A. INTRODUCTION

The 2001 *City Environmental Quality Review (CEQR) Technical Manual* outlines the following guidelines for the infrastructure, solid waste and sanitation services, and energy assessments:

- A detailed solid waste and sanitation services assessment is appropriate if an action enacts regulatory changes affecting the generation or management of the city's waste or if the action involves the construction, operation, or closing of any type of solid waste management facility. The manual also states that projects with a generation rate of less than 10,000 pounds per week are not considered large and do not require detailed analysis.

Because the proposed action (both the project and the potential development under the reasonable worst-case development scenario) would not trigger any of the CEQR thresholds, this chapter simply discloses the proposed action's sewage and solid waste generation. This chapter concludes that because the proposed action would not generate a large amount of solid waste, there would be no potential for significant adverse impacts on solid waste and sanitation services.

B. EXISTING CONDITIONS

SOLID WASTE AND RECYCLING

In the city of New York, residential and institutional refuse is handled by the New York City Department of Sanitation (DSNY), while solid waste from commercial and manufacturing uses is collected by private carters. These materials are taken to transfer stations for sorting and transfer to larger trucks, barges, or trains. From there, private carters take it to out-of-city landfills and waste-to-energy plants. In Fiscal Year 2006 (July 2005 to June 2006) DSNY handled 11,784 tons per day of waste and 5,154 tons per day of recyclable materials.[1] The total handled by DSNY was 16,938 tons per day of recyclables and solid waste or 5,115,360 tons for Fiscal Year 2006.

Commercial carters pick up from businesses, manufacturers and offices and take the waste materials to transfer stations where the recyclable materials are separated from the solid waste. The solid waste is consolidated into larger trucks for transport and disposal in landfills outside of New York City. The recyclable materials are sold and transported to manufacturing facilities. Private carters handle about 14,830 tons per week of recyclables and solid waste. In addition, private carters handle about 19,070 tons per day of construction debris and excavated materials.

The City's solid waste management services are undertaken in accordance with the existing Solid Waste Management Plan (SWMP) is the responsibility of DSNY. The existing SWMP,

[1] DSNY website: http://www.nyc.gov/html/dsny/html/about/about.shtml

which was approved in 1992 and amended in 1996 and 2000, remained in effect until the Draft New SWMP (October 2004) was approved by the City Council on July 19, 2006 and adopted by New York City on July 27, 2006. The SWMP was approved by New York State Department of Environmental Conservation (NYSDEC) in a letter received by DSNY on October 27, 2006. 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 for out-of-City 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 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.

Only solid waste and recyclable materials from the existing residential units and the school would be handled by DSNY. The residential use is estimated to generate about 1,640 pounds per week and the school about 600 pounds per week for a total of 1.12 tons per week. The solid waste from all other uses on-site and within the rezoning area would be handled by private carters.

C. THE FUTURE WITHOUT THE PROPOSED ACTION

In the future without the proposed action, the increased enrollment in the Heschel School will cause a negligible increase (approximately 600 pounds per week) in the generation of solid waste on the project site.

In October 2004, DSNY developed a new SWMP to address expected future demands for solid waste management for the City. The new SWMP has been approved by the New York City Council and NYSDEC. The plan will be effective for the next 20 years. Because the amended SWMP will be in effect in the 2009 analysis year, this assessment considers the conformity of the Proposed Action with the new SWMP.

The new SWMP addresses recycling, residential waste, and commercial waste. The new SWMP introduces a shift from the current mode of truck-based export to export by barge and/or rail. The City intends to commit to a long-term (20 year) contract with the Hugo Neu Corporation for the processing and marketing of metal, glass, and plastic (MGP). An MGP processing facility will be developed in the City at the 30th Street Pier in the South Brooklyn Marine Terminal. The plant would be barge-fed from Hugo Neu Corporation sites in Queens and the Bronx and a potential DSNY location in Manhattan.

The new SWMP includes a Long Term Export Program for residential waste. The City's Long Term Export Program is anticipated to be implemented through: (1) the development of four converted marine transfer stations; (2) the award of up to five contracts with private transfer stations for barge or rail export of DSNY-managed waste for disposal; and (3) an intergovernmental agreement to dispose of a portion of Manhattan's DSNY-managed waste at a Port Authority waste-to-energy facility in New Jersey. As currently proposed, the new SWMP

would mandate the use of up to nine converted MTS facilities and private transfer stations within the five boroughs at which solid waste would be consolidated, containerized, and barged or railed out of the City. 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. The four converted MTS facilities would be designed to each process at least 4,290 tons per day and accommodate 30 collection vehicles per hour. In the interim, all municipal solid waste would be trucked out of the City.[1]

The New SWMP also proposes three broad categories of action to address traffic issues associated with commercial waste handling as follows: (1) improve conditions at and around transfer stations; (2) facilitate a transition from a network heavily reliant on trucks to one that relies primarily on barge and rail; and (3) redistribute private transfer capacity from a small number of communities that have the largest proportion of the system's impacts.

As currently drafted, the SWMP will require all municipal waste generated from the proposed project site to be trucked to the Essex County Resource Recovery Facility in Newark, New Jersey, where waste would be received and processed.

D. PROBABLE IMPACTS OF THE PROPOSED ACTION

The proposed project would comply with the city's recycling program. The project would be designed to accommodate source separation of recyclables in conformance with city recycling regulations. This would include recycling paper, glass, metals, and certain plastics. With an effective recycling program, it is estimated that the waste stream could be reduced by up to 25 percent.

As shown on Table 12-1, the proposed development would generate solid waste at a rate of 36,483 pounds per week, or just under 1,000 tons per year. This represents a minimal increase in New York City's waste stream. As a result, the proposed action would not be expected to adversely affect solid waste streams or recycling in the city.

Table 12-1
Estimated Solid Waste Generation

Use	Size	DSNY (pounds per week)	Private Carters (pounds per week)	Total (pounds per week)
Residential	812 units	33,292	0	33,292
Medical Office	4,420 gsf (10 employees)	0	130	130
Retail	10,340 gsf (34 employees)		2,686	2,686
School	375 students	375	0	375
Total	*NA*	**33,667**	**2,816**	**36,483**
Source: Generation rates from *CEQR Technical Manual.*				

According to the *CEQR Technical Manual*, the City's SWMP is based on projected rates of growth in the generation of solid waste. The measures proposed to be implemented by the City pursuant to the SWMP are therefore designed to meet the goals of the SWMP notwithstanding further development within certain defined future conditions. In other words, the solid waste

[1] DSNY, Comprehensive Solid Waste Management Plan, July 2006.

handling system assumed to be in place in the future analysis year was designed to accommodate future growth in the generation of solid waste, which includes growth from the proposed project.

Under the new SWMP, new development at the project site would be served by existing DSNY collection routes with DSNY adjusting appropriate collection levels to service the community. As stated above, the new SWMP would require all municipal waste generated from the project site to be trucked to the Essex County Resource Recovery Facility in Newark, New Jersey, where waste will be received and processed. This facility is expected to have sufficient capacity to accommodate the incremental increase in municipal waste generated by the Proposed Action.

The proposed project would comply with the City's recycling program. The project would be designed to accommodate source separation of recyclables in conformance with City recycling regulations. This would include recycling paper, glass, metals, and certain plastics. With an effective recycling program, it is estimated that the waste stream could be reduced by up to 25 percent. As a result, the proposed project is not expected to have an adverse impact on solid waste handling and disposal methods or recycling in the City.

As part of the proposed project, 4,420 gsf of medical office space would be provided on the project site. Depending on the type of medical facilities that eventually locate to the project site, there is the potential for hazardous, biological or chemical waste to be generated at the project site. There could also be the potential for radioactive waste to be generated at the project site.

Any hazardous, biological or chemical waste generated by this use would be handled by licensed waste transporters and taken to a permitted disposal facility. Disposal of hazardous chemical wastes is regulated under the Federal Resource Conservation and Recovery Act (RCRA) and New York State hazardous waste regulations (6 NYCRR Parts 370-374). The generators of hazardous wastes associated with the proposed project would be required to register with NYSDEC to receive a generator's license number. Generators must file manifest forms with NYSDEC each time hazardous wastes are picked up from the site, and must also file quarterly and annual reports. Failure to file the required manifests and reports is punishable by fines and other penalties.

The medical office space may generate regulated medical waste. These regulated wastes are not handled or disposed of by DSNY, but are collected, transported, and treated by licensed specialty contractors. These contractors handle and dispose of regulated medical waste outside the normal solid waste systems, and operate under NYSDEC regulations (6 NYCRR Parts 360-10 and 360-17). Regulated medical wastes receive special packaging, transport, handling and disposal.

The handling of radioactive materials at the proposed project would be in accordance with New York City Health Code Title IV, Article 175, which regulates allowable disposal techniques. Disposal of radioactive materials into the sanitary sewer system would be in accordance with such regulations and would not exceed stipulated chemical specific limits. According to common protocol, after being kept in a storage area where they deteriorate to levels that are not hazardous, they are disposed of into the sanitary sewer system. Radioactive wastes could also be disposed of by transfer to a licensed radioisotope disposal service. Infectious wastes would be disposed of according to New York State Department of Health and NYSDEC regulations, which address requirements for containers, licensing, and record keeping. ✷