

**Special West Chelsea District Rezoning and High Line Open Space EIS**  
**CHAPTER 14: SOLID WASTE AND SANITATION SERVICES**

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**A. INTRODUCTION**

The proposed action would not result in significant adverse impacts to solid waste and sanitation services. As discussed in Chapter 1, “Project Description,” a reasonable worst-case development scenario (RWCDs) for development associated with the proposed action by 2013 has been identified, with net increases of 4,708 DUs, ~~292,676~~ 195,215 sf of retail space, and 198,726 sf of museum space, and net decreases of ~~816,847~~ 796,947 sf of office, 131,100 sf of hotel, ~~40,809~~ 74,818 sf storage/manufacturing, ~~318,580~~ 225,940 sf of parking/auto related uses, and ~~25,064~~ 4,080 sf of vacant space on the 25 projected development sites. The proposed action also includes the site selection and acquisition of the High Line to create a publicly accessible ~~6.7~~ 5.9-acre open space. The residential development is expected to result in a net increase of approximately 8,287 residents to the area by 2013. The non-residential development is expected to result in a net decrease of ~~2,844~~ approximately -2,984 employees.

According to the *CEQR Technical Manual*, actions involving construction of housing or other development generally do not require evaluation for solid waste impacts unless they are unusually large (a generation rate of less than 10,000 pounds per week, for example, is not considered large). Compliance with applicable requirements generally eliminate possible significant adverse impacts. In accordance with these guidelines, this chapter analyzes the effects of the proposed action on solid waste and sanitation services.

In order to determine whether the increase in development due to the proposed action conforms with the City’s Comprehensive Solid Waste Management Plan, a quantitative assessment was conducted. This entails the calculation of existing solid waste generation on the projected development sites, as well as a comparison of equivalent calculations in the future with and without the proposed action in place. As the proposed action is expected to result in a net decrease in employee population, reflecting a reduction in non-residential floor area due to the expected conversion of space to residential use, a quantitative assessment of non-residential solid waste effects is not provided, except for museum-generated effects (refer to discussion of museum solid waste below). A calculation of solid waste generation by the RWCDs’ non-residential program confirmed that the proposed action would generate a net decrease of approximately ~~75,000~~ 84,000 pounds per week in non-residential solid waste.

The creation of the High Line open space, which extends south of the rezoning area boundary to Gansevoort Street and also includes the post office spur extending east of Tenth Avenue at W. 30th Street, would have only minimal solid waste and sanitation services effects. Solid waste generated by users of the open space likely would be limited to incidental trash placed in litter baskets and from possible park amenities. This is not expected to result in significant solid waste generation and is not considered in the analysis of future solid waste and sanitation services conditions.

It should be noted that the New York City Department of Sanitation (DSNY) is currently developing amendments to the recycling program and the Solid Waste Management Plan (SWMP) to address anticipated future demands for solid waste management for the City. The amended SWMP was submitted for public review in Spring 2004. On October 15, 2004, DSNY transmitted the Draft New SWMP - proposing changes to the 2000 SWMP for the next 20 year planning period - to the City Council for review and approval. The amendments also would require approval by the New York State Department of Environmental Conservation. The Draft New SWMP anticipates future demands for solid waste management by the City. As stated in the EAS for the New Comprehensive SWMP, it is expected that these amendments would become effective in 2006.<sup>1</sup> Because the amended SWMP would be in effect by the analysis year of 2013, this assessment considers the conformity of the proposed action with the amended SWMP, as currently drafted.

## **B. EXISTING CONDITIONS**

### **Description of Current Sanitation Services**

In New York City, DSNY is the City agency responsible for the collection and disposal of municipal solid waste and recyclable materials generated by residences, some nonprofit institutions, tax exempt properties, and City agencies. DSNY also collects waste from street litter baskets, street-sweeping operations, and lot cleaning activities. Fresh Kills, which was New York City's only remaining landfill, was officially closed in March 2001. DSNY continues to pick up residential and institutional solid waste and recyclables. Under the current interim SWMP, most of the City's municipal solid waste is collected and delivered to transfer stations for sorting and transfer to larger "hopper" trucks and transported out of the City. Municipal solid waste from the West Chelsea area is collected and trucked directly to out-of-state landfills and waste-to-energy facilities. It is estimated that DSNY collects over 12,000 tons of residential and institutional refuse and recyclables per day.<sup>2</sup>

The City's solid waste management services are undertaken in accordance with the SWMP, which is the responsibility of the DSNY. 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 out of the City for 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

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<sup>1</sup> DSNY website: <http://www.nyc.gov/html/dos/pdf/pubnrpts/swmp/seqra-ceqr.pdf>

<sup>2</sup> DSNY website: <http://www.nyc.gov/html/dos/html/dosfact.html>

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.

The proposed action area is mostly located within DSNY service area M-4, covering Manhattan Community District 4, and the proposed action would only affect municipal solid waste services in this service area. The southern end of the High Line is located in service area M-2, however the proposed open space on this structure is not expected to generate measurable solid waste. In any event, trucks serving these service areas are housed and maintained at a combined M-2/M-4 garage located on the Gansevoort Peninsula (2 Bloomfield Street, near W. 13th Street and Eleventh Avenue). Trucks serving service area M-6 are stored on a parking lot near the proposed action area, at 606 W. 30th Street, under the High Line along the north side of W. 30th Street between Eleventh and Twelfth avenues. The typical solid waste collection truck serving M-4 carries approximately 12.5 tons of municipal waste; recycling trucks carry 11.5 tons of paper or 10 tons of plastic, glass, and metal.

Commercial establishments (restaurants, retail establishments, 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, whose waste is collected by private carting companies, generate another 13,000 tons of refuse each day.<sup>3</sup>

### **Quantitative Analysis of Solid Waste Generation**

As solid waste/sanitation services is a density-based technical analysis, only those developments on identified projected development sites form the basis for the assessment of solid waste and sanitation services. As noted in the "Introduction" section above, the assessment of sanitation services focuses on solid waste generated by residential uses, as non-residential solid waste generation is expected to decline as a result of the proposed action. Solid waste generated by non-residential uses are mostly collected by private carters, whereas residential solid waste is collected by the DSNY. However, as solid waste generated by tax-exempt and non-profit institutions are often collected by the DSNY, the analysis in this chapter includes the projected museum use.

As detailed in Chapter 1, "Project Description," the 25 projected development sites located in the proposed action area currently contain 101 DUs. On average, the number of persons per household in Manhattan Community District 4 is 1.64. Assuming this figure for existing residential units, it can be estimated that these existing dwelling units contain approximately 166 individuals. Based on City-wide average waste generation rates presented in Table 3M-1 of the *CEQR Technical Manual*, each individual is estimated to generate an average of 17 pounds per week of garbage, for a total of approximately 2,822 pounds (1.4 tons) per week. In addition, there is approximately

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<sup>3</sup> Ibid.

28,838 sf of community facility space on the projected development sites, consisting of museum space. The number of community facility (museum) employees is calculated as one employee per 775 sf, which is derived from existing operations data presented in the *583 Broadway New Museum of Contemporary Art EAS, CEQR No. 02DCP055M (2003)*. Using this rate, yields an estimate of approximately 37 existing employees. Community facilities (museums) are estimated to generate an average of 3 pounds of garbage per week per employee, for a total of approximately 112 pounds (0.1 tons) per week. Combined, the residential and community facility uses generate a total of approximately 2,934 pounds (1.5 tons) per week of municipal solid waste. These residential units and community facility (museum) spaces are served by DSNY collection routes. This information is summarized in Table 14-1.

**Table 14-1, Existing Municipal Solid Waste Generated on the Projected Developments Sites**

USE	MUNICIPAL SOLID WASTE
101 DUs (166 residents)	2,822 lbs. per week (1.4 tons)
28,838 sf community facility/museum (37 employees)	112 lbs. per week (0.1 tons)
Total, Existing Conditions	2,934 lbs. per week (1.5 tons)

Assumes 1.64 residents per DU, and 17 lbs of solid waste per week per individual resident; 1 museum employee per 775 sf and 3 lbs of solid waste per museum employee.

## C. FUTURE WITHOUT THE PROPOSED ACTION

### Future Changes to Sanitation Services

As noted above, the Fresh Kills landfill was closed in 2001. In order to close Fresh Kills, New York City developed interim plans to export all of the municipal waste that it collects. A long-term plan was developed, but led to large-scale trucking of municipal solid waste. A new Comprehensive Solid Waste Management Plan (SWMP) is being developed with a focus on municipal solid waste. DSNY continues to pick up residential and institutional solid waste and take it to transfer stations for out-of-city disposal until a long-term plan is developed and implemented.

Beginning in November 2004, collection and disposal of solid waste must be completed in conformance with an amended SWMP currently being prepared by DSNY. As currently drafted, the amended SWMP would mandate the use of up to eight marine transfer stations (MTS) within the five boroughs at which solid waste would be consolidated, containerized, and barged or railed out of the City. The MTSs, including the West 59th Street MTS which processes solid waste from service area M-4, would include a combination of upgraded existing MTS facilities and new facilities. 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. According to the proposed SWMP, existing MTS facilities, such as the West 59th Street facility, would be retrofitted by 2008. In the interim, all municipal solid waste would be trucked out of the City.

The West 59th Street MTS is expected to be retrofitted and upgraded by 2008. As a result, solid waste handling and disposal is expected to become more efficient in the future without the proposed action. According to the proposed new SWMP, the West 59th Street MTS is proposed to have a design capacity of approximately 2,145 tons per day with an average peak day delivery of 1,068 tons of DSNY waste.<sup>4</sup> Solid waste is anticipated to be delivered to the West 59th Street MTS by a variety of collection vehicles, primarily consisting of packer and dual-purpose trucks, including collection vehicles operated by DSNY and other City agencies. The waste would then be containerized, and loaded onto barges with a net payable load of approximately 1,056 tons (gross payable load of 1,308 tons) and the barges would be towed to intermodal facilities where containers would then be transloaded to either trains or ocean-going vessels for transport to out-of-City disposal sites.<sup>5</sup>

While MTS conversion is the primary aim of the proposed Long Term Waste Export policy, other initiatives are under consideration as well, including the possible development of private facilities to transfer and containerize waste. Once consolidated and containerized, solid waste would be exported by barge or rail to disposal sites outside of the City. If the current SWMP remains in effect in 2013, all municipal waste would continue to be trucked out of the City.

#### Relocation of DSNY Garage from Gansevoort Peninsula

The DSNY garage facility on Gansevoort Peninsula at 2 Bloomfield Street is slated to be relocated, along with the NYPD Tow Pound currently on Pier 76, in order to allow the reuse of those areas for open space as part of Hudson River Park. The Hudson River Park legislation states "... that the City must make best efforts..." to relocate these facilities. As part of the Hudson Yards project, a possible new location for a combined DSNY/Tow Pound facility has been identified on the block bounded by W. 30th Street, Eleventh Avenue, W. 29th Street, and Twelfth Avenue. This facility would have a mapped park programmed for active recreation on its roof. If the combined DSNY/Tow Pound facility is relocated to this block, it is expected to occur by 2013.

#### **Quantitative Analysis of Solid Waste Generation**

Absent the proposed action, development on the 25 identified projected development sites is assumed to remain unchanged from existing conditions, or become occupied by as-of-right uses under existing zoning. As discussed in Chapter 2, "Land Use, Zoning and Public Policy," the DCP has identified 9 of the projected development sites which would experience some moderate levels of commercial redevelopment in the form of occupancy of existing vacant space, conversion of existing space to new uses, and occupancy of newly constructed space. However, as residential and museum uses are not allowed under the existing zoning, these uses are not expected in the No-Action condition. The number of dwelling units is expected to remain the same as under existing conditions, with 101 DUs on the projected development sites, and the amount of community facility

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<sup>4</sup> Source: *Draft Scoping Document for the City of New York Comprehensive Solid Waste Management Plan Draft Environmental Impact Statement*, CEQR No. 03-DOS-004Y, May 2004. P. 8 (Table 1.3-1).

<sup>5</sup> Ibid., pp. 31-32.

(museum) space also is expected to remain at 28,838 sf under No-Action. Consequently, the municipal solid waste generation would remain at 2,934 pounds (1.5 tons) per week in the future without the proposed action. This information is summarized in Table 14-2.

**Table 14-2, Municipal Solid Waste Generation on Projected Development Sites Under No-Action Conditions, Compared to Existing Conditions**

USE	MUNICIPAL SOLID WASTE
<i>2004 Existing Conditions</i>	
101 DUs (166 residents), 28,838 sf museum (37 employees)	2,934 lbs. per week (1.5 tons)
<i>2013 Future Without the Proposed Action</i>	
101 DUs (166 residents)	2,822 lbs. per week (1.4 tons)
28,838 sf of museum space (37 employees)	112 lbs. per week (0.1 tons)
Total, No-Action Conditions	2,934 lbs. per week (1.5 tons)

#### **D. FUTURE WITH THE PROPOSED ACTION**

As discussed in Chapter 1, “Project Description,” the proposed action’s RWCDS is expected to result in 4,809 DUs on the 25 projected development sites and 227,564 sf of museum space in the future with the proposed action. In addition, as the 101 DUs present in the future without the proposed action would be removed as a consequence of the proposed action, the proposed action would result in a net increase of 4,708 DUs. The With-Action community facility space includes 28,838 sf also expected to be present under No-Action conditions, therefore the proposed action would result in a net incremental increase of 198,726 sf of community facility space. As discussed in greater detail above in the “Introduction” section, it would also result in increased retail space, and decreased office, hotel, storage/manufacturing, parking/auto related uses, and vacant space. It would also result in the creation of an approximately 6.7 5.9-acre publicly accessible open space on the High Line. As noted above, as the RWCDS would result in a net decrease in solid waste generated by commercial uses, which employ private carters for solid waste collection and disposal, as compared to the future without the proposed action, the analysis considers only residential and museum uses, which are collected by the DSNY.

The 4,708 DUs are expected to house approximately 8,287 residents. In addition, the 198,726 sf of museum space is expected to have 256 employees.

Table 14-3 shows the solid waste to be generated by residential and museum uses on the projected development sites in the future with the proposed action. As shown in the table, in the future with the proposed action, the projected development sites would generate 144,582 pounds (72.3 tons) per week of municipal solid waste to be collected by the DSNY. After taking a credit for the expected 101 future No-Action DUs and 28,838 sf of No-Action community facility space, the proposed action would result in an incremental increase of 141,648 pounds (70.8 tons) per week.

**Table 14-3, Municipal Solid Waste Generation on Projected Development Sites Under With-Action Conditions, Compared to No-Action Conditions**

USE	MUNICIPAL SOLID WASTE
<i>2013 Future Without the Proposed Action</i>	
101 DUs (166 residents), 28,838 sf museum (37 employees)	2,934 lbs. per week (1.5 tons)
<i>2013 Future With the Proposed Action</i>	
4,809 DUs (8,453 residents)	143,701 lbs. per week (71.9 tons)
227,564 sf of museum space (294 employees)	881 lbs. per week (0.4 tons)
Total, Future With the Proposed Action	144,582 lbs. per week (72.3 tons)
<i>Incremental Change, From No-Action Conditions to With-Action Conditions</i>	
4,708 DUs (8,287 residents), 198,726 sf museum space (256 employees)	141,648 lbs. per week (70.8 tons)

Note: Totals may not add as shown due to rounding.

Residents would be required to participate in the City’s ongoing recycling program for paper, metals, and certain types of plastics and glass. It should be noted that these conservative volumes of solid waste are based on the *CEQR Technical Manual* and do not consider the quantities that could be recycled. The amount of recyclables could be approximately 25,497 pounds per week, based on current Citywide municipal waste recycling rate of 18 percent.

As currently drafted, the amended SWMP would require all municipal solid waste generated in the proposed action area is to be transported to the West 59th Street MTS for transfer to barges for ultimate disposal outside of the City. The West 59th Street MTS, which would be retrofitted/ upgraded in the future without the proposed action, is expected to have sufficient capacity to accommodate the additional municipal waste generated by the proposed action.

As noted above, the proposed action is expected to induce an additional 70.8 tons per week of solid waste to be collected by the DSNY. Solid waste generated by new residential and museum development is expected to be picked up by DSNY collection trucks. These new developments would be served by existing DSNY collection routes with the Department adjusting appropriate collection levels to service the community. 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 and museum uses induced by the proposed action on the 25 projected development sites would be expected to generate solid waste equivalent to approximately 1 truck load per day (assuming a seven-day week). This increase is not expected to overburden the DSNY’s solid waste handling services, and the proposed action would not have a significant adverse impact on the City’s solid waste and sanitation services. Accordingly, the proposed action is not expected to result in any significant adverse impacts.

## E. BASE FAR SCENARIO

The Base FAR Scenario is expected to result in less residential development than the proposed action, as it would permit lower density development. As discussed in Chapter 1, “Project Description,” under the Base FAR Scenario RWCDS, it is expected to generate a net increase of 3,041 DUs on the projected development sites, or approximately 1,667 fewer dwelling units than the proposed action. The Base FAR Scenario is expected to result in the same amount of projected development for non-residential uses. As this scenario would generate the same amount of non-residential development and less residential development than the proposed action, it would commensurately generate less solid waste. Specifically, as shown in Table 14-4, the Base FAR Scenario would generate a net increase of 91,634 pounds (45.8 tons) per week as compared to No-Action conditions. This would be 50,014 pounds (25.0 tons) per week less than the incremental increase generated by the proposed action. As solid waste impacts are density-specific, and with the proposed action not expected to result in significant, adverse impacts, the Base FAR Scenario does not have the potential for impacts.

**Table 14-4, Municipal Solid Waste Generation on Projected Development Sites Under Base FAR Scenario Conditions, Compared to No-Action Conditions and With-Action Conditions**

USE	MUNICIPAL SOLID WASTE
<i>2013 Future Without the Proposed Action</i>	
101 DUs (166 residents), 28,838 sf museum (37 employees)	2,934 lbs. per week (1.5 tons)
<i>2013 Base FAR Scenario</i>	
3,142 DUs (5,511 residents)	93,687 lbs. per week (46.8 tons)
227,564 sf of museum space (294 employees)	881 lbs. per week (0.4 tons)
Total, Future With the Proposed Action	94,568 lbs. per week (47.3 tons)
<i>Incremental Change, From No-Action Conditions to Base FAR Scenario</i>	
3,041 DUs (5,345 residents), 198,726 sf museum space (256 employees)	91,634 lbs. per week (45.8 tons)
<i>Incremental Change, From No-Action Conditions to With-Action Conditions</i>	
4,708 DUs (8,287 residents), 198,726 sf museum space (256 employees)	141,648 lbs. per week (70.8 tons)
<i>Difference Between With-Action Incremental Change and Base FAR Scenario Incremental Change</i>	
1,667 DUs (2,942 residents)	50,014 lbs. per week (25 tons)

Note: Totals may not add as shown due to rounding.

## F. CONCLUSION

The proposed action is not anticipated to result in significant adverse impacts to solid waste and sanitation services. Residential solid waste generation would increase by 141,648 pounds (70.8 tons) per week over No-Action conditions. This is equivalent to approximately 1 truck load per day (assuming a seven-day week), as the typical DSNY collection truck for residential refuse carries approximately 12.5 tons of waste material. As the area already is currently served by DOS

residential trash and recycling pick-ups and the resulting increase could be accommodated at the future converted West 59th Street MTS, the proposed action would not affect the delivery of these services, or place a significant burden on the City's solid waste management system. Similarly, the Base FAR Scenario, which would generate a net increase of 91,634 pounds (45.8 tons) per week over No-Action conditions would not result in significant adverse solid waste and sanitation services impacts. Commercial and industrial solid waste generation would actually decrease by approximately ~~75,000~~ 84,000 (net) pounds per week and would be serviced by private carters.