SANITATION GARAGE COMPLEX AND SALT SHED FOR MANHATTAN DISTRICTS 1, 2 & 5

500 WASHINGTON STREET AND 553 CANAL STREET/297 WEST STREET



FINAL SCOPING DOCUMENT

FOR A

DRAFT ENVIRONMENTAL IMPACT STATEMENT

CEQR 07-DOS-003M

JUNE 29, 2007

CITY OF NEW YORK MICHAEL R. BLOOMBERG, MAYOR

DEPARTMENT OF SANITATION JOHN J. DOHERTY, COMMISSIONER

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1.0 INTRODUCTION AND PROJECT DESCRIPTION

The City of New York must relocate its Sanitation District Garages and Salt Shed located at 2 Bloomfield Street and 427 Gansevoort Street (Pier 52) as the Hudson River Park Act requires the removal of these garage operations from this location. The City proposes to co-locate them together with District 1 operations at a new complex ("The Manhattan 1/2/5 Garage Complex" or "Garage") next to the undersized and outdated District 1 Garage, which would become a Salt Shed. Pursuant to the State Environmental Quality Review Act and City Environmental Quality Review procedures (SEQRA/CEQR), this Scoping Document sets forth the scope of a Draft Environmental Impact Statement (DEIS) to be prepared for this project (the Proposed Action). The Department of Sanitation (DSNY) is Lead Agency and the project is a Type I action. The CEQR number for the Proposed Action is 07-DOS-003M. The DEIS will enable DSNY and other involved agencies and the public to analyze and consider any adverse environmental impacts that are found to be significant from the Proposed Action and from alternatives, and any proposed mitigation, and to weigh them together with economic, social and other considerations before taking final action.

1.1 Project Purpose and Need

Pursuant to the Hudson River Park Act of 1998, DSNY is obligated to vacate its longstanding waterfront garage and salt storage facilities on the Gansevoort Peninsula, 2 Bloomfield Street/427 Gansevoort Street, within the boundaries of the recently established Hudson River Park (the Gansevoort Peninsula is on Block 651, Lot 1 [Pier 52]). This location, at the northwest edge of Community District 2, houses garages for Manhattan Districts 2, 4 and 5 (District 4 equipment will relocate to a new facility in 2008). On the approximately seven-acre Gansevoort Peninsula/Pier 52, current DSNY uses (Summer 2007) include outdoor parking for trucks and equipment and accessory parking for three district garages, indoor vehicle parking at the former incinerator building (which has served as a garage for many years), fuel storage tanks, truck washing operations, and a 20,000 sf Salt Shed with approximately 8,000 tons of road salt and a 10,000 gallon calcium chloride tank for road salting operations. DSNY personnel are housed in trailers at the decommissioned Marine Transfer Station on-site and in offices attached to the former incinerator building. Most of District 1 equipment is currently stored on local streets due to its undersized and outdated garage. In accordance with an October 27, 2005 Consent Order between the City of New York and the Friends of Hudson River Park and the Hudson River Park Trust, DSNY must relocate its garages and the salt facility from the Gansevoort Peninsula by the end of 2012.

DSNY is proposing to acquire land to construct and operate a new Manhattan District 1/2/5 Garage Complex at 500 Washington Street, across from the existing District 1 Garage site in lower Manhattan. The site is undeveloped, generally bounded by Spring Street, Washington Street and West Street and is located one block north of the Canal Street border which separates Community District 1 from District 2 (Figure 1- Location of Proposed Action). In addition to making waterfront land available for Hudson River Park development, constructing the new Garage Complex at the proposed site would provide better service to the local community districts, achieve an economy of scale, replace the substandard Manhattan 1 Garage, and improve operational efficiencies. DSNY vehicles and equipment (recycling and refuse collection trucks, snow plows, salt spreaders, etc.) would be parked, maintained, washed and refueled there.

The new Garage Complex would provide a base of operations for three separate District Garages: Manhattan District 1 (now at 553 Canal Street/297 West Street), and Districts 2 and 5 at 2 Bloomfield Street and West Street/Route 9A (on the Gansevoort Peninsula)¹. The existing Manhattan District 1 Garage at 553 Canal Street/297 West Street that has operated on the site since the 1920's would be demolished and rebuilt as a Salt Shed (Figure 1).² Existing DSNY garages and those already under construction in the lower half of Manhattan and the Sanitation/Community Districts they serve are shown in Figure 2 - Existing DSNY Garages. DSNY Garages that would be present in 2012, including the Proposed Action, are depicted in Figure 3 – Proposed DSNY Garages in 2012.

1.2 Project Description

Manhattan 1/2/5 Garage Complex

DSNY is proposing to acquire land to construct and operate a new Manhattan District 1/2/5 Garage Complex. The proposed Manhattan 1/2/5 Garage Complex would be located on an

¹ Manhattan District 5 equipment will be based at the 2 Bloomfield Street facility as of June 2007, relocating from 525-545 East 73rd Street.

² Certain other DSNY garage actions will not be analyzed in this environmental review as they are not dependent on the Proposed Action and will be analyzed separately or are exempt from review. These include the relocation of Manhattan District 6 Garage operations (currently at West 30th Street between 11th Avenue and 12th Avenue) to the garage complex scheduled for reconstruction at 525-545 East 73rd Street in District 8; the relocation of the District 4 Garage operations from DSNY's facility on the Gansevoort Peninsula/2 Bloomfield Street to the District 4/4A(Mechanical Broom)/7 Garage nearing completion at 650 West 57th Street in 2008 in District 4; and the use of the 2 Bloomfield Street facility as swing space to temporarily house the District 1 Garage along with the District 5 Garage (as noted above, both must leave this location by the end of 2012). The District 5 Garage was required to leave District 8 in June 2007 due to longstanding plans to reconstruct that dilapidated garage facility to allow Districts 8 and 8A to return and to house the District 6 equipment which is currently housed on a temporary leased site in District 4 on the west side of Manhattan, requiring inefficient cross-town travel to service District 6 on the east side of Manhattan. After reconstruction the DSNY complex at 525-545 East 73rd Street will continue to house two district garages plus a mechanical broom garage; it will be evaluated in a separate environmental review. The discontinuation of DSNY use and physical removal of DSNY facilities from the Gansevoort Peninsula and preparation of the site as parkland have already been mandated by State law, and thus require no further environmental review. Final Scoping Document 2 June 2007 Sanitation Garage Complex and Salt Shed

undeveloped 85,450 square foot (1.96 acre) site (Block 596, Lot 50) known as the UPS Equipment Staging Lot that is currently owned and used by the United Parcel Service (UPS) for truck trailer staging and parking as part of their Manhattan South Facility operations. Located in Manhattan Community District 2, the proposed Manhattan 1/2/5 Garage site is within an M2-4 zoning district and is generally bounded by Spring Street to the south, Washington Street to the east and West Street/Route 9A to the west, with the Hudson River Park opposite the site across West Street. To the north is the St. John's Center building, a former freight terminal; east of the site is the UPS Package Distribution Building (Facility) that extends north to West Houston Street. Directly to the south of the UPS Equipment Staging Lot across Spring Street is the existing one-story (22-foot tall) Manhattan District 1 Garage (Block 595, Lot 87), which DSNY proposes to replace with a Salt Shed.

From the adjacent Package Distribution Facility to the east of the UPS Equipment Staging Lot, UPS handles and ships packages on a 24-hour basis servicing lower Manhattan from 20th Street to the southern tip of the island. Just to the north of the Package Distribution Facility on West Houston Street, between Greenwich and Washington Streets, the UPS operates an Automotive Shop for vehicle maintenance and fueling. The DSNY operations and the UPS Staging Lot operations would be co-located to the new DSNY Manhattan 1/2/5 Garage Complex.³ The new DSNY garage would temporarily displace the UPS Equipment Staging Lot for approximately 12 months while the new UPS space is constructed. During construction UPS would use its rooftop parking for equipment staging. Once completed, the Equipment Staging Lot would be relocated to the main level (ground floor) of the new garage.

The new Manhattan 1/2/5 Garage, a five-level structure approximately 147 to 150 feet in height at the street wall (site elevation varies) plus roof top mechanical equipment, would have a total net floor area of approximately 427,250 square feet of space. The first parking level would accommodate UPS vehicle parking and storage. Parking levels 2, 3, 4 and 5 would include DSNY vehicle storage, offices, and locker facilities. The slightly trapezoid-shaped garage building would be between 190 feet to 220 feet wide and approximately 413 feet long. The building would be constructed on a slab with pilings (with no cellar). Construction would take approximately four years and would commence in 2009. A stormwater pollution prevention plan would be implemented during construction.

³ An agreement to share the site with UPS has not yet been finalized, but such an agreement is expected to be completed in the near future.



Base Map Copyrighted by the New York City Department of Information Technology and Telecommunications, 2004

Hydrodettal	Proposed Manhattan District 1/2/5 Garage Complex	Figure 1 Location of
1200 MacArthur Boulevard Mahwah, New Jersey 07430 (201) 529-5151 f:(201) 529-5728	City of New York Department of Sanitation	Proposed Action June 2007



Base Map Copyrighted by the New York City Department of Information Technology and Telecommunications, 2004

	Proposed Manhattan District 1/2/5 Garage Complex	Figure 2 Existing DSNY
1200 MacArthur Boulevard Mahwah, New Jersey 07430 (201) 529-5151 f:(201) 529-5728	City of New York Department of Sanitation	Garages June 2007



Base Map Copyrighted by the New York City Department of Information Technology and Telecommunications, 2004

Hydrodial	Proposed Manhattan District 1/2/5 Garage Complex	Figure 3 DSNY Garages
1200 MacArthur Boulevard Mahwah, New Jersey 07430 (201) 529-5151 f:(201) 529-5728	City of New York Department of Sanitation	in 2012 June 2007

There would be approximately 128 pieces of DSNY equipment operating out of the new Garage Complex. The total number of employees on a peak day over three shifts for the district garages would be about 231. The peak number of employees working out of the new Garage Complex during any individual shift would be 108, excluding winter emergencies. The garages would operate 24 hours per day, 7 days per week although no residential refuse or recycling is collected on Sundays. On Sundays, waste collection is limited to street baskets, resulting in trip generation that is well under that of a normal collection day. The three garages would each be on separate floors of the building, with separate management and equipment assigned to each. District 1, the smallest district in Manhattan, has 15 collection/recycling trucks assigned, while District 2 has 27 and District 5 has 20 such vehicles.

DSNY truck and equipment access and egress to the DSNY garage would be via West Street and Washington Street. The configuration of West Street in this location allows for queuing of trucks and equipment, when needed. Vehicles exiting the garage at this point would turn north onto West Street. DSNY trucks would also be able to enter and exit the new garage via Washington Street (one-way in a southerly direction) at the northern end of the site. DSNY employee vehicles would enter and exit the garage from Washington Street at mid-block.

The new garage would have a total of approximately 266 parking spaces (UPS – 64 truck trailers; DSNY – 95 large vehicles (collection trucks, salt spreaders, etc.), 33 small vehicles, 74 accessory off-street parking spaces). On the busiest day of the week, there would be a net increase in collection truck trips of 62 out and 62 in over a 24-hour period compared with existing conditions at the Manhattan District 1 Garage, plus lighter vehicles such as DSNY sedans and SUVs and employee cars. Including sedans and employee vehicles, the maximum number of DSNY daily two-way movements into and out of the garage on a peak day would be 480 trips (240 trips in and 240 trips out including existing District 1 Garage trips). There are currently 158 total trips (79 trips in and 79 trips out) generated at the MN1 Garage. The net increase in facility peak day DSNY truck trips over levels from the current District 1 Garage include those from refuse collection trucks (19 out, 19 in) recycling trucks (up to 22 out, 22 in), street basket collection trucks (21 out, 21 in) and relay collection trucks (up to 18 out, 18 in). District 5 trucks would deliver their refuse loads on shift to the East 91st Street Marine Transfer Station, while Districts 1 and 2 would continue to relay (roughly one third shift, two thirds relay) their refuse to the Essex Country Resource Recovery Facility in Newark, NJ via the Holland Tunnel.

The new garage would also be designed to provide for truck washing and refueling. Truck wash water would be directed through an oil/water separator before being discharged to the City's sewer system for further treatment at the Newtown Creek Water Pollution Control Plant (WPCP). Located in the northern portion of the garage's first floor would be nine underground storage tanks for fuel and oil: (1)10,000 gal. diesel; (3) 4,000 gal. diesel; (1) 4,000 gal. unleaded gasoline; (1) 2,000 gal. ethanol; (1) 2,000 gal. motor oil; (1) 2,000 gal. hydraulic fluid; and (1) 2,000 gal. used oil. The fuel and oil storage tanks at the existing District 1 Garage would be removed.

DSNY proposes that all the diesel refuse and recycling collection trucks stationed at the proposed Manhattan District 1/2/5 Garage would be equipped with Clean Diesel technology consisting of USEPA Certified 2007 Model Year-compliant technology or better, with after-treatment technology such as diesel particulate filters that have been shown to reduce vehicle particulate emissions substantially to levels comparable to those from trucks fueled by compressed natural gas. In addition, most of the DSNY cars and small vehicles garaged at the facility would be alternate fuel vehicles (such as ethanol E85 or hybrid gas/electric).

DSNY proposes to incorporate certain environmentally sustainable design elements, known as "green building" features, in the garage design with the goal of attaining LEED (Leadership on Energy and Environmental Design) Silver status, which is a certified level attested to by the U.S. Green Building Council. For example, DSNY would seek to incorporate recycled materials, energy efficiency, low toxicity materials, solar design features and a green vegetated roof area as part of the garage design, where feasible. The garage boiler would be fueled with natural gas.

Salt Storage Facility

The DSNY Salt Shed would be located on the site of the existing Manhattan District 1 Garage (Block 595, Lot 87), which is approximately 14,575 square feet in area. The garage would be demolished. The new three-sided, covered structure, built on an impermeable slab of concrete, would have a maximum storage capacity of 5,000 tons of salt. No personnel would be permanently assigned to the facility except during resupply of salt or during snow emergencies. There would be two 4,000 gal. underground storage tanks for liquid calcium chloride which is applied with rock salt to melt snow and ice. The roof of the shed (approximately 75 feet high at its peak) would slope down to a height of 30 feet towards the adjacent ventilation building of the Holland Tunnel. A 30-foot wide passageway to accommodate equipment and vehicles would exist between the shed and the adjacent building. Salt would be loaded from the shed only during winter emergencies, typically six to ten times per winter. A diesel-powered front loader using ultra-low sulfur fuel and Best Available Retrofit Technology (diesel particulate trap) would load the salt. The Proposed Action

Conceptual Site Plan (Figure 4) depicts the Proposed Action sites in relation to the other prominent land uses.

United Parcel Service (UPS)

The current UPS Manhattan South Facility has three primary components - an Equipment Staging Lot, an Automotive Shop and a Package Distribution Building. Trailers and trucks are parked in the Equipment Staging Lot before and after the loading/unloading operations that take place in the Package Distribution Building. The Automotive Shop has six bays and maintains and services the 210 vehicles assigned to this facility. The Package Distribution Facility fronts Greenwich Street, and comprises four internal operations centers: 1) Battery Center servicing the Financial District/2 Bridges area; 2) Knickerbocker Center servicing West Village/Tribeca/Chinatown; 3)Village Center servicing Gramercy/Village/SoHo/Union Square /East Village; and 4) World Trade Center servicing SoHo/Little Italy/Bowery/Lower East Side.

The Equipment Staging Lot would be relocated to the first floor of the new DSNY Manhattan District 1/2/5 Garage Complex. The UPS Package Distribution Facility and the Automotive Shop would remain in their existing locations and their operations would not be affected by the Proposed Action. Overall UPS operations would not change as a result of the co-location with the new DSNY garage. The number of UPS trucks, trailers, other vehicles and employees would remain at their current levels. The DEIS will provide a description of the project components, including construction of the new Garage Complex and relocation of UPS facilities. It will also include a site description and general operations schedule for DSNY and UPS.

1.3 Project Approvals

Project approvals that have been identified include City Planning Commission approval of site selection and acquisition for a capital project, disposition of real property (to accommodate UPS in the building), and special permits for relief from street wall height limit requiring a setback after 85 feet above curb level and for relief from yard requirements; consistency review with respect to the City's Waterfront Revitalization Program; City construction contracts; Art Commission review of facility designs. A "minor source" of New York State Department of Environmental Conservation Facility Air Permit may be required for the Garage Complex pursuant to 6 NYCRR201. Ministerial approvals would include a demolition permit for the Manhattan District 1 Garage, building permits, New York City Department of Environmental Protection water supply connection approval and Industrial Pretreatment Program approval for connection to the sanitary sewer system, New York



Hydrogeliai	Proposed Manhattan District 1/2/5 Garage Complex	Figure 4 Proposed Action
1200 MacArthur Boulevard Mahwah, New Jersey 07430 (201) 529-5151 f:(201) 529-5728	City of New York Department of Sanitation	Conceptual Site Plan June 2007

State Department of Environmental Conservation (NYSDEC) registration of underground storage tanks, and coverage under a general permit for construction-related stormwater discharges under the NYSDEC State Pollutant Discharge Elimination System program

2.0 SCOPING AND PUBLIC REVIEW PROCESS

DSNY as Lead Agency responsible for the review and approval of the DEIS initiated the scoping process by publishing a Notice of Scoping Meeting and Notice of Availability of Draft Scope in the Daily News and in the Environmental Notice Bulletin, and by filing and circulating the Draft Scope with the relevant Community Boards, Department of City Planning, and other interested parties. The Draft Scope was posted on DSNY's website and in the Project Document Repositories (Section 2.1). DSNY held a Public Scoping Meeting to give a presentation on the project and receive oral and written public comments on the Draft Scope on January 31, 2007 at Kimmel Hall, New York University, 60 Washington Square South, Rosenthal Pavilion, Tenth Floor, from 7:30 pm to 9:30 pm. The public comment period was extended by DSNY from February 12, 2007 through February 26, 2007.

2.1 Changes to the Proposed Action

A Draft Scoping Document was circulated for public comment on December 28, 2006, with comments accepted until February 26, 2007. In response to comments received from other agencies and the public, DSNY is proposing certain revisions to the Proposed Action, as further described below.

- DSNY will not acquire a private parking garage at 575 Washington Street for a new Salt Shed site but will locate the shed on the site of the current Manhattan District 1 Garage (553 Canal Street/297 West Street).
- All existing and proposed underground storage tanks for vehicle refueling will be moved from the District 1 Garage into the proposed Manhattan District 1/2/5 Garage Complex, together with proposed truck maintenance and washing operations.
- All of DSNY's truck fleet garaged at the complex will be equipped with USEPA-Certified 2007 Model Year Clean Diesel Technology or better, with advanced controls, such as diesel particulate filters, that reduce diesel truck air emissions to levels comparable to those from trucks fueled by compressed natural gas.

• The Garage Complex will incorporate "Green Building" design features with the goal of achieving LEED (Leadership on Energy and Environmental Design) Silver certification from the U.S. Green Building Council.

2.2 Final Scope

After due consideration of the public comments received on the Draft Scoping Document, DSNY has made changes to the Proposed Action, revised the scope of matters to be studied in the DEIS, and adopted the revised document as the Final Scoping Document.

The Final Scoping Document can be reviewed on DSNY's website: www.nyc.gov/sanitation (click on Publications and Reports) and at the repositories indicated below.

Project Document Repositories:

- City of New York Department of Sanitation Bureau of Legal Affairs, 125 Worth Street, Room 708, New York, New York 10013.
- Mayor's Office of Environmental Coordination 253 Broadway, 14th Floor, New York, New York 10007.
- Community Board No. 2 3 Washington Square Village, Apartment 1A, New York, New York 10012.
- Hudson Park Library 66 Leroy Street, New York, New York 10014.
- Jefferson Market Regional Library 425 Sixth Avenue, New York, New York 10011.

2.3 Draft EIS (DEIS)

A DEIS will be issued pursuant to this Final Scope. The content and format will comply with CEQR and SEQRA. The DEIS will include an Executive Summary that will utilize all relevant material from the document to describe the proposed project, its environmental impacts, measures to mitigate those impacts that are found to be significant, and alternatives to the Proposed Action. Public notice of the DEIS completion and availability, and of a public meeting on the DEIS will be published on DSNY's website, in the Environment Notice Bulletin, in the City Record, and in a newspaper of general circulation. The DEIS will be posted on DSNY's website.

2.4 Public Hearing

The public hearing on the DEIS will commence at least 15 days after the filing of the Notice of Completion of the DEIS. Public comments are invited on the DEIS and will be accepted for at least 10 calendar days after the hearing for a total public comment period of at least 30 calendar days after publication of the DEIS. All substantive comments received during the public review period and at the public hearing will be summarized and addressed in the Final EIS (FEIS), assuming the DEIS identifies a significant adverse impact. (If no such impact is found, there may be no need for an FEIS and a Negative Declaration would be prepared instead.)

2.5 Final EIS (FEIS)

The FEIS consists of the DEIS, copies of the substantive written comments received and responses to those written comments, and a summary of verbal comments received at the public hearing and responses to those comments. Revisions and/or supplemental analyses would also be included. Mitigation measures that minimize any significant adverse impacts that are found would be identified in the FEIS. The FEIS will be posted on DSNY's website following issuance of a Notice of Completion of the FEIS. The environmental review process would end with the issuance by DSNY of a Findings Statement at least 10 days after the filing of the FEIS.

2.6 SEQRA/CEQR and ULURP

DSNY will seek to coordinate the SEQRA/CEQR review process with the public process required for the Proposed Action pursuant to the City's Uniform Land Use Review Procedure (ULURP), wherever feasible.

3.0 METHODOLOGY OF THE EIS AND SCOPE OF REVIEW

The DEIS, prepared pursuant to SEQRA and CEQR, will disclose potentially significant adverse impacts associated with the construction and operation of the Proposed Action, identify and consider mitigation measures to reduce or eliminate potentially significant adverse impacts, and identify and analyze feasible and reasonable alternatives to the Proposed Action, in addition to the No Action Alternative. The general framework for the DEIS is to study and describe existing conditions in the area(s) likely to be affected by the proposal, to project these conditions to a future analysis (or "build") year without the project (known as the "future No Build" condition), and to assess probable impacts of the proposal on that future No Build condition. In view of the currently undeveloped condition of the proposed Manhattan District 1/2/5 Garage Complex site, and taking

into account market conditions, the favorable location of the site and the owner's report of recent offers received to develop the site as-of-right under current zoning, the future No Build condition will be a "soft site" analysis as per the *CEQR Technical Manual*. Therefore, the future No Build condition will assume the UPS Equipment Staging Lot is developed with a commercial use in accordance with existing zoning regulations that allow for development with a Floor Area Ratio (FAR) of 5.0.

The DEIS will also include:

- An Executive Summary.
- Statement of purpose and need.
- Description of the environmental review process.
- Permits and approvals required.

For this DEIS, the future analysis year will be 2012, the anticipated date for completion of construction and commencement of operation of the proposed DSNY Garage Complex. The chapters of the DEIS, including issues and methodological approach, are described in the following sections of this document.

Where appropriate and in accordance with the *CEQR Technical Manual* (2001), screening procedures will be applied to determine the potential for significant adverse impacts and the need for detailed analyses of the Proposed Action.

The proposed Manhattan 1/2/5 Garage Complex site and the existing Manhattan District 1 site (the proposed Salt Shed) will be examined in detail at a comparable level of analysis. A preliminary assessment of the movement of vehicles and equipment from each of the existing garages (District 1, District 2 and District 5) indicates that the number of trips in the Build Year will be similar to current operational activity from these facilities. District 2 trips (trucks, equipment and employees - approximately 188 peak weekend trip ends) would be transferred to the new garage from 2 Bloomfield/Gansevoort Street and would be evaluated in detail at the new location. The transfer of District 5 operations from 2 Bloomfield/Gansevoort Street would add another estimated 146 daily peak weekday trips to the new Manhattan 1/2/5 Garage Complex, while the trips associated with District 1 operations would be unchanged in 2012 (apart from moving across the street).

As per the *CEQR Technical Manual*, a Scoping Document is to help focus the DEIS analysis in an appropriate way. Given the proposed location and the nature of the Proposed Action, the Proposed Action would not be expected to result in potentially significant adverse impacts with respect to certain impact categories. Thus, they will not be subject to detailed analyses in the DEIS. Brief qualitative discussions of these issues will be presented instead, including:

- Community Facilities.
- Open Space.
- Natural Resources.
- Infrastructure.
- Solid Waste and Sanitation Services.
- Energy.

Based on the preparation of an Environmental Assessment Statement and as a result of consultation with other agencies and the public, DSNY's preliminary review has identified the potential for significant impact from the Proposed Action with respect to traffic, air and noise, although other CEQR impact categories will also be studied, as appropriate. If further analysis indicates a significant impact, the DEIS would propose mitigation measures where feasible.

The DEIS will include a set of technical appendices that will likely include: agency correspondence; data on traffic; air quality, hazardous materials; and other related analysis documents.

3.1 Land Use, Zoning, Public Policy, Neighborhood Character and Community Facilities

Land use, zoning, public policy, neighborhood character and community facilities will be described for the proposed Garage Complex and Salt Shed site. In accordance with the *CEQR Technical Manual* the primary study area will be a 400-foot radius around the proposed sites; a secondary study area of 0.25 mile will also be studied. If analyses in other technical areas indicate a need to expand the study area, a larger one would be considered, as needed.

Land use and zoning data will be inventoried in the study area. The descriptions and data will provide the basis for analysis of potential impacts to other land uses in the study area (e.g., other businesses, residences, etc.). Land use information will be compiled and mapped primarily through a review of existing data, street maps, topographic maps, NYC Department of City Planning (NYCDCP) land use and zoning maps, Sanborn maps, etc. This data will be supplemented with field surveys. Figure 5 is a land use map of the area (400 ft.) surrounding the Proposed Action sites.



Tax Map Source: NYC Department of City Planning, Bytes of the Big Apple, 2004. Land Use Source: NYC Department of Finance, Real Property Assessment Data, 2005. Modified based on field verification May 2007.

Hydrottal	Proposed Manhattan District 1/2/5 Garage Complex	Figure 5 Land Use
1200 MacArthur Boulevard Mahwah, New Jersey 07430 (201) 529-5151 f:(201) 529-5728	City of New York Department of Sanitation	Proposed Action June 2007

The Proposed Action's compatibility with the existing land uses in the primary study area will be discussed. The proposed garage is an as-of-right use under the existing M2-4 zoning (the existing MN1 Garage site is also zoned M2-4). Figure 6 depicts zoning districts in the vicinity of the Proposed Action sites. It is anticipated that the new garage would be within the requisite FAR of 5.0; however, DSNY would likely seek special permits for relief from street wall height and setback and yard requirements for the new garage.

As per the *CEQR Technical Manual*, "neighborhood character is an amalgam of the various elements that give neighborhoods their distinct "personality." These can include land use, urban design, visual resources, historic resources, socioeconomics, traffic and noise". A description of neighborhood character in the study area will be provided in the DEIS as a basis for discussing potential impacts such as noise, traffic and air quality that could occur during construction and operation. Community facilities, such as schools, churches, and community/senior citizen centers and fire and police protection will be identified in the study area, and the Proposed Action's impact on them will be discussed.

The analyses will include:

- Characterization of the land use patterns, demographics and zoning in the study area. In the surrounding study area, predominant land uses will be identified. The location of nearest residential uses will also be identified. Features that contribute to defining the study area (e.g., major public buildings, unique land uses, etc.) will be discussed.
- Existing public policies potentially affecting the study area will be evaluated (e.g., Urban Renewal Plans, 197(a) Plans, Hudson Square Rezoning, City Waterfront Revitalization Program, etc.). Consistency of the Proposed Action with the policies will be assessed.
- Planned projects or proposed changes in public policies will be identified to determine changes or trends that could affect study area land use and neighborhood character in the future without the project. For purposes of the overall analysis, the proposed DSNY Gansevoort Recyclables Acceptance Facility will be included in the future No Build condition. This facility, which requires amending the Hudson River Park Act and which is in the City's approved Solid Waste Management Plan, is planned to accept recyclables from Manhattan for barge shipment to a proposed recycling facility on the 30th Street Pier in South Brooklyn.



• The analysis will describe the impacts to land use, neighborhood character and community facilities that could be reasonably expected to occur from construction and operation of the DSNY Garage Complex and Salt Shed compared to the future No Build condition. General background growth will be considered in the future No Build Condition.

3.2 Socioeconomic Conditions

A socioeconomic assessment is appropriate if an action may be reasonably expected to create substantial socioeconomic changes within the affected area that would not be expected to occur absent the action. The Proposed Action is not one that generally would be expected to result in significant direct or indirect adverse impacts to socioeconomic conditions (e.g., population, housing stock, or economic activities) using *CEQR Technical Manual* criteria. There would be no change in the overall level of DSNY or UPS employment. There would be a minor shift in the disbursement and spending of wages given the realignment of DSNY garages, but not in amounts to be considered significant in the context of the economy of Manhattan and the region.

The UPS Manhattan South Facility would continue to operate as it currently does once the new garage is completed. There is no permanent displacement of UPS or any other business enterprise.

The socioeconomic assessment would:

- Present general data (1990, 2000 and interim, as available) on population, demographics, housing, and employment in an area that encompasses the DSNY garages directly affected by the Proposed Action (MN1, MN2, MN5). Updated data (2006) will also be acquired to provide a more current picture of the study area socioeconomics.
- Determine the level of economic activity and other fiscal effects associated with the Proposed Action.
- Assess the effects of the proposed project in terms of economic activity and employment.
- Identify any direct or indirect socioeconomic impacts resulting from the project.

As part of the project's ULURP Application, a Fair Share analysis will be prepared in accordance with Section 203 of the City Charter which guides the equitable distribution of city facilities among the boroughs and community districts.

3.3 Open Space

Pursuant to the *CEQR Technical Manual*, an assessment of direct/indirect effects to public open space is recommended for non-residential projects that add 500 or more workers or a substantial number of visitors to a site. The purpose of the analysis is to determine the adequacy of local parks and recreational facilities to meet this new demand. However, as noted above, the Proposed Action would not meet this threshold: it would not result in any employment changes for either DSNY or UPS; nor would it be likely to attract visitors to the site. Therefore, the DEIS will not address this issue in detail; rather, a brief assessment will be included to show that the action will not result in significant adverse effects on open space and recreation facilities.

Potential shadows from the proposed Garage Complex and Salt Shed that could affect open space of the Hudson River Park are described in Section 3.4, Shadows. Canal Park, located south of the proposed Salt Shed site, would not be affected by shadows from the Proposed Action.

3.4 Shadows

The proposed DSNY garage may create incremental shadows on the street and adjoining areas, as compared to as-of-right commercial development of the site under the future No Build condition without the Proposed Action. An adverse shadow impact may occur when the shadow from a proposed project falls on a publicly accessible open space, historic landscape or historic resource. An adverse shadow impact to a historic resource may occur if the shadow obscures the features or details that make the resource significant or that depend on sunlight (for example, a notable stained glass window). Because the project site is located proximate to a NYC Landmark building, the James Brown House located at 326 Spring Street, as well as the Hudson River Park and waterfront, a screening analysis will be performed to ascertain whether incremental project-related shadows might reach either of these resources. If the screening analysis indicates that the proposed new facilities might cast shadows on these resources, then further evaluation will be conducted. The impact of project shadows upon the National Register-listed Land Ventilation Building of the Holland Tunnel will also be assessed.

The extent and duration of project-related shadows and the effect of those shadows on open space uses or historic resources will be assessed, as compared to the future No Build condition with

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commercial development on the Manhattan 1/2/5 Garage Complex site. This analysis will be performed using simulation software such as AUTODESK VIZ, or other appropriate format. Shadow diagrams will be prepared for representative times of day (9:00 AM, Noon, 3:00 PM) and year (March, May, June, December) to illustrate the extent of shadows cast from the proposed garage building and Salt Shed. An analysis will be conducted to determine if these shadows will extend to either of the sensitive resources identified. In the event that the proposed shadows do extend to the sensitive resources, then an assessment will also be conducted to identify the shadows' effect on the sensitive resource, and whether or not it represents a significant adverse effect.

3.5 Cultural Resources

The DEIS will consider the potential for the Proposed Action to cause a significant adverse impact to known or potential archaeological and historic architectural resources.

As noted above, there are New York City Landmarks Preservation Commission (NYCLPC)designated and a New York State/National Register(S/NR)-listed buildings near the project site at 326 Spring Street (the James Brown House, cater cornered to the site) adjacent to a newly constructed residential building at 330 Spring Street (the Urban Glass House). The National Register-listed Land Ventilation Building of the Holland Tunnel is adjacent to the MN1 Garage. Two additional structures, 366 and 368 Greenwich Street, are currently being considered as potential NYC landmarks. The potential for construction- and traffic-related vibration effects from the Proposed Action on these resources will be addressed. The DSNY would implement protective measures as part of the garage construction specifications to avoid accidental damage to architectural resources.

The tasks to be undertaken for the DEIS will include:

- Review existing documentary research on the proposed sites and consult with NYCLPC. Given the availability of data and history of the site (urban fill), a Phase 1A Archaeological Assessment may not necessary.
- If necessary, prepare a work plan and upon review by NYCLPC and the New York State Historic Preservation Office (SHPO), implement a Phase 1B Archaeological Field Investigation. Results of the study will be documented in the DEIS.
- Map and briefly describe known NYC, S/NR-listed and eligible resources in the study area. Through research and field inventory, determine if any buildings in the study area not

already listed or determined eligible meet the criteria for S/NR eligibility and/or designation as a NYC Landmark. Prepare Historic Inventory Forms for these properties, if they exist, and submit to NYCLPC and SHPO for determinations.

- Describe the potential for changes to architectural and archaeological resources of the study area in the future without the Proposed Action.
- Assess the Proposed Action's impacts on known or potential archaeological and architectural resources direct effects as well as visual and contextual impacts.
- If needed, develop mitigation measures to avoid any significant adverse impact in consultation with NYCLPC and SHPO.

DSNY has committed to perform archaeological monitoring of the UPS Equipment Staging Lot in accordance with a recommendation by NYCLPC.

3.6 Urban Design/Visual Resources

The new garage would be constructed within the general building forms that have recently been constructed and are being built in lower Manhattan. The uniform street wall would be assessed with respect to compatibility with the surrounding area built forms. The height and uniformity of the approximately 147 to150-foot high structure would potentially block some views from publicly accessible locations. The garage would house the UPS trucks and semi-trailers that are regularly parked in the existing open, fenced parking lot.

According to the *CEQR Technical Manual*, a detailed assessment of urban design and visual resources is performed when a proposed project would demap an active street, alter block form or would result in structures substantially different in height, bulk, size, scale, use or arrangement than the future condition without the Proposed Action. The Proposed Action would not meet these thresholds, and therefore a detailed assessment would not be presented in the DEIS. A more generalized, qualitative discussion would be provided, and a comparison made with the future No Build that assumes as-of-right commercial development on the site.

• Based on field visits, the study area's urban design and visual resources will be generally described through photographs and text. The built features and visual resources, including view corridors, if any, will be described.

- Expected changes based on the planned developments will be described as they might affect the study area in the future without the Proposed Action.
- The discussion would evaluate the potential effects on urban design and visual resources expected to result from the Proposed Action.

3.7 Natural Resources

The project's two parcels are located in an urban environment, removed from any designated wildlife refuges, wetlands or other threatened or endangered species habitats. The already developed or paved and graveled sites are devoid of significant natural resources. Therefore, significant adverse impacts to natural resources from the Proposed Action would not be expected. Consequently, no extensive analysis is warranted for the DEIS according to *CEQR Technical Manual* criteria.

There would be no reasonable likelihood of adverse effects on the Hudson River Marine Estuary (water area of Hudson River Park from West 59th Street to Chambers Street) from construction or operation of the Proposed Action. The new garage and Salt Shed design includes flood control gates. The wash water from the garage would pass through an oil/water separator and then to the city's sanitary sewer system for treatment. Construction would include implementation of a Stormwater Pollution Prevention Plan to control site runoff.

Existing resources in the general vicinity would be mapped and generally described. Hudson River Park resources would also be noted.

3.8 Hazardous Materials

The DEIS will consider the project's potential to cause adverse impacts related to hazardous materials. Fuel and lubricant will be stored in underground tanks equipped with leak detection systems in accordance with federal and state regulations. Disposal of waste oils will be discussed.

The project area history will be examined to determine the potential for the presence of hazardous or contaminated materials in the project area. A Phase I Environmental Site Assessment (ESA) in accordance with ASTM (1527-05) guidelines will be prepared. The general approach will be in accordance with the guidance provided in the *CEQR Technical Manual*.

Work tasks will include:

- Review of historic maps, records and atlases (e.g., Sanborn maps, New York City Department of City Planning (NYCDCP), NYC Buildings Department, aerial photographs, etc.) to determine the land use history of the site and area.
- Research Federal and State databases (e.g., Superfund, CERCLA, New York State Department of Environmental Conservation, etc.), including registered underground storage tanks, waste disposal sites, hazardous waste generators and treatment facilities, hazardous substance releases. An area of up to 0.25 mile of the sites will be evaluated.
- Perform a visual site inspection for any evidence of contamination, including the presence of drums, tanks, stained soils, stressed vegetation and illegally dumped or stored materials.
- Assess the potential for contamination of soil and groundwater in the project area and the potential need for site testing based on the land use history, review of records, and current site conditions.
- The results of the Phase I ESA and recommendations, if any, for supplemental Phase II testing will be summarized in the DEIS. If needed, a Phase II Workplan will be prepared and implemented, with NYCDEP approval, prior to construction at the site.

3.9 Waterfront Revitalization Program

The proposed Manhattan 1/2/5 Garage Complex site and the Salt Shed site are located within the designated New York City coastal zone boundary and are subject to a Local Waterfront Revitalization Program (LWRP) Consistency Review. The proposed garage and shed would not be water-dependent uses, nor would they be located immediately adjacent to surface waters. The ten policies of the LWRP are used as the basis for the evaluation of discretionary actions in the City's designated Coastal Zone. The analysis will consist of a review of the policies and assessment, as applicable, and of the Proposed Action's consistency with the policies. A LWRP Consistency Assessment Form will be included in the DEIS.

3.10 Infrastructure and Energy

The proposed garage is a project that would not generally pose significant issues with regard to infrastructure services such as energy, water supply and sewage generation based on its scale and

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nature. Only a minor amount of additional stormwater would be expected as the proposed garage site is already partially paved. Nonetheless, the demand for these services on the capacity of existing infrastructure will be estimated.

- The existing water supply system and planned changes will be described. Water demand for the proposed garage will be estimated using the *CEQR Technical Manual* or other established data. The incremental demand will be evaluated with respect to the existing system adequacy (supply and pressure).
- The existing stormwater drainage system will be described. The volume of stormwater generated by the Proposed Action would be estimated.
- The Proposed Action stormwater plan and discharge would be described. Future stormwater flows will be assessed for impacts on the stormwater collection and disposal system.
- The existing sewer system that is part of the Newtown Creek WPCP service area will be described. Sanitary sewage generation for the proposed project will be estimated. The effects of incremental demand on the system will be assessed to determine if there would be any effects on the WPCP operations.
- The existing network of energy services electric, natural gas, etc. will be described. The energy use for the Proposed Action will be estimated and assessed for potential impacts on the energy supply systems.

All of the analyses will take into account the future No Build condition.

3.11 Solid Waste and Sanitation Services

A major objective of the Proposed Action is to improve DSNY garage infrastructure to support solid waste and sanitation services. No decrease in service or substantial change in solid waste management would result. The garage would serve primarily as a parking facility for DSNY vehicles. There would be an estimated total of 231 employees assigned to the new garage from the existing Manhattan District 1, 2 and 5 garages (a maximum of 108 employees would be there at peak operating conditions). Therefore, generation of solid waste and sanitation service needs would not increase as a result of the Proposed Action. The Proposed Action would not be expected to result in a significant adverse impact on New York City's solid waste and sanitation services, requiring a detailed quantitative analysis.

The potential effects on DSNY's municipal solid waste (MSW) and recycling collection, street cleaning and snow removal operations will be assessed qualitatively. Consistency with the City's Comprehensive Solid Waste Management Plan (SWMP) will be discussed.

3.12 Traffic and Parking

The Proposed Action will generate more than the *CEQR Technical Manual* screening analysis threshold of 50 passenger car equivalent (PCE) trip ends in the facility's peak hour, and so a detailed traffic analysis will be presented to determine whether the impacts to traffic would be significant. The DEIS will assess traffic and transportation-related issues associated with the changes in travel patterns resulting from the Proposed Action. The analysis will include a description of the existing conditions, a projection of future conditions, identification of any potential significant adverse impacts as per *CEQR Technical Manual* criteria, and feasible mitigation measures. Seasonal use of the Salt Shed will be assessed. It will be assumed that salt operations would occur six to ten times during the year, and only during winter storm emergencies.

Traffic data collected in June 2005 and additional supplemental traffic data will be utilized in this study. Automatic Trip Recorders (ATRs) were installed and data collected over the course of four days at eight locations in the project vicinity, including Clarkson Street, West Street (3 locations), West Houston Street, Washington Street, Spring Street, and Canal Street. Manual counts of intersection turning movements were completed at eight locations, including Canal Street (two directions), Spring Street (two locations) West Houston Street (two locations), Clarkson Street and 12th Avenue for the 6:00AM to 8:00AM and 2:00PM to 4:00PM periods. Additional traffic data may be collected to facilitate this analysis at locations where it may be required, or in support of the air quality analyses. PCEs will be used for all trucks. The location of intersection and roadways studied are shown in Figure 7 – Roadway Network and Monitoring Locations.

The traffic and parking studies will include these tasks:

• Develop Trip Generation Projections - A projection of the vehicle activity that will be generated by the Proposed Action will be made. Trip generation estimates will be developed utilizing existing operational data at the existing facilities to be consolidated, and projections incorporated into the 2004 Environmental Assessment Statement (EAS) entitled "Delivery of Municipal Residential Waste from Manhattan to Facilities in New Jersey" (CEQR No. 05-DOS002M) and other more recent and applicable documents, including the 2005 FEIS for the



1200 MacArthur Boulevard Mahwah, New Jersey 07430 (201) 529-5151 (1/201) 529-5728	Proposed Manhattan District 1/2/5 Garage Complex	Figure 7 Roadway Network
	City of New York Department of Sanitation	Locations June 2007

City's new SWMP. These projections will be prepared for the AM and PM peak activity periods of the garages. An hourly (24 hour) trip generation table will also be presented.

- Distribute Trips and Assign Peak Hour Vehicle Activity Peak period vehicle traffic will be assigned to the roadway network. Routes to and from the proposed facilities will be identified. Existing garage activity will be removed from the roadway network, with the activity associated with the proposed site added to the roadway network. Vehicle trips from the existing garages, as well as any displaced uses, will be removed from the roadway network to quantify the net change in traffic volumes. The resulting projected net increases (or decreases) in vehicle volumes will allow identification of specific locations where traffic impacts, if any, would most likely occur, as well as allow documentation of the anticipated lack of a net increase in vehicle trip activity region-wide. Specific locations where significant increases in traffic volumes are identified will be analyzed in detail to determine the potential for significant impacts and, if necessary, development of appropriate mitigation measures.
- Data Collection and Reduction Up to ten (10) intersections will be analyzed. Traffic data was previously collected in 2005. Key analysis locations were identified and a thorough data collection program to establish existing traffic levels, operations and geometric conditions was completed. This program included manual intersection turning movement counts, installation of ATRs and an inventory of existing geometric conditions and traffic control.

Intersection turning movement counts were conducted during the two site's peak two-hour periods. Traffic volumes were recorded by movement in 15 minute intervals and classified as light, medium or heavy vehicles. The counts were conducted on a typical weekday (Tuesday through Thursday).

Concurrent with the manual turning movement counts, ATRs were installed for a four-day period concurrent with the intersection turning movement counts. The ATRs recorded traffic volumes, by direction, in 15-minute intervals. The data was utilized as control points for verification of the intersection turning movement counts, and determination of roadway peak hours. ATRs were installed at up to eight (8) locations, which were determined subsequent to identification of the locations most likely to be affected by the Proposed Action.

As input into the operational analysis, all pertinent geometric and control parameters at the analysis locations will be measured in the field. Data items to be collected include: location

and type of traffic control devices; traffic signal phasing and timing; number and utilization of travel lanes; lane widths; parking restrictions; bus stop locations; etc. Official traffic signal timing and phasing will be obtained from the NYC Department of Transportation (NYCDOT) for incorporation into the analysis.

- Characterize Existing Conditions/Operations Utilizing the results of the field data collection program, the study area intersections will be analyzed for capacity and level of service. As per CEQR guidelines, the analysis will be conducted following the procedures set forth in the "2000 Highway Capacity Manual". Results of the analysis will be tabulated for the AM and PM site peak hours.
- Project Future No Build Traffic Volumes/Operations Future No Build traffic volumes on the study area roadway system will be projected to the project's anticipated completion year. The projections will account for: standard background traffic growth rates; site specific trip generation anticipated from as-of-right commercial development of the UPS Staging Lot; traffic volumes generated by specific other developments within or proximate to the study area; and the effects of any significant planned changes in the transportation system infrastructure. Under the future No Build, operations for Districts 2 and 5 would continue to be based on the Gansevoort Peninsula (2 Bloomfield Street), while District 1 operations would remain at 553 Canal St./297 West St. UPS Staging Lot operations would continue with commercial development above.
- Utilizing the projected No Build traffic volumes, the study area intersections will be analyzed for capacity and level of service under the future No Build condition. As with the existing condition analysis, the analysis will be conducted following the procedures set forth in the "2000 Highway Capacity Manual". Results of the analysis will be tabulated for the two analysis peak hours. An hourly trip generation table will also be prepared.
- Build Condition Traffic Volumes/Operations Proposed Action-induced vehicle trip generation, distribution and assignment will be addressed, by component, under "Trip Generation" and "Trip Distribution/Assignment of Peak Hour Vehicle Activity". The operational condition that has the greatest potential for traffic impacts will be determined and assessed (e.g., summer operations, winter operations with use of salt shed). Based upon the results of the latter, the changes in vehicle activity will be superimposed on the future No Build traffic volumes.

- Utilizing the projected traffic volumes, the study area intersections will be analyzed for capacity and level of service under the future Proposed Action condition. The results of this analysis will be compared with the results of the future No Build condition analysis to determine the effect of site related traffic volumes on the study area. Significant impacts, if any, as defined in the *CEQR Technical Manual*, will be identified.
- Mitigation of Significant Impacts If significant impacts are identified, suitable measures to mitigate the impacts will be developed. These measures could range from simple re-timing of existing traffic signals, vehicle rerouting, lane restriping to construction of physical improvements, such as addition of exclusive turn lanes.
- Identify Input Air Quality and Noise Analysis Subsequent to quantification of the net change in traffic volumes and review of the operational analysis results, locations where detailed air quality and noise modeling are required will be identified. These locations will be identified based upon the criteria set forth in the *CEQR Technical Manual*. In general, for locations where increases in traffic volumes will effectively double the Passenger Car Equivalents (PCEs) passing by a sensitive land use, a detailed noise analysis will be required. Similarly, detailed air quality analysis (Section 3.14) will be required at intersections where the increase in PCEs passing through the intersection exceeds CEQR defined thresholds and the intersection is expected to operate at or below specific level of service thresholds. Results of the traffic operational analysis will be required.

Travel speed and delay runs will be conducted along roadways where detailed air and/or noise analysis is required. Travel speed and delay runs, if needed, will be conducted during the peak activity periods utilizing the floating car method for up to four corridors. These data will be utilized as input to the detailed air quality and/or noise modeling.

• Parking - On-street parking proximate to the site is limited, with a majority of the surrounding roadways subject to parking prohibitions during the day. DSNY vehicles currently park on certain local streets due to inadequate space at the Manhattan District 1 Garage. Sufficient parking will be provided on-site in the Manhattan 1/2/5 Garage Complex for the use of DSNY and UPS employees and visitors, freeing up space on local streets. UPS presently provides all necessary employee parking on the roof of the Package Distribution Building. Peak parking demand under the future No Build Condition and the Proposed Action will be compared with the anticipated parking supply to determine if the Proposed Action would cause a reduction in available parking spaces of 25 or greater. In Manhattan

south of 60th Street, reductions in parking supply are to be disclosed, but are not classified as significant impacts. Therefore, a detailed off-site parking analysis is not warranted.

3.13 Transit and Pedestrians

The proposed Garage Complex will accommodate all DSNY vehicles assigned to Manhattan District 1 that currently must be parked on the street, where they may cause conflicts with traffic and pedestrians. A small increment of pedestrians – employees traveling to the garage site via mass transit – may occur. Therefore, a screening level analyses will be performed, taking into account Proposed Action trip generation, Future No Build traffic volumes, adjacent parks, and any relevant uncontrolled pedestrian crossing locations.

The pedestrian evaluation will focus on the sidewalk and crosswalks proximate to the intersections of Spring Street/West Street (Route 9A), Spring Street/Washington Street and Canal Street/Washington Street. The transit analysis will use available data from the NYC Metropolitan Transit Authority (MTA) – services, peak ridership, etc. Based upon the results of the trip generation and modal split analysis conducted previously, the ability of the existing transit services to accommodate the increased demand will be determined, as applicable.

3.14 Air Quality

The air quality studies will involve both mobile and stationary source analyses. The mobile source air quality impact analysis will address the effect of traffic generated at and on the garage site and specific off-site locations in the study area. For stationary sources, the air quality studies will examine the effects of emissions from DSNY trucks and heating / ventilation equipment. No other emissions from Garage Complex and Salt Shed operations are anticipated. As noted above, DSNY proposes that all of the diesel refuse and recycling collection trucks at the proposed Manhattan District 1/2/5 Garage utilize B5 Biodiesel fuel (5% biodiesel content) and be equipped with Clean Diesel technology consisting of USEPA Certified 2007 Model Year-compliant technology or better, with after-treatment technology such as diesel particulate filters and Exhaust Gas Recirculation that have been shown to reduce vehicle emissions to levels comparable to those from trucks fueled by compressed natural gas. In addition, most of the DSNY vehicles garaged at the facility would use alternate fuels (such as ethanol E85 or hybrid gas/electric). Local law requires ultra low sulfur diesel fuel and Best Available Technology and Best Available Retrofit Technology for applicable vehicles to further reduce vehicle emissions, including non-road vehicles (front loaders). In addition, the new garage boiler would be fueled with natural gas. A summary of potential other air

pollutants associated with diesel emissions will be presented, as applicable, from the 2005 Solid Waste Management Plan FEIS.

Potential air quality impacts will be assessed in relation to applicable state and federal air quality standards as well as New York City *de minimis* criteria.

Analyses will include the following:

Mobile Source Analyses

- Gather existing air quality data. Summarize existing ambient air quality data for the study area from the nearest NYC Department of Environmental Protection (NYCDEP) and/or New York State Department of Environmental Conservation (NYSDEC) monitoring stations. The most recent set of available meteorological data will be used.
- Based on the results of the traffic analysis (Section 3.12), determine the need for a carbon monoxide (CO) microscale analysis per CEQR requirements (if 100 or more trips are generated at a specific location). If necessary, a refined mobile source analysis will be performed. CO is not an issue for diesel vehicles.
- Based on the frequency and duration of use, salt shed operations will be assessed.
- Three most impacted intersections based on delay and volume increases will be identified and used in CO modeling. MOBILE 6.2 will be used for emission rates and CAL3QHC (Version 2) will be used for the dispersion modeling.
- Calculate the 1- and 8-hour CO concentrations for existing, future without the Proposed Action and with the project.
- Predicted overall and incremental increases in CO levels will be compared to the *de minimis* criteria and National Ambient Air Quality Standards (NAAQS). If analysis with screening level CAL3QHC model results in *de minimis* impacts or exceedances of the CO standard, the CAL3HCR model will be used.
- Evaluate mitigation measures for any significant adverse air quality impacts.
- Assess the Proposed Action's consistency with the State Implementation Plan (SIP).

• Determine if the net number of heavy duty trucks exceeds the City screening threshold for a $PM_{2.5}$ analysis to reflect the revision of the NAAQS for 24-hour $PM_{2.5}$ from 65-µg/m³ to 35-µg/m³. If so, a $PM_{2.5}$ analysis will be conducted in consultation with NYCDEP, taking into account DSNY's use of 2007 Clean Diesel technology and using CAL3QHCR and the MOBILE 6.2 model with vehicle-specific inputs, as appropriate, to compute vehicular emissions for the dispersion modeling. Mobile source $PM_{2.5}$ will be evaluated using available NYCDEP and NYSDEC guidance criteria, where necessary, combined with stationary source $PM_{2.5}$ impacts to determine if criteria are exceeded.

Stationary Source Analyses

- Potential impacts from emissions of the Proposed Action's heating/ventilation equipment will be assessed. As noted above, the garage's boilers will be fueled by natural gas. The Salt Shed would not be heated. The *CEQR Technical Manual* screening methodology will be used to determine the potential for significant impacts.
- If needed, a detailed stationary source analysis using the USEPA's AERMOD dispersion model will be performed. One year of meteorological data from Newark Liberty International Airport and upper air data from Brookhaven, New York will be used (Tier I). CO, sulfur dioxide, nitrogen oxides and particulate matter concentrations will be determined. Mitigation measures will be identified should standards or thresholds be exceeded.

Reference will be made to odor measurements from DSNY collection vehicles parked at a garage that were discussed in the 2005 Solid Waste Management Plan FEIS.

3.15 Noise

The assessment of potential noise impacts on sensitive land uses that could be affected by onsite operations and off-site project generated traffic along the transportation network will be conducted. The methodologies used will be consistent with those contained in the *CEQR Technical Manual*. The Traffic Noise Model (TNM) will be used, where appropriate.

- Appropriate noise descriptors from the *CEQR Technical Manual* criteria will be selected to describe the noise environment and the potential impact of the proposed project.
- Sensitive receptor sites for detailed analysis based on those locations where the proposed project would have the greatest potential to affect ambient noise levels (e.g., where traffic

generated results in a doubling of PCEs) will be selected. Sensitive receptor sites include such uses as residences, parks/playgrounds, schools, churches and other places of worship, outdoor performance facilities, indoor performance facilities with windows, health care facilities, libraries and community centers.

- Existing noise levels in the study area will be determined based on noise monitoring (20minute measurements). Measurements will be made during the time period when the increase in truck traffic would be greatest, compared to existing traffic (Saturday pre-dawn) at up to four representative locations. Hourly L_{eq} and L₁₀ values and the 24-hour L_{eq} and L_{dn} values will be calculated.
- Future noise levels without and with the Proposed Action will be determined at each receptor location. The analysis will be conducted for both on-site noise sources (equipment and operations) and off-site mobile (vehicular) sources. Noise levels will be determined using existing noise levels, acoustical fundamentals, and mathematical models.
- Total noise impact from stationary and mobile sources, as appropriate, will be calculated.
- Heavy Trucks, with a gross vehicle weight of over 26,400 pounds will be considered to be equivalent to 47 PCEs, unless relevant studies demonstrate that a different PCE conversion factor is appropriate.
- Existing noise levels and future noise levels, with and without the proposed project, will be compared with various noise standards, guidelines and other noise criteria, including the *CEQR Technical Manual*, New York City *Ambient Noise Quality Criteria*, the New York City *CEPO-CEQR Noise Standards*, and the New York City *Noise Performance Standards*.
- If necessary, recommendations for measures to attain acceptable noise levels will be made.

3.16 Construction Impacts

Construction of the Proposed Action will be described, including the likely schedule and estimate of on-site activity. The analysis will focus on areas where construction could pose specific environmental issues; unless otherwise specified, the analyses will be qualitative in nature. Technical areas to be analyzed include:

- Transportation Systems This assessment will consider effects on transportation services (loss of traffic lanes, sidewalks, etc.), if any, during construction, and identify the effects of vehicle trips from construction workers and equipment. The analysis will be partially quantitative and partially qualitative. A discussion of the construction plan and any appropriate steps to minimize potential impacts will be considered and included in the Mitigation Measures chapter. Construction of the garage will limit the availability of the site to existing UPS operations for about twelve months. A discussion of the UPS plan to operate during this interim period (on the roof of its existing Package Distribution Facility) will be presented.
- Air Quality This section will contain a qualitative discussion of construction activity, including fugitive dust and on-site diesel equipment. Potential effects from mobile source emissions at nearby sensitive receptors and congested intersections will be analyzed, as applicable. The applicability of recent local requirements for construction equipment emission controls for City projects will be discussed. Methods to control on-site emissions from construction and construction equipment will be identified.
- Noise The construction noise impact section will contain a qualitative discussion of noise from each phase of construction activity based on the equipment to be used. Reference will be made to construction noise standards and control measures imposed by the City's new Noise Code. Measures to reduce impacts will be considered and described in the Mitigation Measures chapter, as needed.
- Hazardous Materials In coordination with the assessment of potential impacts from Hazardous or Contaminated Materials, if any, a summary of actions to limit exposure of construction workers and nearby residents to potential contaminants from on-site work would be prepared, if necessary. Should a construction Health & Safety Plan be needed, it too would be discussed.
- Infrastructure This section will contain a qualitative discussion of any disruption to infrastructure and measures that will be taken to minimize them.
- Other Technical Areas Other areas of potential concern, as appropriate, will be discussed for potential construction-related impacts.

3.17 Public Health

Other analyses contained in the DEIS will address issues related to public health such as air quality and emissions, solid waste and sanitation, transportation safety, noise, and hazardous materials. This chapter will summarize these analyses and conclusions with respect to public health. Reference will be made to research concerning diesel vehicle emissions and asthma that was presented in DSNY's FEIS for the Solid Waste Management Plan in 2005, and the effect of recent local and federal legislation in reducing emissions from DSNY vehicles.

3.18 Mitigation Measures

As noted in certain of the CEQR impact categories discussed above, if significant adverse project impacts are identified in the various impact category analyses, measures to avoid and/or mitigate those impacts to the extent practicable will be described, as appropriate. Where such impact, if any, could not be mitigated practicably, it would be disclosed as an unavoidable significant adverse impact.

3.19 Summary Chapters

The DEIS will contain an Executive Summary describing the Proposed Action, positive and adverse impacts, proposed mitigation, and alternatives considered.

An assessment of resources - natural and man-made - that will be irreversibly and irretrievably committed to the construction (e.g., building materials) and operation (e.g., energy) of the Proposed Action will be identified. A discussion of the Proposed Action's design features with respect to environmental sustainability will be presented.

4.0 ALTERNATIVES

As per the *CEQR Technical Manual*, the alternatives analysis of the EIS is intended to depict and analyze alternatives that are likely to eliminate or reduce significant impacts expected to be generated by the Proposed Action. Pending further analysis and confirmation, DSNY has identified potential significant adverse impacts with respect to traffic, air and noise.

A screening of various potential alternatives will be discussed and several alternatives to the Proposed Action will be analyzed in order to permit a comparison of potential significant environmental impacts. These alternatives, with varying levels of analysis as appropriate, will include the following:

1. No Action Alternative

Pursuant to SEQR/CEQR, the No Action Alternative must be analyzed. The City is legally required to remove its garage facilities and salt shed from the Gansevoort Peninsula. Accordingly, the DEIS will assume that remaining there would not be a viable option but will nevertheless discuss the Future No Build Condition with Districts 2 and 5 still at 2 Bloomfield Street and District 1 operations still at 553 Canal St./297 West St. As discussed previously, the DEIS will present future conditions without the Proposed Action utilizing a Future No Build "soft site" approach, in accordance with the *CEQR Technical Manual*, based on the likelihood that by 2012 the proposed Manhattan District 1/2/5 Garage Complex site would be fully developed as-of-right for commercial purposes, if the Proposed Action were not built.

2. DSNY as Sole Occupant of Proposed Manhattan 1/2/5 Garage Complex

A second Alternative will analyze full DSNY occupancy of the proposed Garage site, without UPS on the ground floor. This would permit a smaller building and fewer trip ends from the complex. UPS staging operations would occur on the roof of their existing Package Distribution Facility.

3. Garage, Separate Truck Washing/Refueling Facility, and Washington Street Salt Shed

A third Alternative to be considered would be the Proposed Manhattan 1/2/5 Garage Complex on the same site as the Proposed Action, but would involve a Truck Washing and Refueling Facility on the site of the current Manhattan District 1 Garage, and would include a Salt Shed on the site of a private parking garage at 575 Washington Street, which would be demolished (This was the original Proposed Action before it was modified during the Scoping process).

4. Retain DSNY Manhattan District 1 Garage, Relocate Garages for Manhattan Districts 2 and 5

A fourth Alternative will discuss DSNY remaining at the Manhattan District 1 Garage, but relocating Districts 2 and 5 to the vicinity of West 30th Street between 11th and 12th Avenue. This alternative would be addressed qualitatively, with references to analyses done for the Hudson Yards Rezoning FEIS in 2005 and related approvals, which included the City's proposal at that time to

construct two DSNY garages below-grade at that location. Reference will also be made to the alternative DSNY garage sites considered in that FEIS.