A. INTRODUCTION

According to the *City Environmental Quality Review (CEQR) Technical Manual*, actions involving construction of housing or other development generally do not require evaluation for solid waste impacts unless they are unusually large (a generation rate of less than 10,000 pounds per week, for example, is not considered large). Compliance with applicable requirements generally eliminates possible significant adverse impacts. In accordance with these guidelines, this chapter analyzes the effects of the Proposed Action and subsequent development on solid waste and sanitation services. The results of the analysis indicate that the Proposed Action would not result in significant adverse impacts to existing solid waste and sanitation disposal services.

As discussed in Chapter 1, "Project Description," the Proposed Action would facilitate the construction of a modern complex, to be operated by the NYPD, which would consolidate in one-campus facilities for civilians, recruits, and active police officers that are currently spread across the City. The total development size would consist of approximately 2.4 million gross square feet and would include indoor physical training facilities, classrooms and related support space, an indoor pistol training facility, a tactical village, an indoor track, a police museum, a paid student/guest lecturer <u>lodging</u> facility and an above-grade <u>accessory</u> parking <u>garage</u> to accommodate on-site parking demand ("proposed development").

In order to determine whether the Proposed Action conforms to the City's Comprehensive Solid Waste Management Plan (SWMP), a quantitative assessment was conducted. This entails the calculation of the existing solid waste generation on the proposed development site, as well as a comparison of equivalent calculations in the future with and without the Proposed Action.

B. EXISTING CONDITIONS

Description of Current Sanitation Services

In New York City, the Department of Sanitation (DSNY) is the agency responsible for the collection and disposal of solid waste and recyclable materials generated by residences, some nonprofit institutions, tax-exempt properties, and City agencies (including the Tow Pound portion of the Project Site). DSNY also collects waste from street litter baskets, and handles street-sweeping operations and lot cleaning activities. Private carters handle solid waste from other uses, e.g., commercial retail, office, and industrial operations, Fresh Kills Landfill, which was New York City's last operating landfill, was officially closed in March 2001. DSNY continues to collect residential and institutional solid waste and recyclables (the municipal waste stream), which are now transported out of the City. Currently, most of the City's municipal solid waste is collected and delivered to transfer stations for sorting and transfer to larger "hopper" trucks, and then transported out of the City. Likewise, municipal solid waste from the project area is collected and trucked via transfer stations to out-of-State landfills and waste-to-energy facilities. Private carters also consolidate solid waste from commercial and industrial operations and haul it to waste transfer facilities both inside and outside New York City, where it is then transported to out-of-City disposal facilities. It is estimated that DSNY collects more than 12,000 tons of residential and institutional refuse and recyclables (solid waste) per day. It is also estimated that the non-residential (commercial/industrial) waste stream is approximately 13,000 tons

per day (tpd). The total solid waste generated in the City, therefore, averages approximately 25,000 tpd.

The City's solid waste management services are undertaken in accordance with the City's SWMP. The DSNY developed a new Draft SWMP in October 2004 to address anticipated future demands for solid waste management for the City. The Draft SWMP was subsequently revised in July 2006 and approved by the New York City Council on July 19, 2006. The new SWMP is effective for the next 20 years and is expected to be fully operational by the end of 2009. The new SWMP addresses and recognizes the interdependency of the systems for managing 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 South Brooklyn Marine Terminal. The plant will 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 waste handled by the DSNY. The City's Long- Term Export Program is anticipated to be implemented through: (1) the development of four new converted marine transfer stations (MTS); (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. Solid waste would be consolidated, containerized, and barged or railed out of the City from the converted MTSs or the five existing private transfer stations. The barges currently used at MTS facilities will be replaced or retrofitted with new sealed containers or "intermodal containers" capable of being transported on barge or rail. The four converted MTS facilities will be designed to each process up to 4,290 tons per day and accommodate 30 collection vehicles per hour. In the interim, all municipal solid waste will be trucked out of the City.

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 and industrial establishments be 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.

The proposed Police Academy site is located within the DSNY service area covering Queens Community District 7, and the Proposed Action is only expected to affect municipal solid waste services in this service area. DSNY trucks serving this service area are housed and maintained at a garage located at 120-15 31st Avenue between College Point Boulevard and 122nd Street, less than a quarter mile west of the Site.

Under existing conditions, the 35-acre Academy Site is essentially comprised of three distinct areas: the northern portion of the College Point Tow Pound, the auto repair shop at the southeast corner of 28th Avenue and College Point Boulevard, and the vacant strip of property on the eastern side of College Point Boulevard between 28th Avenue and 31st Avenue. These three components of the Site generate a negligible amount of solid waste compared to the capacity of the system. A private carter services the auto repair shop. The western portion of the site is entirely un-built and vacant and generates no solid waste. The balance of the Site, consisting of the NYPD's College Point Tow Pound, generates a very small amount of municipal waste, as the intake/central services/administrative building is located outside of the proposed Site boundaries. The second Tow Pound building, located

at the northeastern corner of the Site, is only utilized during auction activities and does not have a fulltime staff. As such, this outlying building is not a significant source of solid waste generation. All of the on-site vehicles are stored, on a temporary basis, at the College Point Tow Pound and generate no municipal wastes. Therefore, a private carter collects the negligible waste generated by the service station portion of the Site; DSNY collects the waste generated at the Tow Pound.

C. THE FUTURE WITHOUT THE PROPOSED ACTION (NO-BUILD CONDITION)

The changes to the solid waste handling system mandated by the new SWMP are described above. As mentioned in the Project Description, the College Point Tow Pound property would be vacated in the future without the proposed action as the NYPD consolidates its vehicle impound operations. The Tow Pound portion of the proposed development site is not expected to be redeveloped in the absence of the Proposed Action. However, it is expected that the service station could potentially continue to function in its present capacity if the Academy were not constructed at the currently proposed location. It is expected that the City would extend the service station's current lease on a month-to-month basis. As such, it is assumed that the volumes of solid waste generated at the Site would reduce under future No-Build conditions. Private carters would continue to provide sanitation services to the vehicle service station.

D. THE FUTURE WITH THE PROPOSED ACTION (BUILD CONDITION)

The Proposed Action and subsequent public facility development would increase the volume of solid waste generation at the site. The proposed development would be required to comply with the City's recycling program. This includes source separation of solid waste in conformance with City recycling regulations and state solid waste laws. Materials to be separated include paper, cardboard, metal, glass, and certain plastics, all of which reduces stream of wastes to landfills. To be conservative, the following analysis does not include that reduction.

As described in Chapter 1, "Project Description," the Proposed Action would facilitate the construction of a modern complex, to be operated by the NYPD, which would consolidate in one-campus facilities for civilians, recruits, and active police officers that are currently spread across the City. The total development size would consist of approximately 2.4 million gross square feet and would include indoor training facilities, classrooms, and related support space, an indoor pistol training facility, a tactical village, an indoor track, a police museum, a visiting police/lecturer housing facility and 2,000 accessory parking spaces, including an above-grade parking garage of approximately 1,800 spaces and 200 additional at-grade parking spaces that would be located throughout the site in small parking lots and along the Academy's interior road network. On a typical day, the proposed development is expected to have a maximum population of approximately 5,500 people. The facility would be staffed on a 24-hour basis, though the second and third shifts would be the busiest and the overnight shift would consist primarily of service staff.

Table 9-1 provides solid waste projections for the proposed development under Build Conditions. These projections are based on the Citywide average rate for waste generation of a college, at a rate of one pound per week per pupil (includes in-service population); a hotel (similar to the proposed visiting guest facility), at a rate of 75 pounds per week per employee; and an office building, at a rate of 13 pounds per week per employee (includes all staff and instructors, as well as the museum population), all of which are listed in Table 3M-1 of the *CEQR Technical Manual*. As shown in Table 9-1, the typical day-to-day operations at the proposed development would generate approximately 32,900 pounds of solid waste per week (approximately 16.45 tons).

Table 9-1: Projected Solid Waste Generation on the Proposed Development Site in the Future With the Proposed Action (Weekly)

	2014 Build Condition			
	Recruits / Trainees ¹	Employees / In-Service ²	Visiting Police/Lecturer Facility ³	Museum ⁴
Population	3,400	2,150	100 beds 20 employees	35 visitors 6 employees
Generation Rate (Pounds per week)	1 lbs/week per pupil	13 lbs/week per employee	75 lbs/week per employee	13 lbs/week per employee
Generation (Pounds per week)	3,400 lbs/week	27,950 lbs/week	1,500 lbs/week	78 lbs/week

Notes:

- The recruit / trainee population was analyzed as an equivalent to the "College" rate described in Table 3M-1 of the CEQR Technical Manual.
- The employee / in-service population was analyzed as an equivalent to the "Office Building" rate described in Table 3M-1 of the CEQR Technical Manual.
- 3 The visiting student population was analyzed as an equivalent to the "Hotel" rate described in Table 3M-1 of the CEQR Technical Manual. As such, the 75-pound per employee ratio was used. The visiting students were not double counted in the recruit / trainee population for the purposes of solid waste generation estimates.
- 4 The museum population was analyzed as an equivalent to the "Office Building" rate described in Table 3M-1 of the CEQR Technical Manual. As such, the 13-pound per employee ratio was used. The museum visitors were not counted in the museum population for the purposes of solid waste generation estimates.

Source: Rates from the CEQR Technical Manual, December 2001

Given that the proposed development is a public facility, it is expected that the DSNY would handle any generated waste. The proposed development is expected to generate a maximum of 16.45 tons of solid waste per week at maximum utilization. This represents only a very small percentage of the estimated 84,000 tons of refuse collected by the DSNY per week in the City. According to the *CEQR Technical Manual*, the typical DSNY collection truck carries approximately 12.5 tons of waste material. Under the typical day-to-day operations, the proposed development would be expected to generate solid waste equivalent to approximately 0.19-truck load per day (assuming a seven-day week). As such, the proposed development is not expected to burden the DSNY's solid waste handling services, nor would the Proposed Action have a significant adverse impact on the City's solid waste and sanitation services.

It is expected that the proposed development would be served by existing DSNY collection routes with the DSNY adjusting appropriate collection levels to meet the additional demand and adequately service the community. It should be noted that the students and staff of the proposed development would also be required to participate in the City's ongoing recycling program for paper, metals, and certain types of plastics, and glass, which would reduce the stream of waste generated. As mentioned above, the above analysis conservatively overestimates the waste generation as it does not include that reduction.

E. CONCLUSION

The Proposed Action is not expected to result in significant adverse solid waste impacts. Development pursuant to the Proposed Action would occur in an area that is currently served by DSNY trash and recycling pick-ups. The proposed action would not affect the delivery of these services, or place a significant burden on the City's solid waste management system. The proposed development would

normally generate approximately 16.45 tons of solid waste per week under typical day-to-day operations.

Therefore, the increase in solid waste to be picked up by the DSNY is relatively small (a maximum of 2.35 tons per day assuming a 7-day week) when compared to the estimated 12,000 tons of residential and institutional refuse and recyclables collected by the DSNY per day. Therefore, it is concluded that in the future with the Proposed Action in 2014, there would be no significant adverse impacts on residential or commercial solid waste collection and disposal services, nor would the Proposed Action conflict with, or require any amendments to, the City's solid waste management objectives as stated in the SWMP.