14.0 Solid Waste and Sanitation Services

A. INTRODUCTION

In accordance with the *CEQR Technical Manual*, this chapter analyzes the potential effect of the Proposed Action on the demand for 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 and comparison of the future demand for solid waste collection services without and with the Proposed Action in place. In the future without the project, the site would not generate demand for these services. Using the CEQR methodology for calculating demand, the this quantitative analysis concludes that the Proposed Action would result in no significant adverse impacts to solid waste services through the amount of solid waste generated by the residential uses (handled by DSNY) or solid waste produced by other Project uses (handled by private carters). Though different from the Preferred Development Program, in terms of solid waste generation, the three variations, like the Preferred Development Program, would not result in any significant adverse impacts to the City's municipal solid waste management or sanitary services.

B. EXISTING CONDITIONS

In New York City, solid waste from commercial and business uses is collected by private carters, and residential waste is handled by the DSNY. Solid waste is transported to private landfills.

The City currently generates approximately 26,000 tons of solid waste per day, of which 13,000 tons are produced by non-residential uses. Solid waste produced on site is minimal, consisting of waste material generated by operations at the NYPA facility. This solid waste is removed by NYPA employees and taken to a disposal facility and does not place a demand on City sanitation services.

C. FUTURE CONDITIONS WITHOUT THE PROPOSED ACTION

In the future without the Proposed Action, the NYPA facility would be relocated, eliminating its demands on the municipal solid waste management system. Conditions at the Project Site would otherwise be the same as described under Existing conditions.

Projects anticipated to be completed by 2009 in the vicinity of the Project Site would total approximately 2,163,000 sf of commercial and 4,183,000 sf of residential development. Solid waste generated from these projects would increase by 184,000 lbs/week. This additional demand on sanitary services in the study area is within the City's capacity to provide these services.

D. FUTURE CONDITIONS WITH THE PROPOSED ACTION

The Proposed Action would affect solid waste generation and sanitation services for this area. The Proposed Action would facilitate a mixed-use development containing studios, offices, residential, retail, and community facility uses instead of the current industrial use. The residential component of the development would introduce up to 1,000 new residential units to the Project Site and introduce approximately 2,700 new residents to the area. The additional demands on infrastructure are indicated below.

Based on accepted solid waste generation rates in the *CEQR Technical Manual*, the Proposed Action would generate approximately 113,953 pounds of solid waste per week above Future Conditions without the Proposed Action, as a consequence of the increased number of residents, workers and visitors. Of this amount, new residents would generate approximately 45,900 pounds of solid waste per week, which would be collected and disposed of by DSNY. This represents less than 0.1 percent of the solid waste produced by City residents and would not affect the City's ability to provide these services.

The Proposed Action would add approximately 655,000 square feet of commercial space and approximately 77,000 square feet of retail space, which would add approximately 2,183 and 257 employees, respectively, to the area. The combined solid waste generation for commercial and retail use would be approximately 48,682 pounds per week. The Proposed Action would also add approximately 126,401 square feet of cultural space (retail use/public space) and 347,000 square feet of production studio (commercial/office use), which would produce approximately 10,349 and 9,022 pounds per week of solid waste, respectively (Table 14-1). Waste generated by such uses would be handled by private carter companies and would not significantly affect the City's ability to collect and dispose of solid waste. Therefore, the Proposed Action would have no significant adverse imparts on solid waste management.

TABLE 14-1: SOLID WASTE GENERATION

Use	Rate (lbs/week)	Persons	Solid Waste (lbs/week)
Residential	17	2,700	45,900
Office/Commercial	13	2,183	28,379
Retail	79	257	20,303
Cultural	79	131	10,349
Film Studios	13	694	9,022
Total Solid Waste Generation			**113,953**

Notes:
1. Rates taken from *CEQR Technical Manual*, 10/01, Table 3M-1.
2. Persons per residential unit is based on an average household size of 2.70, which is a weighted blended rate for Community District 2 in Queens County and the Study Area.
3. Employee numbers are based on the following ratios: office 1/300 sq. ft.; retail 1/300 sq. ft.; cultural/community facilities 1/100 sq. ft.; and studio 1/500 sq. ft.

E. VARIATIONS

The replacement of office space with an equivalent amount of residential space with Variation 1 would result in a net increase in solid waste generation of approximately 1,694 lbs/week more than the Preferred Development Program (approximately 113,953 lbs/week with the Preferred

Development Program compared to approximately 115,639 lbs/week with Variation 1). Variation 1 would result in an increase of solid waste to be handled by the DSNY of approximately 30,065 lbs/week (approximately 45,900 lbs/week of residential waste with the Preferred Development Program compared to approximately 75,965 lbs/week of residential waste with Variation 1).

The replacement of cultural or other community facility space with an equivalent amount of studio and studio support space with Variation 2 would result in a net decrease in solid waste generation of approximately 6,943 lbs/week less than the Preferred Development Program (approximately 113,953 lbs/week with the Preferred Development Program compared to approximately 107,010 lbs/week with Variation 2). However, this would not result in any change in the amount of municipal solid waste to be handled by the DSNY compared to the Preferred Development Program.

Variation 3 would result in the replacement of both office space and cultural space with equivalent amounts of residential space and studio and studio support space, respectively, which would result in a net decrease in solid waste generation of approximately 5,257 lbs/week less than the Preferred Development Program (approximately 113,953 lbs/week with the Preferred Development Plan compared to approximately 108,696 lbs/week with Variation 3). However, as with Variation 1, it would result in an increase of approximately 30,065 lbs/week of solid waste to be handled by the DSNY (approximately 45,900 lbs/week of residential waste with the Preferred Development Program compared to approximately 75,965 lbs/week of residential waste with Variation 3).

As with the Preferred Development Program, the amount of municipal solid waste that would be generated by any of the variations would be less than 0.1 percent of the solid waste currently produced by City residents and would not affect the City's ability to provide solid waste management services; therefore, no significant adverse impacts to solid waste management would result from the variations.