2.K SOLID WASTE AND SANITATION SERVICES

INTRODUCTION

According to the *CEQR Technical Manual*, it is possible that an unusually large project or a project with unusual waste generation characteristics could increase a component of the City's waste stream beyond levels projected in the current Solid Waste Management Plan, thus resulting in potential significant adverse impacts. The Manual states that few projects have the potential to generate substantial amounts of solid waste and, therefore, would not result in a significant adverse impact. However, it is recommended that the solid waste and service demand (if relevant) generated by a project be disclosed.

PRINCIPAL CONCLUSIONS

As compared to future no-action conditions, the proposed action would generate an additional 80,294 pounds per week (40.3 tons) of residential and community facility solid waste, which would be carted away by the NYC Department of Sanitation (DSNY). This volume, averaging approximately 11,470 pounds per day (5.7 tons) of solid waste, is below the 50 tons per week identified in the *CEQR Technical Manual* as a "substantial amount" of solid waste. It is an insignificant amount compared to the approximately 15,500 tons per day of solid waste that is managed by DSNY.[1] Further, it would require fewer than four DSNY collection truck trips per week, which is insignificant compared to the nearly 5,000 collection truck trips made per day.[2] The proposed action would not directly affect any DSNY facilities or conflict with the City's Solid Waste Management Plan. The Proposed Action would not have a significant adverse impact on the City's solid waste and sanitation services.

METHODOLOGY

The solid waste and sanitation services analysis focuses on those sites that are projected to be developed in the future with the proposed action, as presented in the Reasonable Worst Case Development Scenario (RWCDS) in Chapter 1, Project Description. The current demand on existing solid waste services is based on existing land uses and the number of employees and residential units contained therein. The number and types of businesses in the proposed rezoning area were determined through an employment and business survey conducted by HR&A Advisors in April and May 2010. (For more information on the survey, see Chapter 2.B, Socioeconomic Conditions, which provides a thorough analysis of existing employment in the proposed rezoning area.)

The increased demand projected for the future without the proposed action is based on completion of previously planned development on the projected development sites, as detailed in RWCDS provided in Chapter 1: Project Description. The increased demand projected for the future with the proposed action is based on completion of project-generated development on the projected development sites, and excludes those projects which would only proceed if the proposed action is not taken.

Table 14-1 in the *CEQR Technical Manual* provides solid waste generation rates on which this analysis is based. For storage, manufacturing, and automotive uses, the solid waste generation rate used is the average rate of the two industrial use categories listed in Table 14-1, which is 183 pounds of solid waste per employee per week. For hotel use, the CEQR "hotel" rate of 75 pounds of solid waste per employee

[1] DSNY Final Comprehensive Management Plan, September 2006.

[2] DSNY Annual Report, 2009.

per week was used. For residential use, the CEQR "household" rate of 41 pounds per household per week was used. For retail use, the CEQR "general retail" rate of 79 pounds of solid waste per employee per week was used.

The *CEQR Technical Manual* states that if a project's generation of solid waste in the future action condition would not exceed 50 tons per week, it may be assumed that there would be sufficient public or private carting and transfer station capacity in the metropolitan area to absorb the increment, and further analysis is generally not required. Since the proposed action would result in a net increase of approximately 40 tons per week, a detailed analysis is not required. This chapter therefore presents a preliminary analysis and disclosure of the solid waste that would be generated on the projected development sites in the future with the proposed action.

EXISTING CONDITIONS

The NYC Department of Sanitation (DSNY) collects solid waste and recyclable materials from residents, schools, and community facilities, while private carters haul waste from commercial and industrial facilities. Medical waste, a special type of solid waste, is collected and treated separately. DSNY also provides street-sweeping services, snow removal and salting, and carts away waste from street litter baskets; these services do not require analysis in this chapter. In Fiscal Year 2009, DSNY collected approximately 49,535 tons per week of curbside residential refuse. An additional 8,000 tons per week was collected by containerized collection trucks.[3] Each month, DSNY's weekly collection truck and tonnage targets are allocated to each of the City's sanitation districts.

Commercial establishments in the city contract with private carters for collection and for processing and/or disposal of various kinds of solid waste. Private carters generally charge a fee on a per-cubic-yard basis.

DSNY is responsible for collection of recyclables from residents and institutions. Recycling operations reduce the amount of waste that has to be exported for disposal. In FY 2009, DSNY collected approximately 10,600 tons of recyclables per week with curbside collection trucks, and an additional 500 tons per week with containerized collection trucks.[4]

Solid waste in New York City is managed in conformance with a ten-year Comprehensive Solid Waste Management Plan (SWMP). The most recent SWMP was released in September 2006. It addresses recycling, residential waste, and commercial waste, providing a framework for waste collection and disposal through 2026. The SWMP provides a long-term export plan for residential waste, in which the City's waterways and existing infrastructure are used for the containerization of waste and the long-distance export of the containerized waste by rail or barge. With respect to commercial refuse, the SWMP aims to improve conditions at transfer stations used for commercial solid waste, facilitate private waste carters' transition from truck-based to barge- and rail-based transport, and ensure that certain communities are not disproportionally affected by private transfer activities. Finally, the SWMP addresses residential, institutional, and commercial recycling, and strategies for the stabilization and strengthening of recycling processes in the City.

Table K-1 shows the total existing floor areas by land use category for all projected development parcels within the proposed rezoning area. As shown in Table K-1, all existing uses on the projected development sites presently generate 27,780 pounds of solid waste per week. Of this, 246 pounds is

[3] DSNY Annual Report, 2009.

[4] DSNY Annual Report, 2009.

generated by residential use. According to the *CEQR Technical Manual*, a typical DSNY collection truck for residential refuse carries approximately 12.5 tons of waste material. Therefore, the volume of solid waste generated by the existing uses on the projected development sites requires less than one DSNY collection truck trip per week. Commercial solid waste (including that generated by industrial, automotive, and hotel uses) totals 51,267 pounds per week and is picked up by private carters. Commercial carters typically carry between 12 and 15 tons of waste material per truck. Conservatively assuming a 12-ton capacity, commercial solid waste removal on the projected development sites requires approximately two trucks.

Table K-1 : Existing Conditions: Estimated Weekly Solid Waste Generation on Projected Development Parcels

Use	Unit	Multiplier (lbs per week per unit)	Solid Waste Generated (lbs per week)
Storage/Manufacturing/Automotive	274 employees	183	50,142
Retail	0 employees	79	0
Hotel	15 employees	75	1,125
Residential	6 households	41	246
Day Care	0 children	3	0
Total			**51,513**

Table K-2 : Future No-Action Conditions: Estimated Weekly Solid Waste Generation on Projected Development Parcels

Use	Unit	Multiplier (lbs per week	Solid Waste Generated
Storage/Manufacturing/Automotive	274 employees	183	50,142
Retail	117 employees	79	9,243
Hotel	0 employees	75	0
Residential	140 households	41	5,740
Day Care	0 children	3	0
Total			**65,125**

FUTURE CONDITIONS WITHOUT THE PROPOSED ACTION

If the proposed action is not taken, it is anticipated that two of the projected development sites would experience a change in land use. On the northernmost parcel within the proposed rezoning area, a new building with approximately 134,000 square feet of residential floor area and 39,000 square feet of ground floor retail space would replace the hotel, and a surface parking lot accessory to the hotel. Assuming one dwelling unit per 1,000 square feet of residential area and three employees per 1,000 square feet of retail floor area, the new development would contain 134 residential units and employ 117 persons. As is shown in Table K-2, residential solid waste generation is expected to increase to 5,740 pounds per week, a net change of 5,494 pounds per week. This volume of solid waste would require less than one DSNY collection truck trip per week, the same as required under existing conditions. Commercially-generated solid waste would increase to 59,385 pounds per week (50,142 pounds from

industrial use and 9,243 pounds from retail use), a net increase of 9,789. This waste would be picked up by private carters, requiring the capacity of 2.5 trucks.

FUTURE CONDITIONS WITH THE PROPOSED ACTION

In the future with the proposed action, the projected development sites are expected to be redeveloped with residential, ground floor retail, and community facility (day care) uses, replacing many of the existing industrial and automotive uses. On the development site identified above under the future no-action condition, a larger building would be constructed under the proposed rezoning actions. As detailed in Chapter 1, the reasonable worst case development scenario (as compared to the future no-action condition) includes a net decrease in industrial and automotive floor area of 396,644 square feet, a net increase in retail floor area of 92,941 square feet, a net increase in the number of residential dwelling units by 2,635, and a net increase in community facility floor area of 11,888 square feet.

The proposed rezoning area covers two DSNY garages, located at 1661 and 1787 West Farms Road. These facilities are not considered development sites, would not be displaced, and their operations would not be affected by the proposed action.

In accordance with New York City Recycling Law, Local Law 19 of 1989, codified at Title 16 of the Administrative Code of the City of New York, Chapter 3, multi-unit dwellings generated by the proposed action will set aside space for the storage of designated recyclable materials in designated locations. Per the same law, residents of the units generated by the proposed action are required to separate designated recyclable materials in specified manners. Recyclables are carted away by DSNY separately from other refuse, and help reduce the demand at solid waste transfer stations and management facilities.

As shown in Table K-3, the future action condition is expected to generate 145,419 pounds of solid waste per week. Table K-4 shows the increment between this amount and the estimated solid waste generation in the future without the proposed action. The displacement of existing industrial and automotive uses on the projected development sites would result in a net decrease of 50,145 pounds of solid waste per week as compared to future no-action conditions. Retail solid waste generation would increase by 22,041 pounds per week. Residential solid waste generation would increase by 108,035 pounds per week and institutional solid waste generation would increase by 360 pounds per week. The net increase in solid waste generation on all development sites within the proposed rezoning area would be 80,294 pounds per week.

Table K-3 : Future Action Condition: Estimated Weekly Solid Waste Generation on Projected Development Parcels

Use	Unit	(lbs per week per unit)	Generated (lbs per week)
Storage/Manufacturing/Automotive	0 employees	183	0
Retail	396 employees	79	31,284
Hotel	0 employees	75	0
Residential	2,775 households	41	113,775
Day Care	120 children	3	360
Total			**145,419**

Table K-4 Future Action Condition Increment: Estimated Weekly Solid Waste Generation on Projected Development Parcels as Compared to Future No-Action Conditions

Use	Change in Unit	Multiplier (lbs per week per unit)	Change in Solid Waste Generated (lbs per week)
Storage/Manufacturing/Automotive	-274 employees	183	-50,142
Retail	279 employees	79	22,041
Hotel	0 employees	75	0
Residential	2,635 households	41	108,035
Day Care	120 children	3	360
Total			**80,294**

CONCLUSIONS

Because of the large size of the City's public and private refuse and recyclables collection fleets, the capacity of the local and regional transfer station and related access to disposal facilities, and the fact that solid waste often moves in interstate commerce, the proposed action's waste generation would not be significant relative to the total city-wide and region-wide system. As compared to future no-action conditions, the proposed action would generate an additional 80,294 pounds per week (40.1 tons) of solid waste. This volume, averaging approximately 11,470 pounds per day (5.7 tons) of solid waste, is below the 50 tons per week identified in the *CEQR Technical Manual* as a "substantial amount" of solid waste. It is an insignificant amount compared to the approximately 15,500 tons per day of solid waste that is managed by DSNY.[5] Further, it would only require 3.2 DSNY collection truck trips per week, which is insignificant compared to the nearly 5,000 collection truck trips made per day.[6]

The proposed action would not affect or conflict with the City's Solid Waste Management Plan. It would not generate solid waste with unusual characteristics, such as medical waste. Refuse generated on-site will be collected and disposed of in a manner that will not adversely affect traffic, pedestrians, public health, or community character. The proposed action would not disrupt DSNY operations or facilities. The solid waste generated by commercial uses on the projected development sites would be handled by private carriers, and in fact would be less than that generated under existing and no-action conditions.

In conclusion, the proposed action would not have a significant adverse impact on the City's solid waste and sanitation services.

[5] DSNY Final Comprehensive Management Plan, September 2006.

[6] DSNY Annual Report, 2009.