

A. INTRODUCTION

The Proposed Project would generate new demands on solid waste management and sanitation services provided in the project area. The New York City Department of Sanitation (DSNY) has developed a Solid Waste Management Plan (SWMP) to address expected future demands for solid waste management for the City. The SWMP is effective for the next 20 years with progress reports to New York State Department of Environmental Conservation (NYSDEC) every two years starting in 2009. This chapter analyzes the potential impact of the Proposed Project on solid waste services and considers the conformity of the Proposed Project with the SWMP.

The Reasonable Worst Case Development Scenario (RWCDS) for the solid waste and sanitation services analysis assumes a mix of uses that maximizes retail and office uses. Therefore, the analysis is based on RWCDS 3b (see Chapter 1, "Project Description"), which assumes 2,100 residential units, 1,012 hotel rooms, 151,598 gross square feet (gsf) of community facility (public school), 325,022 gsf of retail, 52,209 gsf of office, and 276,011 gsf of auto showroom.

PRINCIPAL CONCLUSIONS

The Proposed Project would result in a net increase of approximately 85,773 pounds per week or 6 tons per day (tpd) over No Build Scenario 1 conditions, or 225,580 pounds per week (16 tpd) over No Build Scenario 2 conditions. These increases are insignificant compared with the approximately 30,000 tpd currently generated in New York City. Although the Proposed Project would create new demand for the disposal of solid waste, municipal and private solid waste services would have adequate capacity to meet these increases in demand. Therefore, the Proposed Project would not result in any significant adverse impacts on solid waste and sanitation services.

B. SUMMARY OF 1992 FEIS FINDINGS

The 1992 FEIS concluded that the Riverside South project as a whole would generate 7.25 tons of solid waste per day by 1997 and 24.7 tons by 2002. Within Sanitation District 7, the project's residential refuse would increase the collection by 0.42 percent by 1997 and 0.76 percent by 2002. It was determined that these increases would not be significant and could be accommodated by DSNY.

C. METHODOLOGY

This chapter:

- Describes the existing solid waste management services in the project area, using solid waste generation rates for typical land uses and activities provided in the 2001 City Environmental Quality Review (CEQR) Technical Manual¹;
- Determines future solid waste demands with the Proposed Project; and
- Assesses the effects of this incremental demand on sanitation services.

D. EXISTING CONDITIONS

DESCRIPTION OF SOLID WASTE AND SANITATION SERVICES

In New York City, DSNY is the agency responsible for the collection and disposal of solid waste and recyclable materials generated by residences, public schools, some nonprofit institutions, tax-exempt properties, and city agencies. DSNY also collects waste from street litter baskets, and handles street-sweeping operations and lot-cleaning activities. Private commercial haulers handle solid waste from other uses, e.g., commercial, office, and industrial operations.

Currently, most of the city's municipal solid waste is collected and delivered to transfer stations for sorting and transfer to larger "hopper" trucks, and then transported out of the city. Private carters also consolidate solid waste from commercial and industrial operations and haul it to waste transfer facilities both inside and outside New York City, from where it is transported by truck to out-of-city disposal facilities. In fiscal year 2009 (July 1, 2008 to June 30, 2009) DSNY collected and disposed of 10,986 tpd of residential and institutional refuse and 5,394 tpd of recyclables (solid waste).² This yields a total of about 16,380 tpd of solid waste handled by DSNY. It is also estimated that the non-residential (commercial/industrial) waste stream is about 13,000 tpd. The total solid waste generated, transported, and disposed of in the city averages over 30,000 tpd.

DSNY developed a new comprehensive SWMP to replace an earlier SWMP. The 2006 SWMP was approved by the New York City Council in July 2006, and NYSDEC on October 27, 2006. The 2006 SWMP addresses and recognizes the interdependency of the systems for managing recycling, residential waste, and commercial waste, and introduces a shift from the current mode of truck-based export to export by barge and/or rail. The 2006 SWMP includes a Long-Term Export Program for residential waste, which is being implemented through: (1) the conversion and reuse of four existing but non-operational marine transfer stations (MTS) to handle DSNY-

¹ In May 2010, shortly prior to the completion of the Draft SEIS, a substantive update to the 2001 CEQR Technical Manual was released. Prior to the public hearing for the Proposed Project, a Technical Memorandum was prepared (and published on DCP's website in September 2010) that considered whether one or more analyses contained in the Draft SEIS should be revised in the Final SEIS in light of the updated guidance set forth in the 2010 CEQR Technical Manual. The evaluation of the Proposed Project under the 2010 CEQR Technical Manual focused on technical areas where changes in methodology would have the potential to affect the analyses and/or conclusions of the Draft SEIS for the Proposed Project. With respect to solid waste and sanitation services, the 2010 CEQR Technical Manual updates would not materially change the analyses or conclusions presented in the Draft SEIS.

² Preliminary Fiscal 2010 Mayor's Management Report.

managed waste, as well as provide capacity that could be available to containerize commercial waste for barge/rail export; (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.

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, newspapers and other paper wastes from household waste for separate collection. Under the 2006 SWMP, commercial and industrial establishments are also 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, plastic containers, and aluminum foil, in addition to meeting the commercial recycling requirements.

SOLID WASTE GENERATION

The project site is within Manhattan Community District 7. Currently, the project site is composed of open and structured vehicle parking. A solid waste generation rate of 13 pounds per week per employee would be representative of the parking uses that are currently operating on the project site. The existing facilities on the project site currently employ approximately 15 employees. Based on these assumptions, the existing project site uses generate a total of approximately 195 pounds of solid waste per week. These private businesses are served by private commercial solid waste and recycling management companies.

E. THE FUTURE WITHOUT THE PROPOSED PROJECT

DESCRIPTION OF SOLID WASTE AND SANITATION SERVICES

It is expected that by 2018, DSNY's Long-Term Export Program (as proposed in the 2006 SWMP), will be fully operational. Based on the program, all municipal waste generated from the project site would be delivered in collection vehicles to the Essex County Resource Recovery Facility (RRF), a permitted and operating waste-to-energy facility in Newark, New Jersey. The 2006 SWMP also states that if an enclosed barge unloading facility (EBUF) were to be developed in the vicinity of the Essex County RRF some time in the future, this waste may be delivered via hopper barges from MTSs.

In 2018, commercial waste from the project site would continue to be collected by private carters. Currently, this waste is transported to out-of-city disposal facilities by truck. However, the 2006 SWMP includes proposals to address commercial waste management that would allow for commercial waste generated in the city to be transported out of the City by barge rather than by truck. West of Riverside Park South and Route 9A (also known as the Miller Highway) is the West 59th Street Marine Transfer Station (MTS) on Pier 99. This MTS is currently operated as a recyclable paper transfer station and is proposed to be converted to accept commercial waste. As described in Chapter 2, "Land Use, Zoning, and Public Policy," the proposed conversion of the West 59th Street MTS is expected to be complete in 2012. This conversion will require its own separate environmental review and approvals. The 2006 SWMP also proposes that commercial waste be handled at the four converted MTSs. In the event these programs are not implemented by 2018, commercial waste from the project site would continue to be transported out of New York City by truck.

Recyclables from the project site are expected to be sorted and sold.

SOLID WASTE GENERATION

As discussed in Chapter 1 “Project Description,” this SEIS considers two different scenarios for developing the project site absent the proposed discretionary actions. Under No Build Scenario 1, Parcels L, M, and N would be developed according to the original 1992 FEIS program. Parcels L and M would be developed with residential buildings with office space and public parking. Parcel N would be developed with a mix of retail, office, entertainment studio production, cinema, and parking uses.

Under No Build Scenario 2, the original 1992 FEIS program would be completed for Parcels L and M, but Parcel N would remain in its current use.

NO BUILD SCENARIO 1

Table 14-1 shows the expected amount of solid waste that would be generated by No Build Scenario 1. In the Future Without the Proposed Project, No Build Scenario 1 would generate approximately 164,998 pounds per week (approximately 82.5 tons per week, or 12 tpd).

**Table 14-1
Solid Waste Generation for No Build Scenario 1**

Use	Size	Generation Rate (pounds per week)	DSNY (pounds per week)	Private Carters (pounds per week)	Total (pounds per week)
Residential	577 units	41 per unit	23,657	0	23,657
Retail	82,065 gsf (205 employees)	79 per employee	0	16,207	16,207
Office	350,370 gsf (1,752 employees)	13 per employee	0	22,776	22,776
Cinema	1,800 seats (37,800 patrons per week)	1 per patron	0	37,800	37,800
Studio	1,962,554 (4,906 employees)	13 per employee	0	63,778	63,778
Parking	297,200 (60 employees)	13 per employee	0	780	780
Total			23,657	141,341	164,998
Notes:	Retail: 400 square feet per employee Office: 200 square feet per employee Cinema: three patrons per seat per day Studio: 400 square feet per employee Parking: 5,000 square feet per employee				
Sources:	Generation rates from the <i>CEQR Technical Manual</i> , except cinema which uses a rate from previous EIS's.				

Municipal Services

Approximately 23,657 pounds (12 tons) would be residential waste, and would be collected by DSNY. According to *CEQR Technical Manual* guidelines, the typical DSNY truck has a capacity of approximately 12.5 tons. Therefore, the amount of municipal waste generated by No Build Scenario 1 would require the equivalent of about one new DSNY truck trip per week in 2018.

Private Services

No Build Scenario 1 would generate approximately 141,341 pounds of commercial solid waste per week (approximately 71 tons per week, or 10 tpd) that would be transported by private carters. This increase in demand would be met by private-sector response to the increase in service needs.

NO BUILD SCENARIO 2

Table 14-2 shows the expected amount solid waste that would be generated by No Build Scenario 2. In the Future Without the Proposed Project, No Build Scenario 2 would generate approximately 25,191 pounds per week (approximately 12.6 tons per week, or 1.8 tpd).

Table 14-2
Solid Waste Generation for No Build Scenario 2

Use	Size	Generation Rate (pounds per week)	DSNY (pounds per week)	Private Carters (pounds per week)	Total (pounds per week)
Residential	577 units	41 per unit	23,657	0	23,657
Retail	0	79 per employee	0	0	0
Office	20,370 gsf (102 employees)	13 per employee	0	1,326	22,776
Cinema	0	1 per patron	0	0	0
Studio	0	13 per employee	0	0	0
Parking	50,000 gsf (10 employees)	13 per employee	0	130	130
Parking	6 employees	13 per employee	0	78	78
Total			23,657	1,534	25,191
Notes:	Retail: 400 square feet per employee Office: 200 square feet per employee Cinema: three patrons per seat per day Studio: 400 square feet per employee Parking: 5,000 square feet per employee				
Sources:	Generation rates from the <i>CEQR Technical Manual</i> , except cinema which uses a rate from previous EISs.				

Municipal Services

Approximately 23,657 pounds (12 tons) would be residential waste, and would be collected by DSNY. According to *CEQR Technical Manual* guidelines, the typical DSNY truck has a capacity of approximately 12.5 tons. Therefore, the amount of municipal waste generated by No Build Scenario 2 would require the equivalent of about one new DSNY truck trip per week in 2018.

Private Services

No Build Scenario 2 would generate approximately 1,534 pounds of commercial solid waste per week (approximately 0.77 tons per week, or 0.1 tpd) that would be transported by private carters. This minimal increase in demand would be met by private-sector response to the increase in service needs.

F. THE FUTURE WITH THE PROPOSED PROJECT

DESCRIPTION OF SOLID WASTE AND SANITATION SERVICES

As described above, in 2018, it is expected that all municipal waste generated from the project site would be delivered in collection vehicles to the Essex County RRF, a permitted and operating waste-to-energy facility in Newark, New Jersey.

Commercial waste from the project site would continue to be collected by private carters.

SOLID WASTE GENERATION

As described in Chapter 1, “Project Description,” the Proposed Project would include a mix of uses on Parcels L, M, and N that would differ from those proposed in the 1992 FEIS (which could either be developed as No Build Scenario 1 or No Build Scenario 2). These uses would place different demands on the solid waste and sanitation services than those expected under either No Build Scenario. This analysis determines the solid waste and sanitation services demands of the Proposed Project. As described in detail above, the RWCDs for this analysis assumes a mix of uses that maximizes retail and office uses.

To determine future solid waste volumes, the solid waste generation rates from the *CEQR Technical Manual* were applied to the Proposed Project. **Table 14-3** presents the solid waste generation expected with the Proposed Project on Parcels L, M, and N.

Table 14-3
Solid Waste Generation for the Proposed Project

Use	Size	Generation Rate (pounds per week)	DSNY (pounds per week)	Private Carters (pounds per week)	Total (pounds per week)
Residential	2,100 units	41 per unit	86,100	0	86,100
Retail	325,022 (812 employees)	79 per employee	0	64,192	64,192
Office	52,209 (209 employees)	13 per employee		2,717	2,717
School	1,332 seats	3 per seat	3,996	0	3,996
Cinema	252 seats (5,292 patrons per week)	1 per patron	0	5,292	5,292
Hotel	1,012 rooms	75 per room	0	75,900	75,900
Auto Showroom	276,011 gsf (92 employees)	125 per employee	0	11,500	11,500
Parking	412,900 (83 employees)	13 per employee	0	1,074	1,074
Total			90,096	160,675	250,771
Notes:	Retail: 400 square feet per employee Office: 250 square feet per employee Cinema: three patrons per seat per day Auto Showroom/Service: 3,000 square feet per employee Parking: 5,000 square feet per employee				
Sources:	Generation rates from the <i>CEQR Technical Manual</i> , except cinema which uses a rate from previous EISs.				

It is estimated that the Proposed Project would generate approximately 250,771 pounds of solid waste per week (approximately 125 tons per week, or 18 tpd) in 2018. As mentioned above, the

total solid waste generated in New York City averages approximately 30,000 tpd. Therefore, the demand from the Proposed Project would be equivalent to approximately 0.06 percent of the total amount of solid waste currently handled each day in New York City. This would not be considered a significant increase in the city’s solid waste stream.

Table 14-4 compares the incremental increase in solid waste generation from the Proposed Project with No Build Scenarios 1 and 2. In both cases, the Proposed Project would generate a greater amount of solid waste.

Table 14-4
Incremental Solid Waste Generation (pounds per week)

Waste Stream	Proposed Project	No Build Scenario 1	Increment over No Build Scenario 1	No Build Scenario 2	Increment over No Build Scenario 2
Municipal	90,096	23,657	66,439	23,657	66,439
Commercial	160,675	141,341	19,334	1,534	159,141
Total	250,771	164,998	85,773	25,191	225,580

Municipal Services

Compared with both No Build Scenario 1 and 2, the Proposed Project would generate approximately 66,439 pounds per week more of solid waste (an increment of approximately 33.2 tons per week, or 5 tpd) to be collected by DSNY. Based on a typical DSNY truck capacity of 12.5 tons, this would result in the equivalent of about three additional truck trips a week over the one additional truck trip a week that would be required under either No Build scenario. This increase would not be considered to be significant.

The 2006 SWMP is based on projected rates of growth throughout New York City and the associated growth in the generation of solid waste. The measures proposed to be implemented by the city pursuant to the 2006 SWMP are designed to meet the goals of the 2006 SWMP notwithstanding further development within certain defined future conditions. In other words, the solid waste handling system assumed to be in place in the future was designed to accommodate future growth in the generation of solid waste, which would include growth from developments such as the proposed project.

Private Services

The Proposed Project would generate approximately 19,334 pounds more of commercial solid waste per week (an increment of approximately 10 tons per week, or 1.4 tpd) than No Build Scenario 1. Compared with No Build Scenario 2, the Proposed Project would generate approximately 159,141 pounds more of commercial solid waste per week (an increment of approximately 80 tons per week, or 11 tpd). Any increase in demand over the No Build Scenarios would be met by private-sector response to the increase in service needs. This would not be considered a significant increase.

The Proposed Project would comply with New York City’s recycling program. The Proposed Project would be designed to accommodate source separation of recyclables in conformance with existing recycling regulations. This would include recycling paper, glass, metals, and certain plastics. Although recycling does not change the amount of waste collected, with an effective recycling program, it is estimated that the waste that would otherwise be disposed of in landfills or other disposal facilities could be reduced by up to 25 percent. Overall, the Proposed Project is not expected to have an adverse impact on the recycling program in New York City. *