

**A. INTRODUCTION**

The FGEIS concluded that no significant impacts would occur to sanitation services as a result of the sale and redevelopment of the First Avenue parcels. This chapter updates the assessment in the FGEIS to reflect updated background conditions and the specific development program now considered under the Proposed Actions.

The solid waste and sanitation services analysis in the FGEIS and in this SEIS adhere to *City Environmental Quality Review (CEQR) Technical Manual* guidelines for solid waste assessments. This SEIS analysis finds that the development program now proposed would not result in substantial differences from the solid waste generation rates projected for the illustrative programs analyzed in the FGEIS. In fact, the expected demand for the disposal of solid waste would be less than the maximum demand projected in the FGEIS.

Since the completion of the FGEIS, the New York City Department of Sanitation (DSNY) has developed a new Solid Waste Management Plan (SWMP) to address expected future demands for solid waste management for the city. The new SWMP was approved by the New York City Council in July 2006 and the New York State Department of Environmental Conservation (NYSDEC) in October 2006, and is effective for the next 20 years with compliance reports to NYSDEC every two years starting in 2009. Because the amended SWMP will be in effect in the 2014 analysis year, this assessment considers the conformity of the Proposed Actions with the new SWMP.

This chapter concludes that the solid waste systems that would serve the development parcels have adequate capacity to meet the relatively modest increase in demand for solid waste handling generated by the proposed development program. Therefore, the Proposed Actions would not result in significant adverse impacts on sanitation services.

**B. SUMMARY OF FGEIS FINDINGS**

The FGEIS analyzed the anticipated solid waste handling demand resulting from illustrative development programs under an As-of-Right Scenario and a 12 FAR Rezoning Scenario. A 2007 Interim Build Year and the 2011 Final Build Year were analyzed for all of the illustrative programs under the As-of-Right and Rezoning Scenarios. The analysis found that the solid waste generated by redevelopment at the First Avenue parcels would range from 33 to 120 tons per week in 2007, and from 49 to 144 tons per week in 2011. As compared with the 144,000 tons per week of solid waste that were handled by DSNY and private carters in the existing condition, the solid waste generation at the First Avenue parcels in the future with the Proposed Actions was determined not to constitute a significant adverse impact on the solid waste handling system.

## **C. EXISTING CONDITIONS**

In the City of New York, residential and institutional refuse is handled by the DSNY, while solid waste from commercial and manufacturing uses is collected by private carters. These materials are taken to transfer stations for sorting and transfer to larger trucks. From there, private carters take the materials to out-of-city landfills and waste-to-energy plants. It is estimated that DSNY collects over 12,000 tons of residential and institutional refuse and recyclables per day.<sup>1</sup>

Commercial carters pick up waste from businesses, manufacturers, and offices and transport the 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. According to DSNY's website, private carters handle about 13,000 tons per day of recyclables and solid waste.

The city's solid waste management services are undertaken in accordance with the SWMP, which is the responsibility of DSNY. New York City adopted a Comprehensive SWMP in August 1992, and the implementation of the plan was altered slightly in May 1993 to gain approval from NYSDEC. It has since been updated to reflect changing conditions. In order to close the Fresh Kills landfill, New York City developed interim plans to export all the municipal waste that it collects. A long-term plan was developed that led to large-scale trucking of municipal solid waste. A new SWMP was released in October 2004 with a focus on municipal solid waste. The Final Environmental Impact Statement (FEIS) for the new SWMP was released in April 2005. The new SWMP follows two main principles: (1) containerization of waste, and (2) long-distance export of that waste by barge or rail.

The SWMP establishes a hierarchy of preferred solid waste management methods to reduce and process solid waste generated within the city. The objectives of the SWMP are, in order of importance: waste minimization; reuse, recycling, or composting; and export for out-of-city disposal. 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.

Existing remediation activities on the development parcels generate a negligible amount of solid waste compared to the capacity of the system.

## **D. FUTURE WITHOUT THE PROPOSED ACTIONS**

In the future without the Proposed Actions it is assumed that all of the development parcels would be vacant, with no demand for solid waste collection and disposal.

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<sup>1</sup> DSNY website: <http://www.nyc.gov/html/dsny/html/about/about.shtml>

The new SWMP addresses recycling, residential waste, and commercial waste. The new SWMP introduces a shift from the current mode of truck-based export to export by barge and/or rail. The city intends to commit to a long-term (20 year) contract with the Hugo Neu Corporation for the processing and marketing of metal, glass, and plastic (MGP). An MGP processing facility will be developed in the city at the 30th Street Pier in South Brooklyn Marine Terminal. The plant will be barge-fed from Hugo Neu Corporation sites in Queens and the Bronx and a potential DSNY location in Manhattan.

The new SWMP includes a Long Term Export Program for residential waste. The city's Long Term Export Program will be implemented through: (1) the development of four converted marine transfer stations (MTS); (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. The new SWMP mandates the use of up to nine converted MTS and private transfer stations within the five boroughs at which solid waste will be consolidated, containerized, and barged or railed out of the city. The barges currently used at MTS facilities will be replaced or retrofitted with new sealed containers or "intermodal containers" capable of being transported on barge or rail. The four converted MTS facilities will 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>2</sup>

The new 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.

Under the new SWMP, solid waste will be taken from Manhattanville to the Essex County, New Jersey, Resource Recovery Facility for sorting and disposal. Recyclable materials are expected to be sold after sorting and the remaining waste burned for energy recovery. The SWMP has been approved both by the New York City Council and NYSDEC. DSNY is in the process of implementing the SWMP.

Under the new SWMP, the methods of handling commercial solid waste are not expected to change significantly from current methods. In March 2004, DSNY published the Commercial Waste Management Study (CWMS) pursuant to Local Law 74 of 2000. The purpose is to: (1) address the siting and operations of private transfer station and waste collection operations, (2) determine future demand for commercial transfer capacity, and (3) facilitate a transition from the current mode of truck-based export to export by barge and/or rail. The study found that the basic system of private carters collecting and disposing of waste from commercial facilities is expected to remain unchanged. Overall, the major change to solid waste collection systems serving New York City is greater reliance on private carters to transport and dispose of DSNY-handled waste outside New York City. Municipal waste and privately handled waste will continue to be shipped to licensed landfills and resource recovery facilities outside New York City. Recyclables are expected to be sorted and sold.

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<sup>2</sup> DSNY, Draft Comprehensive Solid Waste Management Plan, October 2004.

## E. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

This section discloses the anticipated future demand for solid waste handling under the proposed development program for the 2014 analysis year. The solid waste assessment applies *CEQR Technical Manual* methodology, using gross square footage figures as outlined in Table 1-1 of Chapter 1, “Project Description.”

As described in Chapter 1, “Project Description,” the proposed development program would introduce a total of 3,753,607 gross square feet (gsf) of residential use, 119,936 gsf of community facility use, 1,532,437 gsf of commercial office use, 71,167 gsf of retail use, and 640,030 gsf of below-grade space. Of the below-grade space, 315,105 gsf would be dedicated to parking, while the remaining space would be used for mechanical services. The program would also include 4.84 acres of publicly accessible open space, which, in addition to the below-grade space, is not included in the solid waste analysis because the demand for solid waste services generated by these uses would be minimal.

As shown in Table 13-1, the proposed development program would generate solid waste at a rate of 268,156 pounds (approximately 134 tons) per week. Of this amount, about 85 tons per week would be handled by DSNY, and private carters would handle about 49 tons per week. This represents a relatively small increase in New York City’s waste stream (approximately 0.1 percent of the weekly amount currently handled by DSNY, and 0.06 percent of the weekly amount handled by private carters, assuming a six-day work week). Given that a truck can haul about 10 tons of solid waste, the proposed development program would require approximately 13 truck trips per week.

**Table 13-1  
Solid Waste Generation for the Proposed Development Program**

Use	Size	Generation Rate (pounds per week)	DSNY (pounds per week)	Private Carters (pounds per week)	Total (pounds per week)
Residential	4,166 units	41 per unit	170,806	0	170,806
Retail	178 employees <sup>1</sup>	79 per employee	0	14,062	14,062
Office	6,130 employees <sup>2</sup>	13 per employee	0	79,690	79,690
Community Facility	119,936 gsf	0.03 per square foot	0	3,598	3,598
<b>Total</b>			<b>170,806</b>	<b>97,350</b>	<b>268,156</b>
<b>Notes:</b>					
<sup>1</sup> Number of retail employees assumes one employee per 400 square feet of retail space.					
<sup>2</sup> Number of office employees assumes one employee per 250 square feet of office space.					
<b>Source:</b> <i>City Environmental Quality Review (CEQR) Technical Manual (2001).</i>					

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 project.

Under the new SWMP, new residential development at the First Avenue parcels would be served by existing DSNY collection routes with DSNY adjusting appropriate collection levels to service the community. The new SWMP would require all municipal waste generated from the development parcels to be trucked to a new city-owned converted MTS at East 91st Street, where waste would be received, containerized, and exported by barge. The converted MTS facility will be designed to process at least 4,290 tons per day and accommodate 30 collection vehicles per hour. As the residential waste generated by the proposed development program would be only 0.3 percent of this waste capacity, and since less than two DSNY truck trips per day would be generated, the converted MTS is expected to have sufficient capacity to accommodate the additional municipal waste generated by the proposed development program.

The proposed project would comply with the city's recycling program. The project 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. With an effective recycling program, it is estimated that the waste stream could be reduced by up to 25 percent. Overall, the Proposed Actions are not expected to have an adverse impact on solid waste handling and disposal methods or recycling in the city.

## **F. FUTURE CONDITIONS WITH THE UNDC PROJECT**

In the FGEIS, the proposed UNDC project at East 41st Street and First Avenue was considered as part of the baseline condition in the Future Without the Proposed Actions section. However, because the UNDC project is complex and requires approvals from the New York State Legislature, the New York City Economic Development Corporation, and possibly other public agencies, including its own environmental review, it is uncertain whether the project will be completed by 2014 or, in fact, ever built. With or without the UNDC building as a background project, the Proposed Actions would not result in significant adverse impacts to solid waste and sanitation services. As described above, the city's SWMP is based on projected rates of growth in the generation of solid waste, and 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. 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 would include the UNDC project, if developed.

## **G. CONCLUSIONS**

Approximately 134 tons per week of solid waste are expected to be generated by the proposed development program. This demand would be met by the sanitation services assumed to be in place in the future analysis year, and no significant adverse impacts would result. The proposed development program would generate less solid waste than the maximum amount analyzed in the FGEIS; the illustrative programs in the FGEIS were projected to generate between 49 and 144 tons per week. \*