Chapter 15: Solid Waste and Sanitation Services

A. INTRODUCTION

This chapter assesses the effects that the Proposed Actions would have on solid waste services and anticipated changes in solid waste generation that may occur in the Future with and without the Proposed Actions.

PRINCIPAL CONCLUSIONS

While the Proposed Actions would generate additional solid waste and require the relocation of existing Department of Sanitation New York (DSNY) facilities, no significant adverse impact on solid waste and sanitation services would occur as a result of the Proposed Actions.

DSNY is responsible for the collection and disposal of municipal solid waste, including the collection of recyclables, generated by residences, some nonprofit institutions, tax exempt properties, and City agencies. Private carters provide these services to commercial and other users. DSNY is also responsible for street cleaning, snow and ice removal from City streets, and enforcement of the City's Recycling Law and other Sanitation Code provisions. The Proposed Actions would increase the volume of solid waste and recyclables that would have to be managed, but would not pose a significant strain to overall capacity of the City's municipal and private solid waste system or hamper the provision of adequate sanitation services.

While the DSNY M-6 garage, including the storage and other facilities located on the Development Site, are expected to eventually move and be consolidated with other DSNY facilities, the Proposed Actions would require the interim relocation of existing DSNY facilities from the Development Site to existing feasible alternative sites, which may be subject to necessary approvals. DSNY is in the process of identifying suitable relocation sites.

Municipal waste collection services within the surrounding area are provided by DSNY in accordance with a new 20-year Comprehensive Solid Waste Management Plan (SWMP) dated September 2006. The Proposed Actions are consistent with, and do not require amendments to, the City's SWMP.

The Proposed Actions would require the relocation of existing DSNY facilities from the Development Site to existing feasible alternative sites, which may be subject to necessary approvals. DSNY would identify suitable interim relocation sites. A generic analysis was conducted to determine the potential environmental impacts that could result from the relocation of the DSNY facilities from the Development Site. The analysis concluded that, depending on the interim site, relocation of the DSNY facilities could result in significant adverse impacts in the following areas: land use, zoning, and public policy; architectural historic resources; and noise. The assessment is conservative, and many, if not all, of the potential impacts may not occur. In the absence of site-specific details at this time, it is possible that the relocation of the DSNY facilities would result in one or more of the significant adverse impacts noted above. In that event, a range of measures would be available to eliminate or avoid those possible impacts.

B. METHODOLOGY

The purpose of a solid waste and sanitation services impact assessment is to determine whether the Proposed Actions would generate waste in quantities that would strain the capacity of, or require changes to, the City's integrated waste management system or significantly conflict with the City's adopted Solid Waste Management Plan and applicable State policy with respect to solid waste. The City's integrated solid waste management system includes the public and private collection components, and public and private transfer, processing, recycling, composting, transport, and disposal components.

This chapter describes existing solid waste and sanitation services and examines conditions in the Future with and without the Proposed Actions using average solid waste generation rates for common activities provided in the *City Environmental Quality Review (CEQR) Technical Manual* to assess the effects of incremental demands from the Proposed Actions on municipal and private sanitation services.

The *CEQR Technical Manual* provides guidance on the methods used to assess effects on the City's solid waste and sanitation system and conformity with the SWMP. The *CEQR Technical Manual* allows for both a screening level and a full assessment of a proposed action, depending on the anticipated magnitude of the action's effects, with the recommendation that any project that would generate in excess of 10,000 pounds per week of municipal solid waste should include an impact assessment on the municipal solid waste management system.

The Proposed Actions would result in the development of three sites: the primary project is located at the Western Rail Yard Development Site, and two additional sites would be used for the construction of affordable housing. The two Additional Housing Sites are located at Tenth Avenue and West 48th Street ("Tenth Avenue Site") and at Ninth Avenue and West 54th Street ("Ninth Avenue Site").

This chapter provides estimates of the increased volumes of commercial and municipal waste that would be generated by the Proposed Actions, and the additional municipal waste services that would be required to service the Development Site. This chapter also considers how the relocation of DSNY facilities from the Development Site would impact DSNY operations.

As described in Chapter 2, "Framework for Analysis," the analysis of the Proposed Actions is performed for the expected year of completion of the project—2019. In addition, an assessment of the Proposed Actions' potential environmental impacts is undertaken for a 2017 interim year of development. The following analysis considers the potential for a significant adverse impact of the Proposed Actions in the full (2019) Future with the Proposed Actions condition and then for the interim (2017) Future with the Proposed Actions condition.

C. EXISTING CONDITIONS

The DSNY manages the disposal of municipal solid waste and recyclable materials collected by DSNY from residences, public areas, nonprofit institutions, and government offices. It also collects waste from street litter baskets, street sweeping operations, and lot cleaning activities. Commercial solid waste from offices, restaurants, retail stores and other businesses and industries is collected and disposed of by private carters. The operations of private carters are regulated by the Business Integrity Commission (BIC).

Currently, most of the municipal waste generated in the City is collected and delivered to transfer stations for export outside of the City for final disposal. DSNY transports municipal

waste by collection truck from Manhattan directly to facilities in New Jersey. DSNY-managed refuse from the Bronx, Staten Island, and part of Brooklyn is transported from the City by rail. DSNY-managed refuse from the rest of Brooklyn and Queens is exported by truck. Recyclables (metal, glass, and plastic or "MGP") from Manhattan and Staten Island are delivered to a processor in New Jersey, while MGP from the Bronx, Brooklyn and Queens is delivered to truck-to-barge transfer facilities in the Bronx and Queens for export to the processor in New Jersey. DSNY delivers paper recyclables from Manhattan to its West 59th Street Marine Transfer Station (MTS) from which it is barged to a recycled paper manufacturer.

Private carters similarly consolidate solid waste from commercial and industrial operations and haul it to waste transfer facilities both inside and outside the City for transport to out-of-City disposal facilities. Private carters also haul recyclables to processing facilities in the City and region.

Municipal waste collection services within the surrounding area are provided by DSNY in accordance with the new SWMP, approved in September 2006. The new SWMP proposes to award a 20-year contract for the processing and marketing of recyclables and the development of a recyclables processing facility in the City, the development of four converted Marine Transfer Stations, the award of up to five contracts with private transfer station operators for barge or rail export of DSNY-managed waste, and an intergovernmental agreement to dispose of a portion of Manhattan's DSNY-managed wastes at the Essex County Resource Recovery Facility in Newark, New Jersey. In addition, the New SWMP designates the West 59th Street MTS in Manhattan, subject to environmental review, for the export of commercial waste (construction and demolition debris) from the city.

The New York City Recycling Law, 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 waste from household waste for separate collection. Local Law 87 of 1992 requires commercial establishments to recycle. Businesses must source-separate certain types of paper waste, cardboard, metal items, and construction waste. Food and beverage establishments must recycle metal, glass and plastic containers, and aluminum foil, in addition to meeting the other commercial recycling requirements.

Nearly 50,000 tons of waste and recyclables are collected in New York City each day. Roughly 25 percent of this total is a result of residential and institutional generators that is directly managed by the DSNY. The remainder is privately managed and is generated by commercial, industrial, and construction activities. Actual tonnage generation figures for 2006, as per the SWMP, indicate that the total DSNY managed waste for export, recycling, compost, and reuse amounted to approximately 16,938 tons per day, of which approximately 30.4 percent was captured for recycling, composting, or other beneficial re-use.

The three project sites are each located within DSNY service area M-4 (Manhattan Community District 4). Trucks serving the M-4 district were garaged at 2 Bloomsfield Street at Pier 52/Gansevoort Peninsula as of May 2009, but will relocate to 650 West 57th later in 2009.

The typical DSNY collection and EZ-Pak trucks have a carrying capacity of approximately 12.5 tons for refuse or recyclables. EZ-Pak trucks collect refuse or recyclables that are stored in containers (dumpsters).

The DSNY's district M-6 garage is located on the south side of West 30th Street, Block 675, Lot 39 (606 West 30th Street), between Eleventh and Twelfth Avenues opposite the Development

Site. The garage is a one-story building with approximately 15,000 square feet (sf) of space, supplemented by adjacent Lot 12 (613-635 West 29th Street), which has a personnel trailer on a lot of approximately 7,900 sf. The area on the Development Site that is currently used for DSNY storage and facilities, under an arrangement with the Metropolitan Transportation Authority (MTA), totals approximately 55,000 sf. Most of the 47 vehicles assigned to this garage are stored under the High Line along the north frontage of West 30th Street on the Development Site. In addition to collection trucks, vehicles stored under the High Line include plows and front-end loaders for snow removal, street sweepers, and other mechanized equipment.

DSNY facilities located on the Development Site also include a vehicle fueling station, a vehicle inspection shed, and a household special waste collection center. The Household Special Waste Collection Center is located on approximately 500 sf at the extreme southwest corner of the Development Site at the intersection of Twelfth Avenue and West 30th Street (605 West 30th Street). New York City residents can bring motor oil, fluorescent light tubes, transmission fluid, thermostats, automotive and household batteries, motor oil filters, and latex paint for recycling. Residents may also drop off their auto tires at this center. The center is open from 10:00 AM to 5:00 PM on Saturdays except for the last week of each month when it is open on Friday instead.

The M-6 Garage generates a peak facility hour on the average weekly peak day of approximately 27 collection truck trips (refuse, recycling and street basket) leaving the facility in the 6AM hour (7 AM hour during snow season) and 27 returning in the 12 Noon hour (1 PM hour during snow season). Including passenger cars, the facility does not generate more than 50 passenger car equivalent trips in any hour. DSNY diesel trucks are required by local law to be equipped with diesel particulate traps and use Ultra Low Sulfur Diesel fuel. The Special Waste site generates minimal vehicular traffic on the three Saturdays and one Friday per month that it is open.

SOLID WASTE GENERATION

There are currently no residential or institutional uses on the Development Site. As a result, the refuse collected by DSNY from the vicinity of the Development Site is limited to street sweepings, litter collection, and sidewalk trash bins located on frontage streets surrounding the Development Site, refuse generated as a result of DSNY's own operations within its facilities located on the Development Site, and recyclables accepted by the DSNY Household Special Waste Collection Center which amounted to 4.37 tons in 2008.

Other site users rely on private carters to dispose of any solid waste generated by their operations. The largest of the existing users is the Long Island Rail Road (LIRR), which among other activities within the Western Rail Yard, performs interior cleaning of trains parked in the yard. Approximately four tons per week of solid waste are generated by LIRR operations.

The bus parking/storage facility located adjacent to and immediately north of the High Line generates minimal solid waste as no active bus cleaning or maintenance operations are performed onsite. This facility is serviced by private carters who handle the minor solid waste generated at this facility.

New York City Transit (NYCT) currently uses a building located at the southeast corner of the Development Site that extends below the High Line for storage. There are no on-site employees associated with this facility and the storage use does not generate any solid waste.

There currently is minimal solid waste generation associated with both of the Additional Housing Sites. The Ninth Avenue Site currently is a surface parking lot for an adjacent NYCT facility, and the Tenth Avenue Site consists of air rights over the Amtrak Empire Line right-of-way.

D. THE FUTURE WITHOUT THE PROPOSED ACTIONS

In the 2019 analysis year in the Future without the Proposed Actions, it is assumed that the uses currently on the project sites would remain, with the possible exception of the DSNY District 6 Garage and Special Waste Collection Site (see below), and no notable changes would be expected from these sites with respect to solid waste generation.

Under the City's new SWMP, several proposed system improvement projects in Manhattan are anticipated to be completed by 2019, including:

- New Manhattan District 4/4A/7 Garage, located on Twelfth Avenue between West 56th and 57th Streets, to be completed by late 2009.
- New Manhattan District 1/2/5 Garage to be built on West Street between Canal and Spring Streets, and is intended to replace existing facilities from the Gansevoort Peninsula within Hudson River Park. The new facility has received its approvals and is presently being designed, with the projected Build year 2012.
- New Manhattan District 6/8/8A Garage planned to replace an existing facility that was recently demolished from the same site located on the FDR Drive between East 73rd and 74th Streets. This facility is under design and must undergo environmental review and land use approvals. The Build year for this project is currently not available.
- As described in the SWMP, DSNY is also proposing to develop a recyclables acceptance facility in lower Manhattan that would fulfill the goal of the SWMP to distribute waste management facilities more equitably in all five boroughs. The most promising location for this Manhattan Recyclables acceptance facility is the former site of DSNY's Gansevoort MTS on Pier 52 in Manhattan Community District 2. Enabling legislation to site this facility has been secured from the New York State Legislature. For the Gansevoort recyclables MTS to move forward, several issues must be resolved, including how to integrate the facility design (including an environmental education center) and operation into the plans for Hudson River Park, and a public review and approval process will be required.

It is also anticipated that, in accordance with the new SWMP, for Manhattan wastesheds formerly served by the West 135th Street MTS and the West 59th Street MTS (including the surrounding area), DSNY will enter into a long-term service agreement with the Port Authority of New York and New Jersey (PANYNJ) for the use of the Essex County Resource Recovery Facility in Newark, New Jersey to receive and process waste. The West 59th Street MTS has been designated, subject to environmental review, for commercial waste export (by private carters) from the City.

Based upon population growth and continuing development in New York City throughout the 20-year period covered by the SWMP, the SWMP includes projections of generated waste in future years in five year increments, as indicated on Table 15-1.

Table 15-1
DSNY-Managed Solid Wastes (Tons Per Day)

	2006 (Actual)	2015 (Projected)	2020 (Projected)
Total DSNY-Managed Waste for Export	11,784	11,136	11,469
Total DSNY-Managed Curbside/Containerized Recycling	2,198	4,136	4,659
Total "Other Recycled Wastes"	2,955	2,955	2,955
Total DSNY-Managed Generation	16,938	18,228	19,083
Source: *DSNY Solid Waste Management Plan - Attachment II*, dated September 2006			

E. PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2019

The Proposed Actions would result in the generation of new solid waste at the three project sites. Solid waste generation rates from the *CEQR Technical Manual* were applied to determine estimates of the solid waste volume associated with the proposed development.

As described in Chapter 2, "Framework for Analysis," in the Future with the Proposed Actions, the Development Site would be developed with one of two scenarios—a Maximum Residential Scenario or a Maximum Commercial Scenario. The Maximum Residential Scenario would include two options, either (1) office space; or (2) a 1,200-room convention-style hotel. Accordingly, each of these development scenarios has been assessed to determine which would generate the largest solid waste volume. All scenarios also provide space for a public school and envision that the full build-out of development would be completed by the 2019 analysis year.

The estimated project generated solid waste that would be associated with each of these development scenarios for the Development Site is summarized in Table 15-2. The generation rates, used to estimate the amount of solid waste, are from the *CEQR Technical Manual*. The projected numbers of residents and employees use the employment and population ratios referenced in Chapter 4, "Socioeconomic Conditions." Table 15-2 also provides subtotals for solid waste that would be collected by DSNY and that which would be collected by private carters. DSNY would collect residential and public school generated waste, while private carters would be responsible for collecting waste generated by office, retail, and hotel uses.

As indicated on Table 15-2, the Maximum Residential Scenario-Hotel Option would generate the largest quantity by weight, in terms of municipal solid waste; however, the Maximum Commercial Scenario generates the largest total quantity of solid waste. On this basis, the Maximum Residential Scenario-Hotel Option is considered to be the "worst case" in terms of evaluation of impact to the City solid waste management system.

Table 15-2
Development Site: Generated Solid Waste – Full Build (Pounds Per Week)

Use	Solid Waste Generation Rate (lbs per week)[1]	Maximum Residential Scenario				Maximum Commercial Scenario	
		Office Option		Hotel Option			
		Size	Total Waste	Size	Total Waste	Size	Total Waste
Residential[2]	17 lbs/wk/resident	5,347 units	152,710	5,762 units	164,563	4,624 units	132,061
School	4 lbs/wk/student	750 students	3,000	750 students	3,000	750 students	3,000
Total Collected by DSNY (lbs/week)			**155,710**		**167,563**		**135,061**
Hotel[3]	75 lbs/wk/employee	0	0	1,200 rooms	30,000	0	0
Office[4]	13 lbs/wk/employee	1,495,000 sf	77,740	0	0	2,185,000 sf	113,620
Retail[5]	79 lbs/wk/employee	220,500 sf	46,204	210,000 sf	44,004	220,500 sf	46,204
Total Collected by Private Carters			**123,944**		**71,004**		**159,824**
Combined Total Solid Waste Generated			**279,654**		**241,567**		**294,885**

Notes:
1. Solid waste generation rates as per *CEQR Technical Manual*.
2. Residential population based on 1.68 residents per unit
3. Hotel employment based on 1 employee per 3 rooms
4. Office employment based on 250 sf per employee
5. Retail employment assumes a development mix of 80 percent local retail (1 employee per 333 sf) and 20 percent destination retail (1 employee per 800 sf)

Source: Chapter 4, "Socioeconomic Conditions."

Project implementation would result in displacement of the existing DSNY, NYCT, and bus parking/storage facilities currently located on the Development Site along West 30th Street. As the existing solid waste generation from these facilities is considered to be minor, no offsetting reduction in future solid waste generation at the Development Site would occur. LIRR operations within the Western Rail Yard would continue; no change in future solid waste generation from LIRR operation is forecast.

For the Maximum Commercial Scenario, the average weekly solid waste quantities would be approximately 68 tons of domestic (residential and school) and 80 tons of commercial (office, retail and hotel) waste. The standard DSNY collection truck has a capacity of 12.5 tons and a typical load size of approximately 10 tons. Commercial carters' trucks typically are the same size or larger. Accordingly, the worst-case development scenario would result in fewer than 10 additional weekly truckloads of DSNY-handled waste and eight additional truckloads by commercial carters. The additional demand would require some adjustments of DSNY's collection schedule and staffing for Manhattan District 4,

During each week of the fiscal year 2007, DSNY collected 52,531 tons using standard collection trucks, and an additional 8,000 tons using E-Z Pack and Roll-on/Rolloff containerized trucks (source: *2007 ANNUAL REPORT DSNY*). The estimated additional domestic solid waste associated with the Proposed Actions is less than 0.12 percent of this total. Domestic refuse handled by DSNY makes up approximately one quarter of the total 50,000 tons of waste and recyclables collected in New York City each day (source: *Executive Summary - SWMP*, September 2006). On this basis, the commercial solid waste associated with the Proposed Actions is less than 0.03 percent of the total waste stream handled by commercial carters in the City daily.

The two Additional Housing Sites would also generate solid waste. Estimated weekly rates of solid waste generation collected by both DSNY and private carters from each of these sites are set forth in Table 15-3. The generation rates used are as per the *CEQR Technical Manual*. Projected numbers of residents and employees are based on those referenced in Chapter 4, "Socioeconomic Conditions."

Table 15-3
Additional Housing Sites:
Generated Solid Waste – Full Build (Pounds Per Week)

USE	Solid Waste Generation Rate (lbs per week)[1]	Ninth Avenue Site		Tenth Avenue Site	
		Size	Total Waste	Size	Total Waste
Residential[2]	17 lbs/wk/resident	108 units	4,590	204 units	8,670
Total Collected by DSNY (lbs/week)			**4,590**		**8,670**
Office[3]	13 lbs/wk/employee	30,000 sf	1,560	0	0
Retail[4]	79 lbs/wk/employee	6,750 sf	1,601	10,800 sf	2,562
Total Collected by Private Carters			**3,161**		**2,562**
Combined Total Solid Waste Generated			**7,751**		**11,232**

Notes:
1. Solid waste generation rates as per *CEQR Technical Manual.*
2. Residential population based on 2.5 residents per unit
3. Office employment based on 250 sf per employee
4. Retail employment assumes 333 sf per employee (100 percent local retail)

Source: Chapter 4, "Socioeconomic Conditions."

DSNY would collect residential generated waste from these two project sites, while private carters would be responsible for collecting wastes generated by office and retail uses. As indicated on Table 15-3, the Ninth Avenue Site would generate approximately 4,590 pounds per week of municipal solid wastes, and the Tenth Avenue Site would generate 8,670 pounds per week, both of which are under the *CEQR Technical Manual* threshold and are also minor when compared to the waste handled within the City. The commercial solid waste that would be generated, 3,161 pounds per week from the Ninth Avenue Site, and 2,562 pounds per week from the Tenth Avenue Site, are similarly minor.

As per Table 15-1, the DSNY SWMP anticipates and provides for a projected increase in solid waste generation city-wide over the 20-year plan period as a result of population growth and non-specific development. By 2015 the SWMP anticipates a daily increase of 1,290 tons or 7.6 percent, and an increase of 2,145 tons or 12.7 percent by 2020.

The total domestic solid waste generated as a result of the Proposed Actions would be approximately 75 tons per week or 13 tons daily, which is a minor portion of the total growth in the municipal solid wastestream projected by the SWMP by the year 2020. On this basis, the total solid waste generated as a result of the Proposed Actions are a minor increment in the total Citywide wastestream and would be consistent with the SWMP.

DSNY is expected to have feasible alternatives for interim relocation of its existing facilities that are currently located on the Development Site, pending construction of the Manhattan 6/8/8A Garage planned for East 73rd Street. DSNY may require ULURP approval for an interim District 6 Garage and Special Waste Site if an acquisition and/or site selection for a capital project is necessary. Section G, below, contains a generic analysis of the potential environmental impacts that could result from relocating the DSNY facilities from the Development Site. A registration from the New York State Department of Environmental Conservation may be required for the relocated Special Waste Site. The relocation from the essentially cost-free space on the Development Site to another suitable industrially-zoned site or sites in Manhattan may increase DSNY's operational costs, but would not be expected to significantly and adversely affect DSNY's ability to perform its duties.

In summary, the Proposed Actions would not result in significant adverse impact on residential or commercial solid waste collection services, nor would the Proposed Actions conflict with, or require any amendments to, the City's SWMP.

F. PROBABLE IMPACTS OF THE PROPOSED ACTIONS–2017

As described in Chapter 2, "Framework for Analysis," for analysis purposes, the interim year of development of the Proposed Actions is 2017. By 2017, construction on the Development Site is anticipated to be complete for the three buildings closest to Eleventh Avenue, the central open space area, and a plaza located at the northeast corner of the site. Total program floor area would comprise 1.49 million gsf of office space or a 1,200 room convention-style hotel in the north building, retail space of up to 162,750 sf gsf, and up to 1,558 residential units in the two southerly buildings. The interim development would also include the PS/IS school, and 850 accessory parking spaces. This mixture of land uses is the same for the 2017 Future with the Proposed Actions condition as the 2019 Future with the Proposed Actions condition—residential, commercial, community facility, open space, and parking.

Given (1) the similarity of uses between the interim and full Build years; (2) the interim year would have a smaller amount of development; and (3) that the 2019 Future with the Proposed

Actions condition concludes that the Proposed Actions would not result in a significant adverse impact on solid waste and sanitation services (see above), the Proposed Actions would also not result in any significant adverse solid waste and sanitation service impacts in the 2017 Future with the Proposed Actions condition.

G. GENERIC ANALYSIS OF DSNY FACILITIES RELOCATION

The Proposed Actions would require the interim relocation of DSNY facilities located along the southern edge of the Development Site on West 30th Street between Eleventh and Twelfth Avenues. The DSNY facility on the Development Site is used for storage, special household waste collection, and other functions related to DSNY's district M-6 garage, which is located on the south side of West 30th Street, Block 675, Lot 39 (606 West 30th Street), between Eleventh and Twelfth Avenues opposite the Development Site.

The M-6 garage is a one-story building with approximately 15,000 sf of space, supplemented by adjacent Lot 12 (613-635 West 29th Street), which contains office and personnel facilities on a lot of approximately 7,900 sf. The area on the Development Site that is currently used for DSNY storage and facilities, under an arrangement with MTA, totals approximately 55,000 sf. Most of the 47 vehicles assigned to the M-6 garage are stored under the High Line along the north frontage of West 30th Street on the Development Site. In addition to collection trucks, vehicles stored under the High Line include plows and front-end loaders for snow removal, street sweepers, and other mechanized equipment.

DSNY facilities located on the Development Site also include a vehicle fueling station, a vehicle inspection shed, a vehicle wash facility, and a Household Special Waste Collection Center. The Household Special Waste Collection Center is located on approximately 500 sf at the far southwest corner of the Development Site at the intersection of Twelfth Avenue and West 30th Street (605 West 30th Street). New York City residents can bring motor oil, fluorescent light tubes, transmission fluid, thermostats, automotive and household batteries, motor oil filters, and latex paint to this center for recycling. Residents may also drop off their auto tires at this center. The center is open from 10:00 AM to 5:00 PM on Saturdays except for the last week of each month when it is open on Friday instead.

The M-6 garage will eventually be relocated to a Manhattan 6/8/8A Garage planned for East 73rd Street at the FDR Drive. (At this time, however, the City's Capital Budget only includes funding for the design of this facility.) Pending construction of this garage, DSNY would identify feasible alternatives for interim relocation of the M-6 facility including the uses on the Development Site. DSNY would require Uniform Land Use Review Procedure (ULURP) approval for an interim District 6 Garage and Special Waste Site if an acquisition and/or site selection for a capital project is necessary. A registration from the New York State Department of Environmental Conservation may be required for the relocated Special Waste Collection Center. The relocation from the essentially cost-free space on the Development Site to another suitable manufacturing-zoned site or sites in Manhattan may increase DSNY's operational costs, but would not be expected to significantly and adversely affect DSNY's ability to perform its duties.

The M-6 garage facility on the south side of 30th Street would be relocated together with the parking beneath the High Line, the vehicle fueling station, the vehicle wash facility, and the vehicle inspection shed. The remaining DSNY facility on the Development Site—the Household

Special Waste Collection Center—could be relocated to another location separate from the M-6 garage facilities.

Because the existing facilities would be relocated as a direct result of the Proposed Actions, the potential for impacts from this relocation are analyzed below. The generic analysis assesses the potential environmental impacts that could result from relocating the DSNY facilities, based on the likely criteria for siting and operating the relocated facilities. It is expected that the activities occurring at the relocated interim facilities would be approximately the same as the existing facilities. It is assumed for the purpose of this analysis that the relocated facilities would be housed in one-story structures similar to the ones currently on the Development Site and the adjacent M-6 garage site. It is assumed that they would be existing buildings and/or temporary trailers. DSNY has indicated that at a minimum, DSNY needs to provide a building of similar size to its West 30th Street garage. The office/personnel space (trailer) on West 29th Street also needs to be provided for in the interim facility. This generic analysis includes an assessment of potential impacts of the relocated facility on each of the CEQR impact categories.

As described below, the relocation of the DSNY facilities could result in significant adverse impacts in the following areas: land use, zoning, and public policy; architectural historic resources; and noise. This assessment is conservative, and many, if not all, of the potential impacts identified below may not occur due to either the characteristics of the sites identified for the facilities or the implementation of mitigation measures pursuant to a future, site-specific environmental review. However, in the absence of site-specific details at this time, it is assumed that the relocation of the DSNY facilities would result in the significant adverse impacts noted above and discussed below.

ANALYSES

LAND USE, ZONING, AND PUBLIC POLICY

Under New York City's Zoning Resolution, the DSNY facilities on the Development Site are classified as Use Group 18. The Zoning Resolution specifies that uses within this use group cannot be sited in residential districts, and are permitted only in C8 commercial districts as well as manufacturing districts. C8 districts provide for automotive and other heavy commercial services that often require a large amount of land. Typical uses are automobile showrooms and repair shops, warehouses, gas stations, and car washes; residential uses are not permitted in C8 districts or M districts.

It is anticipated that the DSNY facilities would be relocated to sites with appropriate zoning (i.e., C8 or M) where they are a permitted use. Accordingly, the land uses in the vicinity of the relocation sites are expected to be compatible with the DSNY facilities. Furthermore, public policy in an area zoned C8 or M would support light industrial and automotive uses, and thus the relocation of the DSNY facilities to such an area would be consistent with public policy.

However, even if the DSNY facilities were moved to an appropriately zoned area, it is possible that it might conflict with nearby residential or other sensitive uses in an adjacent residential or commercial district. If the facilities were sited near a quiet residential neighborhood or particularly busy commercial area, on the waterfront, or near a park, school or other sensitive use, their presence might have the potential to conflict with existing land uses or adopted community plans, depending on the circumstance. Therefore, the potential for significant adverse impacts on land use, zoning, and public policy from the relocation of the DSNY facilities cannot be ruled out and would have to be analyzed once a specific location is

identified. Measures that could mitigate this potential significant adverse impact are described in below.

SOCIOECONOMIC CONDITIONS

According to the *CEQR Technical Manual*, a socioeconomic assessment should be conducted if an action may reasonably be expected to create substantial socioeconomic changes within the area affected by the action that would not occur in its absence. Actions that would trigger a CEQR analysis include the following:

- The direct displacement of a residential population so that the socioeconomic profile of the neighborhood would be substantially altered.
- The displacement of substantial numbers of businesses or employees; or the direct displacement of a business or institution that is unusually important because of its critical social or economic role in the community and that would have unusual difficulty in relocating successfully; because it is of a type or in a location that makes it the subject of other regulations or publicly adopted plans aimed at its preservation; because it serves a population uniquely dependent on its services in its present location; or because it is particularly important to neighborhood character.
- The introduction of substantial new development that is markedly different from existing uses, development, and activities within the neighborhood. Such an action could lead to indirect displacement.

It is probable that the DSNY facilities would not be relocated to a site with existing residential uses or businesses and, given the small area required for the facility, would result in no or insignificant level of potential displacement. Therefore, the relocation of this facility is not expected to have a significant adverse impact on socioeconomic conditions.

COMMUNITY FACILITIES

It is most likely that the operations of the DSNY facilities would be relocated to a site that would not displace or interfere with the functioning of any community facilities. Because the DSNY facilities would not introduce a residential population, the relocation of their operations would not result in indirect effects on public schools, libraries, hospitals, or day care centers, and therefore, it would not have significant indirect adverse impacts on these community facilities.

The New York City Police Department regularly reviews its operations for each precinct. Based on geographic area, population change, and crime statistics, it adjusts staffing to maintain adequate community protection. The New York City Fire Department similarly adjusts its operations as needed. It is anticipated that the DSNY facilities would not be relocated to where it would directly displace a police or fire station. It is anticipated that the facility would be relocated to an area that is already served by the local precinct and fire house. Therefore, the relocation of theses facilities is not expected to have a significant adverse impact on the delivery of police or fire protection.

OPEN SPACE

The *CEQR Technical Manual* guidelines indicate the need for an open space analysis when an action would result in the physical loss of public open space (direct impact), or the introduction of 200 or more residents or 500 or more workers to an area (indirect impact). The relocation of the DSNY facilities is not anticipated to displace any existing public open space, nor would it

introduce a large new population that would substantially increase the use of public open spaces that may be located within ¼ mile of the relocation site. The relocated facilities would have a small number of employees, and would therefore not have any indirect impacts on existing public open space. Therefore, the relocation of this facility is not expected to have a significant adverse impact on open space.

SHADOWS

The *CEQR Technical Manual* recommends that a screening for potential shadow impacts be conducted for any action that would result in new structures or enlargements 50 feet high or taller, and for shorter structures adjacent to public open spaces or sun-sensitive architectural resources. The buildings currently housing the DSNY facilities are one story, and it is expected that the facilities would be relocated in similar structures. It is anticipated that the DSNY facilities would be relocated either to existing buildings or in temporary trailers that would be less than 50 feet tall. Therefore, the relocation of the DSNY facilities is not expected to result in significant adverse shadows impacts.

HISTORIC RESOURCES

For CEQR purposes, historic resources include any of the following: designated New York City Landmarks; properties calendared for consideration as such; properties listed on, eligible for, or within a district listed on the State and/or National Register of Historic Places; properties recommended by the New York State Board for such listing; National Historic Landmarks; and properties not identified by any of the above that meet one or more of their eligibility requirements. Historic resources include both architectural resources, such as historically important buildings, structures, objects, sites, and districts; and archaeological resources, such as physical remains from historic or prehistoric periods.

It is anticipated that the DSNY facilities would not be relocated to sites containing an architectural historic resource, and that DSNY would not construct a building for the interim period in question that might affect subsurface archaeological resources. If known or potential architectural resources are located within 90 feet of the relocation site, close enough to experience adverse construction-related impacts, a Construction Environmental Protection Plan would be developed in accordance with the New York City Department of Building's *Technical Policy and Procedures Notice (TPPN) #10/88,*to avoid any significant adverse impact during construction. As the facility would likely be relocated to an area where existing public policy initiatives support light industrial and automotive uses, it is unlikely that its presence there would adversely affect the context of any historically significant architectural resources near its site. However, the possibility that the relocation would cause an impact on the context of a nearby historic resource cannot be ruled out and would have to be analyzed once a specific location is identified. Measures that could mitigate this potential significant adverse impact are described below.

Potential impacts on archaeological historic resources would be avoided by a commitment to prepare appropriate documentary research, to monitor site construction activities, and to coordinate, if necessary, a recovery and documentation plan with Landmarks Preservation Commission (LPC) or the State Historic Preservation Office (SHPO).

URBAN DESIGN AND VISUAL RESOURCES

According to the *CEQR Technical Manual*, a detailed assessment of urban design and visual resources is only necessary when a proposed action would result in a building or structure substantially different in height, bulk, form, setbacks, size, scale, use, or arrangement than those around it; or when an action would change block form, demap an active street, map a new street, or affect the street hierarchy, streetwall, curb cuts, pedestrian activity, or other streetscape elements. Proposed actions are considered to have potential impacts on visual resources when they would directly result in a new above-ground development or would otherwise change the bulk of new above-ground development (as with a rezoning), and are proposed in an area that includes significant visual resources.

The DSNY facilities currently occupy unbuilt lots and one-story industrial sheds. It is anticipated that the relocated facilities would be similar in design and character to the existing facilities, and they would likely be typical in terms of form and scale of the buildings found in areas characterized by industrial and automotive uses. It is anticipated that the relocation of the facilities would not change block form, map or demap streets, or affect any other streetscape elements. As the facilities are expected to be relocated to an existing building in a heavy commercial or manufacturing district where these types of uses and structures currently exist, it is not expected that its presence would adversely affect any notable visual resources nearby.

NEIGHBORHOOD CHARACTER

The *CEQR Technical Manual* indicates that neighborhood character is an amalgam of the various elements that give neighborhoods their distinct "personality." A neighborhood character assessment may be appropriate if an action would affect the areas of land use, urban design, visual resources, historic resources, socioeconomics, traffic, and noise. An action can fall below thresholds in these individual areas but still cause a significant impact on neighborhood character by causing moderate changes in all or several of these contributing areas.

As described above, it is most likely that the DSNY facilities would be relocated to a heavy commercial or manufacturing district where similar types of uses and structures currently exist. Also, as noted below, the facility would be small enough that it would not adversely affect traffic or noise conditions. Therefore, the interim relocation of the DSNY facilities would not be expected to result in a significant adverse impact on neighborhood character, although potential land use incompatibility and other considerations as appropriate would have to be analyzed once a specific location is identified.

NATURAL RESOURCES

A natural resources assessment is conducted when a natural resource is present on or near the site of a proposed action, and the action involves the disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and groundwater; wetland resources, including freshwater and tidal wetlands; upland resources, including beaches, dunes and bluffs, thickets, grasslands, meadows and old fields, woodlands and forests, and gardens and other ornamental landscaping; and built resources, including piers and other waterfront structures.

The DSNY facilities are anticipated to be relocated to sites in developed areas of Manhattan. It is anticipated that the relocation sites would either be vacant land or already developed with

buildings. In either case, it is expected that any vegetation on the site would be typical urban invasive vegetation with no wildlife habitat value.

It is possible that the relocation site could be located along the waterfront and have the potential to affect water quality. However, with adherence to all applicable water quality regulations, it is not anticipated that relocation along the waterfront would render the water resources unfit for one or more uses it is classified and/or cause or exacerbate a water quality violation. Therefore, Therefore, the relocation of the DSNY facilities is not expected to result in a significant adverse impact to natural resources.

HAZARDOUS MATERIALS

According to the *CEQR Technical Manual*, the potential for a significant adverse impact related to hazardous materials can occur when a) elevated levels of hazardous materials exist on the site, b) an action would increase pathways to their exposure, or c) an action would introduce new activities or processes using hazardous materials, and the risk of human or environmental exposure is increased.

The vehicle fueling station associated with the M-6 garage includes gasoline/diesel fuel storage on the site, and the relocated facility would also include vehicle fuel storage. Other products including antifreeze fluid, hydraulic oil, and motor oil are also stored at the garage. Additionally, depending on the mechanical systems design, it is possible that heating oil could be stored at the relocation sites. Any new and/or existing underground tanks would have to be inspected and operated in accordance with all applicable requirements, and therefore there would be no significant adverse impact from petroleum or other hazardous materials associated with the operation of the facilities.

Because the sites for the facilities' relocation have not yet been identified, it is not known whether the site would include hazardous materials to which users of the site may be exposed during its construction or operation. It is possible that petroleum storage tanks would need to be installed, above ground and/or underground, causing ground disturbance. However, with a commitment to conducting appropriate site assessments and remediation, as appropriate, and adherence to a Construction Health and Safety Plan (CHASP), there is no anticipated significant impact regarding site contamination exposure.

WATERFRONT REVITALIZATION PROGRAM

If the DSNY facilities were to be relocated to a site within the boundaries of New York City's Coastal Zone, it would have to be assessed for consistency with the City's Local Waterfront Revitalization Program (LWRP). These policies, which are described in detail in Chapter 13, "Waterfront Revitalization Program," include the following:

- Support and facilitate residential and commercial redevelopment in appropriate coastal zone areas;
- Support water-dependent and industrial uses in New York City coastal areas that are well suited to their continued operation;
- Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers;
- Protect and restore the quality and function of ecological systems within the New York City coastal area;

- Protect and improve water quality in the New York City coastal area;
- Minimize loss of life, structures, and natural resources caused by flooding and erosion;
- Minimize environmental degradation from solid waste and hazardous substances;
- Provide public access to and along New York City's coastal waters;
- Protect scenic resources that contribute to the visual quality of New York City; and
- Protect, preserve, and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

If, as expected, the relocation of these facilities would be to areas zoned for manufacturing and/or transportation use, even if it were in a coastal zone, it could be consistent with the policies of the WRP and no adverse impacts would be anticipated.

INFRASTRUCTURE

For CEQR purposes, infrastructure is concerned with water supply, sewage treatment, and stormwater management. As stated in the *CEQR Technical Manual*, the City is committed both to maintaining adequate water supply and pressure for all users and to adequately treating all wastewater generated in the city. An assessment of a project's effects on the City's water supply is necessary only for projects that would have an exceptionally large demand for water, and an assessment of a project's effects on the City's sanitary sewage system is necessary only for unusual actions with very large flows. The relocation of the DSNY facilities from the Development Site would result in a very modest demand on water supply or sanitary and stormwater flows. In fact, given the large regional nature of water supply and sewer service, the project is more likely a shift in location but with no incremental change in overall demand. Therefore, the relocation of these facilities would not result in a significant adverse impact on infrastructure.

SOLID WASTE AND SANITATION SERVICES

The relocation of the DSNY facilities from the Development Site would not result in any substantial increase in the solid waste stream generated by employees and activities associated with the facilities, nor would it adversely affect DSNY's ability to perform its duties. Therefore, there would be no significant adverse impact on the collection or disposal of solid waste.

ENERGY

The relocated DSNY facilities would have approximately the same energy needs as the existing facilities on the Development Site. The relocated facilities, like all new structures requiring heating and cooling built in New York City, would be subject to the New York State Energy Conservation Code. Any building in conformance with this code would not create significant adverse energy impacts under CEQR guidelines. Therefore, no significant adverse impact with respect to energy would be expected with the relocation of the DSNY facilities.

TRAFFIC AND PARKING

The relocation of the DSNY facilities on the Development Site would not necessitate a detailed analysis of traffic and parking under CEQR criteria. Relocating the facility would not materially increase the number of trips on the overall road network, although certain road segments and intersections could experience an increase. The M-6 Garage generates a peak facility hour on the

average weekly peak day of approximately 27 collection truck trips (refuse, recycling and street basket) leaving the facility in the 6AM hour (7 AM hour during snow season) and 27 returning in the 12 noon hour (1 PM hour during snow season). Including passenger cars, the facility does not generate more than the CEQR threshold of 50 passenger car equivalent trips in any hour. Furthermore, because operations begin at 6AM, trips associated with the M-6 garage do not coincide with commuter peak hour trips. The Household Special Waste Collection Center generates minimal vehicular traffic on the three Saturdays and one Friday per month that it is open on Friday instead.

With regard to parking, although it is not known whether off-street parking would be provided at or near the location of the relocated facility, the parking demand generated by these facilities is minimal since it does not generate a large population of employees. Therefore, their effect on any neighborhoods where they could be relocated would not be perceptible.

For these reasons, the relocation of these facilities would not have the potential to result in a significant adverse impact on traffic and parking.

TRANSIT AND PEDESTRIANS

The relocated facilities, like the existing DSNY facilities located on the Development Site, would have a small number of employees, and therefore they would not result in 200 or more new pedestrian or transit trips, the *CEQR Technical Manual* threshold requiring detailed transit and pedestrian analyses. Furthermore, as noted above, employee trips to the facilities associated with the M-6 garage would happen largely separate from peak commuter hours since operations begin at 6AM. Trips to the Household Special Waste Collection Center would also be limited since that facility is only open one day per week. Therefore, no significant adverse impact on transit and pedestrian conditions would be expected with the relocated facilities.

AIR QUALITY

The maximum hourly incremental traffic from the relocated DSNY facilities would not exceed the *CEQR Technical Manual* air quality screening threshold of 100 peak hour trips for CO. Furthermore, DSNY diesel trucks are required by local law to be equipped with diesel particulate traps and use Ultra Low Sulfur Diesel fuel. Peak hour trips from such trucks would not be expected to cause emissions at any road segment that exceed the City's screening level of 5.1234g/mile for heavy duty diesel vehicles, based on aggregate emissions. Therefore, no significant adverse air quality impacts from on-street mobile source emissions would be expected with the relocated facilities.

Because the relocation of the M-6 garage could involve the change in use of an existing industrial building or a temporary structure for a maintenance garage, an air emission permit could be required which would be based on an analysis of the proposed mechanical ventilation for the facility. Since any system that might be required would be designed to conform to all applicable standards, it is anticipated that there would be no significant adverse air quality impacts.

NOISE

Because the facility would not include residential, office, or meeting space, monitoring of ambient noise levels to determine attenuation is not necessary. However, the relocated facility could generate sufficient traffic to have the potential to cause a significant noise impact (i.e., it

would result in a doubling of passenger car equivalents (PCE), which would be necessary to cause a 3 dBA increase in noise levels). Each DSNY truck results in a value of 40 PCE. Therefore, the possibility that the relocation would cause a significant adverse noise impact cannot be ruled out and would have to be analyzed once a specific location is identified. Measures that could mitigate this potential significant adverse impact are described below.

CONSTRUCTION

The relocation of the DSNY facilities may involve the construction of a temporary shed for equipment maintenance activities. If the facility moves into an existing building, there would be little or no substantial construction activity on the site. If the relocation sites were vacant or occupied by a building that does not suit the needs of the facility, new structures may be introduced to the site. Depending on DSNY's needs, these could be temporary trailers or new buildings.

If the relocation of any of the facilities were to involve construction of a new building, work at the site would result in temporary disruptions to the surrounding community and occasional noise and dust. These effects would be temporary and are not considered significant. All fugitive dust control measures—including watering of exposed areas and dust covers for trucks—would be employed to reduce the generation and spread of construction-related dust. The proposed project would be required to comply with applicable control measures for construction noise. Construction noise is regulated by the New York City Noise Control Code and by noise emission standards for construction equipment issued by the U.S. Environmental Protection Agency. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise standards; that, except with a special permit, construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction material be handled and transported in such a manner as to not create unnecessary noise. Based on these requirements, there would be no significant adverse impact resulting from the site's construction.

PUBLIC HEALTH

According to the *CEQR Technical Manual*, public health involves the activities society undertakes to create and maintain conditions in which people can be healthy. Public health may be jeopardized by poor air quality resulting from traffic or stationary sources, hazardous materials in soil or groundwater used for drinking water, significant adverse impacts related to noise or odors, solid waste management practices that attract vermin and pest populations, and actions that result in the exceedance of accepted federal, state, or local standards.

The relocation of the DSNY facilities is not expected to result in a significant adverse impact on air quality or noise. No exceedance of federal, State, or City standards would occur as a result of the relocation. Any necessary hazardous materials remediation measures would be undertaken in accordance with applicable federal, state, and local requirements. Therefore, the relocation of the shop is not expected to result in a significant adverse impact on public health.

MITIGATION

The generic analysis above concluded that relocation of the DSNY facilities could result in significant adverse impacts in the following areas: land use, zoning, and public policy; architectural historic resources; and noise. The following describes the mitigation measures that could be sufficient to eliminate or avoid these significant adverse impacts.

LAND USE

Mitigation for a significant adverse land use impact could include measures such as establishing a buffer between the new incompatible land use and its surroundings and developing terms and conditions for appropriate operational controls. Given the small area required for the relocation of the DSNY facilities, it is likely that if the relocation to a specific location would result in a significant adverse impact on land use, these measures would be sufficient to mitigate the impact.

HISTORIC RESOURCES: ARCHITECTURAL

When a proposed action would alter the setting of an architectural resource that is not actually physically affected, appropriate mitigation involves changing the proposed project to be more compatible with the resource. This is a function of the distinguishing characteristics of the resource and the magnitude of the impact. Possibilities include rearranging the site plan so that important views of the historic resource are not blocked or adding design elements that complement or echo the features of the architectural resources. Design elements should be compatible with the size, scale, color, materials, and character of the property, neighborhood, streetwall, or environment. It is likely that if the relocation to a specific location would result in a significant adverse impact on the context of a nearby historic resource, these measures would be sufficient to mitigate the impact.

NOISE

Mitigation for a significant adverse vehicular noise impact could involve rerouting the traffic causing the significant adverse impact. Specifically, the traffic patterns for the DNSY vehicles entering and exiting the site could be changed such that the trucks would not travel on the road affecting the receptor with the significant adverse impact. If rerouting is not feasible, adequate window/wall attenuation at the affected receptor to conform to acceptable interior noise levels could be provided. It is likely that if the relocation to a specific location would result in a significant adverse impact vehicular noise impact, these measures would be sufficient to mitigate the impact. ✷