waste Increment (lbs/wk) ¹
	Area (sf)	Solid Waste Generation (lbs/wk) ¹	Area (sf)	Solid Waste Generation (lbs/wk) ¹	
Residential ²	0	0	1,119,177	44,302	44,302
Retail ³	0	0	17,500	4,148	4,148
Public School ⁴	29,930	984	97,850	2,167	1,183
Horse Stable	10,000	300	0	0	--
Totals:		1,284	1,234,527	50,617	49,333

Notes:
 1 Solid waste generation rates based on the *CEQR Technical Manual*.
 2 Assumes 2,606 new residents and 17 lbs of waster per week per individual.
 3 Assumes 3 employees per 1,000 sf of retail space and 79 lbs of solid waste per week per employee.
 4 Proposed Actions would facilitate an expansion and relocation of P.S. 51 that would result in 353 elementary seats and 277 intermediate seats, an increment of 77 additional elementary seats over the 276 elementary seats at P.S. 51. Assumes 3 lbs of waste per week for elementary pupils and 4 lbs of waste per week for intermediate pupils.

It is estimated that as a result of the Proposed Actions, the Project Site would generate approximately 50,617 pounds (or 26 tons) of solid waste per week (see **Table 13-2**). This

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represents an additional 49,333 pounds (or 25 tons) of solid waste per week over the conditions in the future without the Proposed Actions.

Residential uses on the Project Site would generate an estimated 44,032 pounds (or 22 tons) of solid waste per week. The proposed school would generate an estimated 2,167 pounds (or 1 ton) of solid waste per week. Solid waste generated by new residential development and proposed school would be collected by DSNY collection trucks and would be served by existing DSNY collection routes; as a practice, DSNY adjusts its operations to service the community. Residents would be required to participate in the City's ongoing recycling program for paper, metals, and certain types of plastics and glass.

The solid waste generated by residential uses and the proposed school in the future with the Proposed Actions would be equivalent to approximately 3 tons per day. As a result of the Proposed Actions, DSNY would collect approximately 2.7 tons more waste per day than without the Proposed Actions. According to the *CEQR Technical Manual*, the typical DSNY collection truck for residential refuse carries approximately 12.5 tons of waste material. Therefore, the new residential uses would be expected to generate solid waste equivalent to approximately 24 percent of a truck load per day. Given this limited amount of solid waste generated, the Proposed Actions would not overburden DSNY's solid waste handling services and would not have a significant adverse impact on the City's solid waste and sanitation services.

Finally, solid waste generated by the proposed commercial use (4,148 pounds or 2 tons) would be collected by private carters. The generation of new solid waste is not expected to have a significant adverse impact on private carters. *