

**PROPOSED AMENDMENTS TO RULES CONCERNING THE SITING
REQUIREMENTS FOR WASTE TRANSFER STATIONS**

**SUPPLEMENTAL ENVIRONMENTAL STUDIES
TO THE ENVIRONMENTAL ASSESSMENT STATEMENT FORM**

SEPTEMBER 2004

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APPENDICES

- A.** Proposed Amendments to Department of Sanitation's Rules Governing the Siting of Transfer Stations
- B.** Analysis of Potential Cumulative Effects through Proximate Siting of More Than One Waste Transfer Station
- C.** Summary Tables of Existing Transfer Stations
- D.** New York City Waterfront Revitalization Program Consistency Assessment Form

1.0 DESCRIPTION OF ACTION

1.1 Purpose and Need

Introduction

The proposed action would revise the siting rules administered and enforced by the New York City Department of Sanitation (DSNY) for private solid waste transfer stations. As explained in greater detail below, the action is in part precipitated by a legal challenge to siting rules promulgated by DSNY in 1998. The proposed rules appear in Appendix A, attached.

Background

DSNY collects and disposes of municipal solid waste (MSW) generated by residences, institutions, not-for-profit organizations, lot cleaning operations, and other New York City agencies. Private waste carting companies collect and dispose of MSW from commercial sources in the city. Both DSNY and commercial waste handlers recycle “source separated” materials including paper, cardboard, metal, glass, and plastic.

The collection and disposal of MSW from households and businesses and waste from construction and demolition projects (C&D debris) in New York City (“the City”) involves the delivery of waste to “transfer stations” where the waste is consolidated after any processing and transferred to larger vehicles (long-haul truck, rail car or vessel) for further transport and ultimate disposition (such as resource recovery, landfill, and/or recycling). Some waste is transported directly for disposal at facilities such as regional waste to energy facilities, without passing through a transfer station.

DSNY regulates three kinds of transfer stations: *Putrescible* (receiving organic waste having the tendency to decompose and cause odors, such as household and institutional garbage and commercial waste from supermarkets, restaurants and the food processing industry); *Non-putrescible* (receiving waste not having the tendency to decompose and cause odors, such as C&D debris waste); and *Fill Material* (receiving clean fill such as dirt, rock, concrete and masonry waste, typically from excavations and demolition work). Much C&D debris, and most fill material waste, is eventually recycled, often after processing such as sorting, crushing, and/or screening, which may take place in open

yards. Putrescible transfer stations, by contrast, must be completely enclosed under current regulations.

After 1993, New York City had only one in-city disposal site: the Fresh Kills Landfill in Staten Island. To extend the life of Fresh Kills, in 1988 DSNY raised the tipping fee for commercial MSW disposal at Fresh Kills and at DSNY's Marine Transfer Stations. As a result, private waste handlers began increasingly to cart the city's commercial MSW to local private transfer stations for subsequent export to out-of-city disposal facilities, in order to save costs. DSNY continued to transport most of the City's residential waste via barge to Fresh Kills. In 1996, the State Legislature mandated the closure of Fresh Kills by January 1, 2002. The following year, DSNY began phasing down its use of Fresh Kills and driving its collection trucks either directly to disposal facilities outside the city or to private waste transfer stations within or outside the city, where the MSW is transferred to long-haul trucks (or trains) for transport to out-of-city disposal facilities such as landfills and resource recovery facilities.

Imposition of Permit Requirements for Solid Waste Transfer Stations

The City's 1988 increase in the tipping fees charged to commercial customers at DSNY's Marine Transfer Stations led to a growing number of private waste transfer stations in certain industrially zoned districts. Problems with such facilities led to the passage of Local Law 40 of 1990 (LL40/1990), which provided for stricter permitting requirements and enhanced enforcement authority concerning such facilities. Among other things, LL40/1990 required DSNY to adopt rules for the siting of transfer stations "in relation to other such facilities, residences and/or other premises as may be appropriate." DSNY undertook rulemaking and enforcement measures which, together with consolidation in the industry, has led to a reduction in the number of transfer stations from 153 in 1990 to 58 facilities today with 65 permits (see Appendix C), of which roughly one third are for putrescible waste, one third for C&D debris, and one third for fill material.

Sections 753 and 1043 of the New York City Charter and sections 16-130, 16-131, 16-131.1 and 16-131.2 of the New York City Administrative Code give the Commissioner of the Department of Sanitation (DSNY) the authority to establish requirements appropriate for protection of public health and the environment concerning the siting of solid waste transfer stations. In 1990 and 1991, DSNY adopted rules for putrescible waste transfer stations. These rules, and similar rules for non-putrescible transfer stations adopted in

1994, require existing and proposed transfer stations to obtain permits from DSNY. In conjunction with the permit application, information and analysis detailing the potential impacts the facility and operation might have on the surrounding environment must be submitted by the applicant for the waste transfer station permit, sufficient to allow the lead agency to conduct the environmental review required by law, including the preparation of an Environmental Assessment Statement.

Applicants must also comply with applicable zoning provisions, including siting in manufacturing zones, performance standards, and certain restrictions in proximity to residence districts, and with New York State Department of Environmental Conservation (DEC) regulations. The Environmental Conservation Law establishes the DEC permitting authority. Pursuant to that authority, DEC has promulgated 6 NYCRR Part 360, which sets forth requirements for transfer station permit applications.

In a 1997 decision involving litigation brought by certain community groups, the court ruled that the City's rules for transfer stations did not sufficiently address the siting of transfer stations "in relation to other such facilities, residences and/or other premises as may be appropriate" as required by Local Law 40 of 1990. In that decision, *Neighbors Against Garbage v. Doherty*, 245 AD2d 81 (1st Dept. 1997), the Appellate Division court expressed the view that LL40/1990 requires siting rules that would address the "clustering" of transfer stations in certain parts of the city.

1998 Waste Transfer Siting Rules

In 1998, DSNY promulgated new transfer station rules that included additional restrictions on the locations in which transfer stations could be sited, restrictions on transfer station expansion, and limitations on the hours of operation of transfer stations. Additionally, the rules required transfer stations to submit transportation plans with all permit applications, and required all permitted facilities to certify annual compliance with applicable zoning performance standards (such as noise, odor, and dust). With certain exceptions, the rules included a general prohibition on the siting of new putrescible and non-putrescible transfer stations in M-1 zones and within 400 feet of residential districts and sensitive receptors such as public parks and schools. The rules also prohibited the siting of a new non-putrescible transfer station within 400 feet of an existing non-putrescible transfer station. These rules constituted a new subsection to Chapter 4 of Title 16 of the Rules of the City of New York.

1999 Legal Challenge to Waste Transfer Station Siting Rules

In 1999, a coalition of community organizations and individuals commenced a proceeding in New York State Supreme Court challenging the 1998 siting rules adopted by DSNY (Organization of Waterfront Neighborhoods v. Carpinello, Index 103661/1999). The Court raised concerns regarding the sufficiency of the 1998 siting rules in light of the *Neighbors Against Garbage* decision, including the potential for concentrations of waste transfer stations in particular areas and the need for distance restrictions between putrescible transfer stations. As a result, DSNY committed to promulgating new-siting rules, while the Court retained jurisdiction of the lawsuit.

As the 1998 siting rules litigation was unfolding, the City of New York in 2000 approved modifications to the City's *Comprehensive Solid Waste Management Plan (SWMP)*. The modifications reflected the closing of the Fresh Kills landfill in Staten Island and proposed the implementation of a long-term rail and vessel export system for the City's publicly managed solid waste. Also in 2000, the New York City Council enacted Local Law 74 that required DSNY to conduct a comprehensive study of New York City's existing system for managing commercial putrescible and non-putrescible waste. The study was issued in April 2004.

In 2003, DSNY adopted interim rules that added §§ 4-36, 4-37 and 4-38 to Chapter 4 of Title 16 of the Rules of the City of New York to temporarily restrict the siting of solid waste transfer stations. The interim rules went into effect March 21, 2003 and as extended remain effective until October 20, 2004. DSNY took this time to complete the Comprehensive Commercial Waste Study and develop permanent siting rules. In general, the interim siting rules temporarily prohibited the following:

- New construction and demolition debris transfer stations.
- Expansion of existing construction and demolition debris transfer stations.
- New fill material transfer stations.
- Expansion of existing fill material transfer stations.
- New putrescible solid waste transfer stations that do not utilize rail or vessel.

1.2 Proposed Action

The proposed action would amend the Rules of the City of New York on the siting of Waste Transfer Stations as discussed below. The proposed action is generic and would apply citywide.

Amendments to Rules Governing Siting Requirements Regarding Waste Transfer Stations

As detailed in Appendix A, the Department of Sanitation (DSNY) is proposing to amend sections #4-31, 4-32, 4-33, 4-34 and 4-35 of chapter 4, subchapter C of Title 16 of the Rules of the City of New York. The proposed action would amend the rules governing the siting of solid waste transfer stations that were promulgated by DSNY in 1998. The proposed action would amend the Definitions (§ 4-31), Siting Requirements (§ 4-32), Hours of Operation (§ 4-33), Engineering Reports, Transportation Plans and Temporary Operating Authority (§ 4-34) and Variances (§ 4-35) sections of the rules governing the siting of solid waste transfer stations (See Appendix A for copy of the proposed amended rules). The amendments would prohibit a new waste transfer stations from siting closer than 400 feet to another transfer station, but would not apply to a new transfer station served by rail or vessel, provided at least 90% of the waste received is further transported by rail or vessel (rather than truck). The rules would also require that any new transfer station provide space on site for truck queuing. In addition, the amendments propose five categories of siting requirements, which vary by community districts depending upon the number of solid waste transfer stations that already exist in the community district. Thus:

1. In community districts with less than four (4) percent of the total number of the city's existing transfer stations, a buffer distance of 400 feet to sensitive receptors (i.e., residential districts, hospitals, parks and schools) would be required for new transfer stations, for increases in throughput capacity (unless the facility utilizes rail or water transport), and for site expansions, and M1 districts would be eligible for transfer stations. If such a community district has at least three transfer stations in M1 districts, no new transfer station would be permitted in an M1 district.
2. In community districts with at least four (4) but less than eight (8) percent of the total number of the city's existing transfer stations, the provisions of Category #1,

above, would apply, except a buffer distance of 500 feet to sensitive receptors would be required.

3. In community districts with at least eight (8) but less than twelve (12) percent of the total number of the city's existing transfer stations, the provisions of Category #2, above, would apply, except a buffer distance of 600 feet to sensitive receptors would be required for new transfer stations. In addition, new transfer stations would be barred from M1 districts.
4. In community districts with at least twelve (12) but less than sixteen (16) percent of the city's total number of transfer stations, the provisions of Category #3, above, would apply. In addition, any new facility must fully enclose the transfer and storage activities. Moreover, any new transfer station, and any existing facility seeking to increase its daily throughput tonnage (provided it is at least 500 feet from sensitive receptors), must obtain a corresponding offsetting reduction in the lawful permitted daily capacity of the same waste type (putrescible, non-putrescible or fill material) at another transfer station within the same community district. An exception would be made for a putrescible or C&D debris transfer station served by rail or water transportation that further transports from the facility by rail or vessel at least 90% of the solid waste received, in which case the required offset for a new facility or throughput increase can be met either by C&D debris waste or by putrescible waste tonnage, and need not match the waste type for which new capacity is sought.
5. In community districts with sixteen (16) percent or more of the total number of the city's existing transfer stations, the provisions of Category #4, above, would apply, except the buffer distance from a new facility to sensitive receptors would be 700 feet.

Based on current DSNY figures, Category #2 would apply to Queens Community Districts 2, 5 and 12 and Staten Island Community District 2. Category #3 would apply to Bronx Community District 1 and Queens Community District 7. Category #4 would apply to Bronx Community District 2, and Category #5 would apply to Brooklyn Community District 1. The proposed rules also clarify that non-putrescible transfer stations in M1 zones may not receive waste (and associated truck traffic) at night, from 7 PM until 6 AM. This merely codifies DSNY's current enforcement practice. Finally, the proposed rules would also impose new variance standards: for existing facilities, the

action must result in an overall environmental benefit. For a new transfer station, the only potential variance would be in an M2 or M3 zone from the 400 foot buffer distance to another transfer station, and the variance standard would be a showing of no significant adverse environmental impact plus the applicant's commitment to environmentally protective measures that exceed regulatory requirements. Both standards are more protective of the environment than was the case under the 1998 rules.

1.3 Impact Screening

Prior to an assessment of specific types of potential impacts in Chapter 2, some general points about the effect of the siting rule amendments should be noted.

Through this action, new transfer stations and those seeking to increase capacity would be less likely than under the 1998 siting rules to cause potential environmental and neighborhood impacts. For that reason, the potential impacts of these changes are envisioned to be environmentally beneficial. For example, the rules would tend to reduce the potential for new and existing facilities to cause impacts to communities from noise, odor, and air pollution. The only potential exception to this is the financial effect of additional requirements on the private waste transfer industry, which CEQR considers under the category of socioeconomic impacts. A screening for socioeconomic impacts is conducted in Section 2.2.

Under the Department of Sanitation's proposed amendments to its siting rules, waste transfer stations may be located in M1 (light manufacturing) zoning districts in some community districts. This is the only element of the new rules less restrictive than the 1998 siting rules, which for permit applications received after October 1998 did not permit waste transfer stations to locate in M1 zones. Unlike the proposed rules, the 1998 rules would have allowed pending applications to avoid compliance with the siting rules. As a result, for example, the 1998 siting rules would have effectively allowed additional transfer stations in M1 zones even if a proposed facility was less than 400 feet from a sensitive receptor or if a community district already had three transfer stations situated in M1 districts. In contrast, the proposed rules prohibit in all community districts new facilities in M1 zones that are less than 400 feet from sensitive receptors and prohibit a new transfer station from being sited in a community district that already has three transfer stations situated in M1 districts.

Any new waste transfer station in an M1 zone would require a CEQR environmental review in order to evaluate its potential impacts. The analysis of the proposed actions included an examination of its potential cumulative effects from allowing multiple waste transfer stations in proximity to one another in an M1 zone where such proximate siting might theoretically occur within the city (see Appendix B).

To determine whether the proposed rules would reasonably lead to significant sitings of new transfer stations in M1 zones in proximity to each other or to one or more existing transfer stations, a thorough inventory was conducted of M1 zoning districts and existing waste transfer stations in all of the community districts where the new siting rules permit waste transfer stations. Then, the potential for proximate siting (using ¼ mile threshold, consistent with CEQR practices) of more than one such facility in each of these M1 zoning districts was determined. An initial screening took into account the proposed siting rules described above, and specifically the required distance separating waste transfer stations from each other and from sensitive receptors. Based on this screening, areas within the M1 districts were eliminated to the extent that locating a waste transfer station in these areas would violate the proposed siting rules.

A secondary screening was performed in subareas within M1 districts that were not eliminated from consideration in the initial screening. In this step, aerial photographs and land use data were used to identify potential sites where a waste transfer station might feasibly locate. The following guidelines were used:

- The site must be for the most part free of structures,
- The site must be vacant or clearly underutilized (e.g., surface parking lot, junkyard, etc.), and
- The site must be at least 20,000 square feet to allow for all operations to be contained on site.

In addition to these guidelines, general professional planning judgment was used. Sites within a New York City Economic Development Corporation (EDC) In-Place Industrial Park were eliminated from consideration. That EDC Program seeks to provide a high-grade industrial park environment for industrial enterprises within the city that is competitive with suburban industrial parks. Introducing a waste transfer station to an in-place industrial park would be inconsistent with the goals of the program, which would seek to add higher value-added manufacturing. If the site met all these criteria and there

did not appear to be any other clear obstacles to implementation, then it was considered to be feasible for waste transfer station siting under the proposed rules. However, cumulative effects are considered possible only in the following circumstances:

- Two feasible sites are identified within a M1 district, far enough away from one another to be permitted under the new rules, but close enough to potentially have cumulative effects (using a 1/4 mile, consistent with CEQR practice). In some instances, two sites closer than ¼ mile might be considered not to have cumulative effects because they were separated by a major barrier, such as a railroad cut or elevated highway.
- One feasible site and an existing waste transfer station are identified within a M1 district, far enough away from one another to be permitted under the new rules, but close enough to potentially have cumulative effects (1/4 mile). In some instances, two sites closer than ¼ mile might be considered not to have the potential for cumulative effects because they were separated by a major barrier, such as a railroad cut or elevated highway.

The detailed analysis, along with accompanying maps of M1 areas and existing waste transfer stations, is presented in Appendix B. Based on an investigation of each relevant Community District, only one M1 district was identified as having the potential for cumulative impacts. This was a very large M1 district in Staten Island Community District 3 located west of the West Shore Expressway, which contains large tracts of undeveloped land.

While the siting in proximity of more than one transfer station is theoretically possible in this location, it is not likely that this would happen in this area, given its relatively remote location from other areas of the city. In fact, industrial areas in Elizabeth, New Jersey are more accessible to most of New York City's commercial waste shed via I-278 than this part of Staten Island, and industrial land is available in abundance there. Staten Island itself is not a major producer of commercial waste due to its prevailing land use patterns. The fact that only one waste transfer station (Interstate Materials Corporation) has located in Staten Island Community District #3, despite the abundance of undeveloped land, provides an indication that it is not a particularly attractive area for waste transfer. Given the large amount of M2 and M3 land in this community district, a scenario involving multiple new stations in M1 districts in this area is very unlikely.

Even if multiple waste transfer stations sited in this M1 area, it is improbable that they would locate close enough to one another to create cumulative effects (1/4 mile), and the West Shore Expressway and Outerbridge Crossing approach would act as barriers between any such cumulative effects and any large-scale residential areas. This is because there is a great amount of undeveloped land here, and many of the lots are very large, providing ample opportunity and reason for multiple new waste transfer stations to maintain their distance from one another. Moreover, the proposed rules would not allow more than three facilities in an M1 zone in a community district, further limiting the potential for cumulative impacts. In the unlikely event that cumulative effects were to occur as a result of multiple facilities locating close to each other, it may be noted that the M1 district contains only a limited number of uses that might be adversely impacted. Those that exist are chiefly located in a small area of residential uses in the center of the district, on and around Sharrotte Road and Androvette Street. Other residential areas are separated from potential impacts of the waste transfer stations by the West Shore Expressway or Outerbridge Crossing approach. Based on these conditions, cumulative impacts, although possible, were judged unlikely to occur.

Having ruled out cumulative effects as something that can reasonably be expected to occur from the proposed action, the following chapter focuses on the potential impacts of individual new waste transfer stations implemented under the new siting rules amendments, as well as the impacts of operational rules amendments to existing stations.

2.0 POTENTIAL IMPACTS OF THE PROPOSED ACTION

2.1 Land Use, Zoning and Public Policy

A land use analysis typically characterizes the use and development trends in the areas that may be affected by the proposed action. Then the lead agency makes a determination as to whether the proposed action is compatible with or may change the existing land use conditions. The analysis considers an action's compliance with and effect on the area's zoning and other applicable public policies. Under CEQR, adverse land use impacts can occur if a proposed action includes incompatible uses that interfere with the proper functioning of the area or its land use patterns, or land uses that adversely alter neighborhood character. With regard to zoning and public policy, an action is considered to have a significant adverse impact if it creates a land use that does not comply with the underlying zoning, conflicts with public policies and plans for the site or the surrounding area, or results in significant changes to current regulations or policy.

The *CEQR Technical Manual* recommends that a proposed action be assessed in relation to land use, zoning and public policy. For each of these areas, a determination is made of the potential for significant impact by the proposed action. If the action does have a potentially significant impact, appropriate analytical steps are taken to evaluate the nature of the impact, possible alternatives and possible mitigation.

No significant adverse land use, zoning, or public policy impacts are expected as a result of this proposed action. The proposed action would amend the rules governing the siting of solid waste transfer stations. Compared to the siting rules promulgated by the Department of Sanitation in 1998, in most respects, the proposed siting rules place more restrictions on the siting of waste transfer stations, and would tend to lessen any potential impacts from the siting of additional transfer station capacity.

The proposed solid waste transfer station siting rules require a buffer distance between solid waste transfer stations and certain sensitive receptors. Sensitive receptors include residentially zoned areas, hospitals, parks and schools. The buffer distance requirement depends on the existing number of solid waste transfer stations in a community district. The buffer distance requirements range from 400 feet in community districts that have less than four percent of existing citywide solid waste transfer stations, to 700 feet for community districts that have 16 percent or more of the city's existing number of solid

waste transfer stations. The proposed transfer station siting rules also require that all new transfer stations have space for truck queuing on site and new non-putrescible stations sited in community districts that have 12 percent or more of the city's total number of existing solid waste transfer stations must be fully enclosed.

The proposed siting rules include offset requirements for new facilities in community districts that have 12 percent or more of the city's total number of existing transfer stations. In these districts, any new transfer stations and any application for an increase in capacity, must generally obtain a reduction in the lawful capacity of the same waste type at another transfer station (putrescible or non-putrescible) within the same community district by an equal or greater amount. However, in the same community district, any new putrescible or C&D debris transfer station located at or adjacent to a rail yard, rail spur, industrial track or vessel facility, from which at least 90% of all solid waste received is subsequently transported by rail or vessel, must obtain a reduction in the lawful capacity at another transfer station (putrescible or construction and demolition debris) within the same community district by a rate of one ton for every new ton of new capacity, but the offset need not be of the same waste type.

The proposed new siting rules for waste transfer stations allow for the siting of transfer stations in areas of the city that have an M1 zoning classification, with some exceptions. However, as further discussed in Appendix B, allowing transfer stations to be sited in areas with an M1 zoning classification is not likely to result in a potentially significant adverse impact on land use in the city. Solid waste transfer stations are a permissible use (Use Group 18) in M1 zones under the current *New York City Zoning Resolution*. Furthermore, the proposed new siting rules do not conflict with the current *New York City Zoning Resolution*. The rules do not require rezoning or changes to the zoning map or text amendments. The Zoning Resolution currently allows waste transfer stations to be sited in any of the three manufacturing zones (M1, M2, or M3).

The action would not conflict with current solid waste management public policy. Solid waste in New York City must be managed in accordance with the *Comprehensive Solid Waste Management Plan*. Actions that affect the generation or management of New York City waste need to be evaluated for consistency with the Plan, which favors the transport of solid waste by rail or vessel to reduce associated truck traffic. Pursuant to Local Law 74 of 2000, DSNY conducted a Comprehensive Commercial Waste Management Study of the existing system to manage commercial putrescible and non-

putrescible solid waste. The proposed rules are consistent with the findings of the *Comprehensive Commercial Waste Management Study*.

2.2 Socioeconomics

A socioeconomic assessment discloses the changes that are expected to occur as a result of the action and is used to determine if the changes are significant. For example, an action may cause an increase or decrease in the population of a specific area or surrounding areas, housing prices may rise or fall, or local businesses may be caused to close or may see an increase in activity. An action that imposes regulatory restrictions may, under certain conditions, have the potential to negatively impact the industry involved and indirectly negatively impact other industries.

The *CEQR Technical Manual* recommends a detailed assessment of socioeconomic conditions if an action displaces a residential population or the profile of the neighborhood becomes substantially altered. The *CEQR Technical Manual* recommends determining if the action significantly displaces businesses or employees or if the action results in new development that is markedly inconsistent with existing uses. The *CEQR Technical Manual* also recommends an evaluation of the potential impact of an action on the business conditions of a specific industry, either directly or indirectly, as well as the impact on employment and economic viability.

The changes to the siting rules under the proposed action will not contribute to the direct or indirect displacement of any residential population. Direct displacement of residents due to a new transfer station would be investigated as part of a CEQR evaluation for each individual facility. The new rules contain provisions that allow for siting in M1, M2, and M3 districts within certain Community Districts that contain less than 8% of existing citywide waste transfer stations, and in M2 or M3 districts in other Community Districts. Therefore, it is unlikely that any new facilities will directly displace any residential uses. Indirect displacement of residents could conceivably occur from the siting of a new waste transfer station if the facility consistently failed to meet regulatory requirements and thereby drove out residents of a residential neighborhood through its environmental impact. This is not considered likely in view of the enforcement authority of state and city regulators. The proposed action, moreover, would make permanent more stringent siting requirements as compared with the 1998 rules, including in certain respects greater buffer distances from residential districts, enclosed operations, and the reduction of on-

street queuing. The rules are thus generally more protective of neighborhoods than were the 1998 rules. Furthermore, the proposed rules do not grandfather pending applications, unlike the 1998 rules, which, in effect, would have allowed more transfer stations in M1 zones even if the proposed facility was less than 400 feet from a sensitive receptor or if the community district in which the facility was proposed already had three transfer stations in M1 zones. For these reasons, indirect residential displacement would not be caused by the new regulations.

Nothing in the new rules would encourage the location of a waste transfer station on the site of an existing business. Similarly, implementing the new more stringent rules should not by itself cause the indirect displacement of surrounding businesses.

The *CEQR Technical Manual* acknowledges that an action that does not displace may still have an effect on a major industry or commercial operation in the city. It is appropriate to consider the effect of the proposed rules on the private commercial waste transfer industry. The CEQR threshold for significant impacts in this category is an action that would measurably diminish the viability of a specific industry that has substantial economic value to the city's economy. In order to determine whether a detailed investigation is appropriate, CEQR poses the following questions:

- Would the action significantly affect business conditions in any industry or category of businesses?
- Would the action indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?

With these questions in mind, consideration was given to whether the new siting rules may have a significant indirect impact on the commercial waste transfer station industry by placing greater limits on the locations where such facilities can be located and on where they may expand. On the one hand, the rules would revise the 1998 restrictions permitting transfer stations to locate in M1 zones, with certain qualifications, potentially increasing the supply of eligible sites. However, greater siting restrictions, such as new buffer requirements for putrescible transfer stations and greater buffer distances to sensitive receptors in certain community districts in M2 and M3 zoning districts, may decrease somewhat the number of available sites. An analysis performed as part of this EAS showed that there is a relatively small number of sites that would be feasible for waste transfer stations in M1 zones throughout the city (see Appendix B). For the

purposes of this analysis, a conservative assumption can be made that the overall number of eligible sites citywide will experience a net decrease as a result of the new rules. This raises the question of whether land acquisition costs will increase as a result. In this regard, it is important to note that the value of appropriate parcels in M1, M2, and M3 zoning districts throughout the city is affected by demand from all industrial users, not just the waste transfer station industry. Therefore, changes in land values of these parcels would be much more dependent upon the industrial market in New York City as a whole than on changes to the siting rules governing waste transfer stations. As a result, it is not expected that the proposed rules will result in a significant impact on land acquisition costs for the waste transfer industry as a whole.

The other rule change that may be relevant to commercial waste transfer industry economics is limited to operators of existing waste transfer stations in community districts with twelve percent or more of the city's total number of existing waste transfer stations. In these community districts, expansion (increase in capacity) can only take place if buffer requirements to sensitive receptors are maintained (unless the facility utilizes rail or water transport) and the expansion is paired with a reduction in lawful capacity at another waste transfer station within the same community district (The reduction must be of the same waste type, unless the facility seeking expansion transports waste by rail or vessel). Currently, only two community districts fall into one of these categories (Bronx CD#2 and Brooklyn CD#1). These community districts currently contain 22 of the city's 58 transfer stations. It is conceivable that waste transfer station operators in these community districts would be unable to obtain the necessary offsets, and therefore be unable to expand an existing site and grow their business in this manner (assuming that there is adequate physical space on site or on an adjacent lot to enable capacity expansion in the first place). However, this does not preclude waste transfer station operators from gaining additional capacity through the development of a new site or expansion of an existing site in another community district. Although the new rules place some greater limitations on siting, there remain viable locations for new sites in M2 and M3 zoning districts throughout the city, as well as in M1 zones to a lesser extent, and expansion is permitted without offset requirements for the majority of existing waste transfer stations. Additionally, the proposed rules do not require any existing facilities to close or to reduce their capacities.

The immediate effect of the rules would be to cap the total permitted transfer station throughput tonnage in community districts, such as Brooklyn Community District 1 and

Bronx Community District 2, in which, respectively, at least 12% of the total number of transfer stations in the city are located. Over time, this would tend to direct new transfer station capacity to be sited in other community districts, thereby altering the respective percentages, by community district, of the city's total number of transfer stations.

Based on this preliminary investigation, it can be concluded that placing somewhat greater limitations on where a waste transfer station can locate, and limiting net expansion of waste transfer station capacity in certain community district categories will have nothing more than a negligible effect on site development costs for the industry as a whole, and would not significantly affect business conditions in this industry, nor substantially reduce employment or impair the economic viability of the industry. Furthermore, DSNY's announced plans to reconstruct a number of its former marine transfer stations in the near future will mean that much of DSNY's waste would no longer go to local commercial transfer stations. This in turn would likely dampen local demand for additional putrescible waste capacity at such transfer stations for a number of years to come. Also, as discussed in the September 2003 Environmental Assessment Statement prepared for DSNY's interim siting restrictions, the city has some excess capacity at non-putrescible C&D debris and fill material transfer stations. The foregoing supports the conclusion that a net limit on transfer station capacity in two of the city's community districts and the other proposed siting restrictions would not result in a significant adverse impact on the waste management industry as a whole. Therefore, no significant impacts are expected and no mitigation measures are necessary.

2.3 Community Facilities and Services

Community facilities are public or publicly funded facilities like schools, hospitals, libraries, day-care centers, and fire and police departments. The CEQR analysis looks at the potential effect a proposed action has on the services these facilities provide to a local community. The CEQR process seeks to determine the type of potential constraints placed on community facilities by a proposed action, to assess if current service levels are sufficient.

Under *CEQR Technical Manual* guidelines, an assessment of a proposed action's impact on community facilities is warranted if the action adds more than 100 residential units or has a direct or indirect effect on a particular facility. A direct effect constitutes a physical altering or displacement of a community facility as a result of the action. An indirect

effect would be an increase to an area population that affects the level of service provided by community facilities.

No significant adverse community facilities impacts are expected as a result of the proposed action. The proposed action would amend the rules governing the siting of solid waste transfer stations. The proposed action would not cause the addition of more than 100 residential units to an area in New York City. It is unlikely that a community facility would be directly displaced as a result of this action. The proposed action is not likely to increase the local population of an area that would create an indirect impact on community facilities. Moreover, as part of the permitting process for new solid waste transfer stations, proposed solid waste transfer stations would undergo individual environmental assessments that include an assessment of the potential for significant adverse community facility impacts.

The proposed action includes a requirement for buffer distance between new solid waste transfer stations and certain sensitive receptors, including school and hospital facilities. The buffer distance requirements of the proposed new siting rules for waste transfer stations and for capacity expansions are more stringent than the buffer distance requirements under the 1998 solid waste transfer station siting rules. The 1998 solid waste transfer station siting rules required a distance of 400 feet between non-putrescible transfer stations and between transfer stations and sensitive receptors such as hospitals and schools, regardless of the existing number of waste transfer stations that existed in a community district. The buffer distance required between new transfer stations and sensitive receptors such as hospitals and schools under the proposed siting rules depends on the percent of the city's existing solid waste transfer stations already in a particular community district. For example, in community districts with 16 percent or more of the city's solid waste transfer stations, a buffer distance of 700 feet is required between a new transfer station and sensitive receptors such as hospitals and schools. The more stringent buffer distance requirements of the proposed rules governing the siting of solid waste transfer stations compared to the 1998 siting rules further reduces the potential for the proposed action to significantly affect community facilities. The complete list of buffer distance requirements for new solid waste transfer stations, based on the percentage of existing solid waste transfer stations in a community district appears in Appendix A.

2.4 Open Space

Open space is publicly or privately owned land that is designated for public access. This includes land set aside for leisure or active recreation or land designed to protect or enhance the natural environment.

Assessing the impact of an action on open space, as per the *CEQR Technical Manual*, involves evaluating the action's direct and indirect effects. Direct effects include publicly accessible open space being physically lost or displaced, changed with regard to its usage, limited to the public or significantly affected by noise and air pollution, odors, or shadows. Indirect effects occur if the action changes the total population of an area and noticeably diminishes the ability of the open space to serve the current or future population.

The proposed action would amend the rules governing the siting of solid waste transfer stations. The proposed action would not directly or indirectly impact open space and is not expected to result in significant adverse open space impacts. The rules governing the siting of transfer station are not likely to lead to the direct displacement or alteration of existing open space resources. Indirect effects on the city's open space resources are not anticipated as the new rules are not anticipated to result in a population change that would alter current usage levels of open space. As part of the permitting process for new transfer stations, individual environmental assessments would be conducted to assess the potential for significant adverse open space impacts.

Compared to the 1998 rules governing the siting of waste transfer stations, the proposed rules would decrease the chance of new transfer stations to have an individual or cumulative effect on the city's open space resources. The 1998 solid waste transfer station siting rules required a buffer distance of 400 feet between new transfer stations and open space resources. The buffer distance required under the 1998 regulations was the same for all community districts in the city, regardless of the number of solid waste transfer stations existing in a community district. The proposed rules require a buffer distance between new solid waste transfer stations and public parks that is linked to the percentage of the city's existing solid waste transfer stations already in a community district. For example, in a community district that has 16 percent or more of the city's existing solid waste transfer stations, the rules would require a buffer distance of 700 feet between a new transfer station and a public park. This includes any publicly owned park,

playground, beach, parkway within the jurisdiction of the New York City Department of Parks and Recreation and any publicly owned park or beach within the jurisdiction of the federal or New York State government. Buffer requirements would also apply to facility site expansions and increases in capacity (unless the facility utilizes rail or water transport).

2.5 Shadows

The shadows cast by newly constructed buildings or structures can have potentially adverse impacts in a particular area or surrounding areas. Shadows can have damaging effects on open spaces, historic districts or important natural features. An evaluation is necessary to determine the impact of shadows created from a new building or structure.

The *CEQR Technical Manual* recommends that shadows be assessed for new buildings or structures taller than 50 feet. Assessment for structures less than 50-feet tall is recommended only if the structure is adjacent to important public resources. These include historic resources, parks or important natural feature.

Significant adverse shadow impacts are not expected to occur as a result of this action. Solid waste transfer stations are typically one story and not taller than 50 feet. Any new waste transfer stations built under the new rules will undergo individual environmental assessments to determine the extent of shadows caused by each individual structure.

2.6 Historic Resources

The term “historic resource” encompasses districts, buildings, structures, sites and objects of historical, cultural, aesthetic, or archaeological importance. Because historic resources play an important role in maintaining the character of a city, the *CEQR Technical Manual* calls for a determination of whether the proposed action disturbs the city’s historic resources including both architectural and archaeological resources. An in-ground disturbance to an area not previously excavated is considered worthy of an archaeological assessment. An architectural assessment is deemed necessary for new construction, demolition or significant physical alteration to any building, structure, or object. Significant impacts include changes in scale, visual prominence or visual context of any building, structure, or object; construction including but not limited to excavation vibration, subsidence, dewatering or falling objects; changes to significant historical

landscapes and elimination of publicly accessible areas; and new shadows or lengthening of existing shadows over historic landscapes or structures.

Significant adverse historic resources impacts are not anticipated as a result of the proposed action. The proposed rules governing the siting of solid waste transfer stations would not directly lead to an in-ground disturbance or new construction, demolition or alteration of a new or existing structure. In addition, as part of the solid waste transfer station permitting process, individual proposed transfer sites would be individually assessed for the potential impact on both archaeological and architectural resources.

2.7 Urban Design and Visual Resources

Urban design and visual resources comprise the "look" of a neighborhood. This includes the neighborhood's physical appearance, the size and shape of buildings, their arrangement on blocks, the street patterns and noteworthy views. An analysis under CEQR considers an action's potential to affect the visual character, visual design or resources of an area.

The *CEQR Technical Manual* recommends a detailed assessment of urban design and visual resources if a project would have substantially different bulk or setbacks that exist in an area and if substantial new above-ground construction would occur in an area that has important views, natural resources or landmark structures.

No significant adverse urban design or visual resources impacts are anticipated as a result of the proposed rules governing the siting of solid waste transfer stations. Solid waste transfer stations are sited in industrial zoned areas of the city that tend to lack noteworthy visual resources, important views, and natural resources or view corridors. Furthermore, as part of the permitting process for new solid waste transfer station, proposed solid waste transfer stations are required to be individually assessed for the potential for environmental impacts, including an assessment of the potential for significant urban design or visual resources adverse impacts.

2.8 Neighborhood Character

Neighborhood character is an amalgam of the various elements that give neighborhoods their distinct personality. Neighborhood character is derived from the combination of varying urban elements, such as land use, urban design, visual and historic resources,

socioeconomics, traffic and noise. These elements come together to create the feeling and context of a neighborhood. Therefore, when considering the neighborhood character, all elements of a neighborhood should be evaluated together.

With regard to neighborhood character, the *CEQR Technical Manual* recommends a detailed assessment if the action results in a substantial change in a neighborhood's land use, urban design, visual resources, historic resources, socioeconomic conditions, traffic or noise.

No substantial change in land use, urban design and visual resources, historic resources, socioeconomic conditions, traffic or noise are expected as a result of this action (see sections 2.1 Land Use, 2.2 Socioeconomic Conditions, 2.6 Historic Resources, 2.7 Urban Design and Visual Resources, 2.15 Traffic and Parking, 2.18 Noise for more detailed discussion of each of these technical sections). As such, the proposed action is not expected to have a significant adverse impact on the character of neighborhoods affected by this action. The proposed action would amend the rules governing the siting of solid waste transfer stations by increasing buffers to sensitive receptors in certain respects and are generally more protective of neighborhood character than the 1998 rules are. Solid waste transfer stations are limited to industrially zoned areas of the city where the solid waste transfer station would tend to fit in with the industrial character of these areas of the city. As discussed in Appendix B, the potential for transfer stations to locate in M1 districts under the proposed action is very limited and subject to substantial buffers to residential districts. Furthermore, as part of the permitting process for new solid waste transfer stations, proposed solid waste transfer stations are required to be individually assessed for the potential for environmental impacts, including an assessment of the potential for significant adverse neighborhood character impacts.

2.9 Natural Resources

The *CEQR Technical Manual* defines a natural resource as an area "capable of providing habitat for plant and animal species or capable of functioning to support environmental systems and maintain the city's environmental balance." Included in the list of natural resources are surface water, groundwater, drainage systems and wetlands. Other resources to consider are dunes, beaches, coastal resources, grasslands, woodlands, landscaped areas, gardens, parks, and built structures used by wildlife.

The *CEQR Technical Manual* recommends several screening criteria when determining whether an assessment of natural resource impacts should be performed. An area must be substantially devoid of natural resources or contain no built resources known to contain or may be used for protected species. An area must not contain subsurface conditions that affect neighboring natural resources, and the action must not disturb nearby natural resources for no further assessment to be warranted. Finally, a proposed action may be deemed to disturb a natural resource, but a regulatory agency with jurisdiction over the resource, under certain conditions may deem the disturbance environmentally insignificant, if for example, the action is considered a necessary improvement. If the action does not meet all of these conditions or if it is unknown whether it meets one or more of these conditions, then an assessment of natural resources is appropriate.

Solid waste transfer stations are located in manufacturing districts across the city. These areas are typically built-up urban environments where significant natural resources do not exist. The proposed action would amend the rules governing the siting of solid waste transfer stations and are not expected to result in significant adverse impacts on New York City's natural resources. Moreover, any new transfer station allowed under the proposed rules would be subject to an individualized environmental assessment, including an assessment of potential natural resource impacts.

2.10 Hazardous Materials

According to the definition set forth in the *CEQR Technical Manual*, a hazardous material is "any substance that poses a threat to human health or the environment." Hazardous materials of particular note are heavy metals, volatile organic compounds, semivolatile organic compounds, methane, polychlorinated biphenyls (PCBs), pesticides, dioxins and hazardous wastes as defined by the Resource Conservation and Recovery Act.

The *CEQR Technical Manual* recommends three screening criteria to be considered before a lead agency decides that no further examination of potential hazardous materials impacts is required. First, no elevated levels of hazardous materials may exist on the site. Second, an action may not create increased pathways to exposure to hazardous materials. Third, an action may not introduce new activities or processes using hazardous materials such that risk of human or environment exposure is increased. If these conditions are not met, a detailed hazardous materials assessment should typically be performed.

Significant adverse impacts from hazardous materials are not anticipated as a result of the proposed action. The proposed action would amend the rules governing the siting of solid waste transfer station in New York City and would not affect the handling or disposal of hazardous waste or hazardous materials. Any hazardous materials issues relating to future permit applications would continue to be subject to individual assessments as part of individual environmental assessments carried out for each proposed site.

2.11 Waterfront Revitalization Program

Proposed actions subject to CEQR that are situated within the designated boundaries of the New York City Coastal Management Zone should be assessed for their consistency with the City's Local Waterfront Revitalization Program (LWRP). The LWRP establishes the city's Coastal Zone and includes ten policies dealing with residential and commercial development, water dependent and industrial uses, commercial and recreational boating, coastal ecological systems, water quality, flooding and erosion, solid waste and hazardous substances, public access, scenic resources, and historical and cultural resources. The LWRP policies address basic issues: fish and wildlife, flooding and erosion, water resources, air and scenic quality, public access and recreation resources, energy development and solid waste disposal, and development. CEQR recommends any proposed action within the Coastal Zone boundaries to be assessed for consistency with the LWRP.

The proposed generic action would amend the citywide rules governing the siting of solid waste transfer stations. The proposed action would not directly lead to the siting of transfer stations in the city's Coastal Management Zone. As individual transfer stations are proposed at various sites, their consistency with the LWRP would be determined during the environmental review process.

However, because the rule changes will have citywide applications and thus include those areas within the designated coastal zone, a Waterfront Revitalization Program (WRP) consistency assessment form was completed (see Appendix D). Although in most cases, the appropriate response to the threshold screening questions on that form was "no" (requiring no further response), the following questions were answered with a "yes" and therefore require further explanation:

- Question #8 - Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island?
- Question #38 – Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility?
- Question #41 – Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous material, or the siting of a solid or hazardous waste facility?

According to the *CEQR Technical Manual*, “yes” answers require the preparation of an explanation to assess the consistency of the proposed action with the noted policy or policies.

Question #8 applies to Policy #2: *Support water-dependent and industrial uses in New York City coastal areas that are well suited to their continued operation.* The six Significant Maritime and Industrial Areas (SMIAs) are specified areas with concentrations of M2 and M3 zoned land and the presence of or potential for intermodal transportation, among other characteristics.¹ Because this is a generic action, the proposed rules are not an action “in” one of the SMIA’s, but could affect such areas indirectly. Under the new rules, waste transfer stations will continue to be permitted in M2 and M3 zoning districts within these SMIA’s. With the exception of parts of the South Bronx, Newtown Creek, and Jamaica within Bronx Community District #2 Brooklyn Community District #1, and Queens Community District #12 respectively, the new rules will permit waste transfer stations to be sited in M1 zones as well. However, the restrictions discussed in Section 1.2 of this report place limits (such as buffers) on exactly where new waste transfer stations can be sited within those zones. There is also some added incentive to site waste transfer stations at waterfront locations within these SMIA’s under the new rules. In community districts with 12% or more of the total number of the city’s existing waste transfer stations (which includes parts of the South Bronx and Newtown Creek) new waste transfer stations operating a truck-to-truck facility must obtain a offsetting reduction of capacity of the same waste type at another station within

¹ The six areas recognized as SMIA’s in the New York City Comprehensive Waterfront Plan (CWP) are: South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook Marine Terminal, Sunset Park/Erie Basin, and Kill Van Kull.

the same community district by an equal or greater amount, whereas a new putrescible or C&D debris waste transfer station from which at least 90% of the waste received is further transported by rail or vessel may use a different waste type (construction and demolition debris or putrescible) for the offset tonnage.

The proposed action is consistent with New Waterfront Revitalization Program Policy #2. Waste transfer stations could continue to locate in waterfront locations. Some types of waste transfer stations, namely those that employ barges or other water vessels to transfer solid waste, could be considered water dependent, and the Policy #2 promotes these types of uses. It also recognizes the need to locate non-water dependent industrial uses in sections of SMIAs. Truck-to-truck waste transfer stations would fall under this category.

Question #38 applies to the New Waterfront Revitalization Program Policy #7 – *Minimize environmental degradation from solid waste and hazardous substances*. Some of the concerns that this policy aims to address are environmental damage caused by illegal dumping, the filling of wetlands and littoral areas, and the degradation of scenic resources in the coastal zone. The proposed action would not negatively impact this policy. The action addresses the siting of waste transfer stations and places greater restrictions on where they may site. Nothing in the rules would result in an increase in environmental degradation. The effects of an individual site on protected natural areas would be evaluated under the environmental review required for any new waste transfer station.

Question #41 applies to New Waterfront Revitalization Program Sub-Policy #7.3 – *Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources*. Included under this policy are guidelines to site solid waste facilities so that they will not adversely affect protected natural areas, and to give priority to waste transfer station sites that allow for waterborne transport of waste materials.

The proposed action is consistent with Sub-Policy #7.3. The effects of an individual site on protected natural areas would be evaluated under the environmental review required for any new waste transfer station. In addition, the new rules give some incentive for the siting of waste transfer stations that employ waterborne methods of transporting waste in the South Bronx and Newtown Creek areas.

2.12 Infrastructure

The infrastructure of a city is made up of the physical systems that support its population. These systems include water supply, wastewater treatment, sanitation, energy, roadways, bridges and tunnels and public transportation. CEQR evaluates the impact on water supply, wastewater treatment and stormwater management together and the other physical systems individually in separate sections.

According to the *CEQR Technical Manual*, actions that require exceptionally large amounts of water, for example a power plant, may have their impact on the demand of the city's water supply evaluated. In addition, if an action results in very large flows of wastewater that could impact the capacity of sewage treatment plants, an assessment is recommended.

The proposed action would amend the rules governing the siting of solid waste transfer stations. A substantial impact on the city's water supply, wastewater treatment or stormwater management is not anticipated as a result of this action. As future solid waste transfer stations are proposed, as part of the application and permitting process, the solid waste transfer stations would undergo an assessment of the potential for significant adverse infrastructure impacts.

2.13 Solid Waste and Sanitation Services

In New York City, the Department of Sanitation has the responsibility to collect and dispose of municipal solid waste and recyclable materials generated by residences, some non-profit institutions, tax-exempt properties and New York City agencies. Private waste carters that contract their services to businesses in the city collect commercial waste. The Department of Sanitation and the private carters haul waste to solid waste management facilities where the waste is processed and sent to recycling or disposal facilities out of New York City.

The CEQR Technical Manual suggests that regulatory changes affecting the generation or management of solid waste in New York City may require evaluation for consistency with the *Comprehensive Solid Waste Management Plan (SWMP)*. The SWMP encourages the future use of vessels and rail to ship solid waste to facilities outside of the city.

The proposed rules would not affect existing DSNY operations and would not increase the generation of solid waste. The action would amend the rules governing the siting of solid waste transfer stations. The proposed rules were developed in part in response to litigation over the City's 1998 siting rules.

The proposed amendments will help encourage the transport of solid waste by rail and barge, as contemplated in the SWMP, which is currently under revision, and would enable private transfer stations to manage commercial or municipal waste in a manner that is consistent with City's policies for solid waste management. By encouraging truck-to-barge and truck-to-rail transport of solid waste, the proposed action would help to reduce truck traffic associated with solid waste management. As discussed in section 2.2 above, the amendments would not have a significant adverse impact on the private waste transfer station industry. The amended rules would therefore not have a significant adverse impact upon solid waste and sanitation services.

2.14 Energy

As part of the environmental review process, energy consumption should be assessed in light of any proposed action. The consumption of energy encompasses sources used for heating, electricity and transportation and includes fossil fuels (oil, coal, gas, etc.), hydroelectric power and miscellaneous sources like wood, solid waste or other combustible materials.

The *CEQR Technical Manual* recommends a detailed assessment of energy use for actions that significantly impact the transmission or generation of energy or that generate a substantial indirect consumption of energy.

The action would amend the rules governing the siting of solid waste transfer stations. The proposed action is not expected to significantly impact the transmission or generation of energy or create an indirect consumption of energy and no significant impact on energy consumption in the city is anticipated as a result of this action. As individual solid waste transfer stations are proposed, the proposed facilities would be assessed for the potential of significant impact on energy consumption in the city.

2.15 Traffic and Parking

Traffic and parking analyses are used to determine whether a proposed action can be expected to have a significant adverse impact on street and roadway conditions and on parking facilities. In particular, the analyses seek to determine how traffic flow and operating conditions, parking conditions, goods delivery and vehicular and pedestrian safety are affected by the action.

The *CEQR Technical Manual* recommends a traffic and parking assessment if the action generates low or low-to-moderate density development in particular sections of the city. The *CEQR Technical Manual* also suggests an assessment if the action creates 50 or more peak-hour vehicle trips.

The proposed action is not expected to significantly impact traffic and parking in the city. The proposed amendments to the rules governing the siting of transfer stations would not generate new residential development or lead to a significant increase in truck traffic on the city's roadways. Moreover, the proposed siting rules require solid waste transfer stations to provide space to accommodate truck queuing on site, which would reduce impacts to traffic from offsite queuing.

Included as part of the proposed siting rules are offset requirements for the authorization of the operation of a new putrescible or non-putrescible solid waste transfer station or for an increase in capacity in community districts that have 12 percent or more of the city's existing solid waste transfer stations. In these districts, any new solid waste transfer station or any application for an increase in permitted capacity must generally obtain an offsetting reduction in the lawful capacity of the same waste type at another solid waste transfer station (of the same waste type) within the same community district by an equal or greater amount. In the same communities, any new putrescible or C&D debris transfer station located at or adjacent to a rail yard, rail spur, industrial track or vessel facility, where at least 90% of all solid waste received is subsequently transported from the transfer station by rail or vessel, must obtain a reduction in the lawful capacity at another solid waste transfer station (putrescible or non-putrescible) within the same community district by a rate of one ton for every new ton of capacity, but the offset need not match the waste type sought. These offset requirements that are part of the proposed solid waste siting rules are more stringent than the 1998 siting regulations and help to discourage the

generation of new truck trips to solid waste transfer stations, while encouraging the transportation of solid waste from transfer stations by rail or vessel.

2.16 Transit and Pedestrians

Transit and pedestrian analyses are used to determine whether a proposed action can be expected to have a significant adverse impact on public transportation facilities and services and on pedestrian flows. In particular, these analyses seek to address how rail and subway facilities and services, bus service and pedestrian flows and conditions are affected by the action.

The *CEQR Technical Manual* has guidelines for determining if a proposed action warrants a detailed transit and pedestrian assessment. If an action would result in development less than shown in Table 3O-1 of the *CEQR Technical Manual* a transit and pedestrian assessment is usually not warranted, except in unusual circumstances. If the proposed action is projected to result in fewer than 200 peak hour transit trips a transit assessment is generally not warranted. And, if an action would result in residential or office projects that are less than 50 percent of the levels identified in Table 3O-1 a detailed pedestrian assessment is usually not required.

The proposed action would not significantly impact transit and pedestrians in New York City. The action would amend the rules governing the siting of solid waste transfer stations. Development is unlikely to occur as a result of this action that would exceed the density levels in Table 3O-1 of the *CEQR Technical Manual* and would require a traffic and pedestrian analysis. In addition, the proposed action will not add more than 200 peak hour transit trips in the city, precluding the need for a detailed transit assessment.

2.17 Air Quality

With regard to air quality, the *CEQR Technical Manual* seeks to determine a proposed action's effects on ambient air quality, or effects on the project because of ambient air quality. Ambient air quality is the quality of surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during operation and/or construction of a proposed action. The pollutants of most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates (PM₁₀), fine particulate matter (PM_{2.5}), and sulfur dioxide.

The *CEQR Technical Manual* recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The *CEQR Technical Manual* recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

The proposed action would have no significant adverse impacts related to air quality in New York City. The action would amend the rules governing the siting of solid waste transfer stations. This action would not increase or redistribute city traffic flows, nor would it create new sources of stationary pollutants or add to existing sources and combine the dispersion of emissions on surrounding areas.

The proposed rules governing the siting of solid waste transfer stations also contain requirements that would potentially serve to benefit air quality. Under the proposed rules governing the siting of solid waste transfer stations, new solid waste transfer stations are encouraged to take advantage of intermodal means of transporting waste. In community districts that have 12 percent or more of the city's existing solid waste transfer station, no new truck-to-truck solid waste transfer facility, and no increase in permitted capacity, would be allowed unless there is a reduction of capacity at another solid waste transfer station by an equal or greater amount. However, in the same community districts, if a putrescible or C&D debris transfer station is adjacent to a rail yard, rail spur, industrial track or vessel facility, and at least 90% of the solid waste is transported from the facility by rail or vessel, the reduction of capacity required at another solid waste transfer station need not match the same waste type of the capacity being sought. In all districts, an increase in permitted capacity at an existing facility that utilizes rail or water transport would not be subject to buffer requirements to sensitive receptors. The siting of solid waste transfer stations in areas that can take advantage of rail or water transport would potentially lead to lower vehicle emission levels due to the lower number of truck trips and lower emissions per ton mile generated by such rail or water-based solid waste transfer station operations.

2.18 Noise

CEQR defines noise simply as unwanted sound. The *CEQR Technical Manual* recommends an analysis of three principal types of noise sources: mobile sources, stationary sources and construction sources. The noise levels associated with the environmental noise assessment are not simply hazardous noise levels that cause hearing loss, but significant noise levels below the hazardous level that have a potential detrimental impact on quality of life in New York City. The density of New York City makes noise assessment vital because of the high potential for noise sources to disrupt sleep, interrupt activities requiring concentration and cause stress-related illnesses.

As per the *CEQR Technical Manual*, a noise-impact screening considers whether the action generates any mobile or stationary sources of noise or will be located in areas with high ambient noise levels. These areas would include highly trafficked thoroughfares, airports, railroads or other loud activities.

The proposed action is not anticipated to lead to significant adverse noise impacts. The action would amend the rules governing the siting of solid waste transfer stations and is not expected to lead to the generation of new mobile or stationary sources of noise. The proposed rules governing the siting of solid waste transfer stations require facilities to provide space for trucks to queue on site, which would help reduce the noise associated with trucks delivering solid waste to transfer stations. The proposed rules also call for new transfer stations in certain community districts to have enclosed facilities, which would help reduce noise associated with the operation of non-putrescible solid waste transfer stations.

Finally, the proposed rules limit the distance from new transfer stations to sensitive receptors such as schools, parks, hospitals, and residential districts, with greater buffer requirements for community districts with greater percentages of the city's transfer stations.

2.19 Construction Impacts

Although the construction of new buildings or structures is temporary in nature, it can have disruptive and noticeable effects. The determination of whether these effects are significant, and if mitigating steps are required, is generally based on the duration and magnitude of the impact. Most projects consider the impacts that are related to traffic, air

quality and noise. Assessments of other technical areas can also be appropriate for particular actions.

The *CEQR Technical Manual* calls for an analysis of construction impacts for any action that involves construction or that would induce construction. The level of detail necessary for the analysis is based on the duration of the potential impact.

The proposed action is not expected to lead to significantly adverse construction impacts. The action would amend the rules governing the siting of solid waste transfer stations. The proposed action would not directly result in the construction of solid waste transfer stations. Furthermore, a separate environmental assessment is required as part of the permitting process for new solid waste transfer stations. The environmental assessment would examine the potential for significant adverse construction impacts that would occur as a result of the individual solid waste transfer station.

2.20 Public Health

Public health involves the activities a society undertakes to create and maintain conditions in which people can be healthy. The *CEQR Technical Manual* recommends an assessment of potential impacts on the public health citywide or on the health of a community or certain group of individuals affected by the proposed action. For a large city, many public health concerns are closely related to air quality, hazardous materials, construction and natural resources.

The *CEQR Technical Manual* states that when deciding whether an assessment is appropriate, special consideration should be given to urban public health concerns. A health assessment may be warranted if an action increases vehicular traffic or emissions; if the action increases exposure to heavy metals or other contaminants or there is the presence of contamination from historic spills or releases of substances that might have affected or affect groundwater; if the action involves solid-waste management practices that could attract vermin, or would have potentially significant adverse impacts to sensitive receptors; or if the action involves vapor infiltration to buildings or soil, exceeds accepted federal, state, or local standards, or if the action involves an activity that results in a significant health concern (i.e. the Williamsburg Bridge Lead Removal Project).

No significant adverse impacts to public health are expected as a result of the proposed action. The rules include enhanced buffer requirements between new transfer stations and

sensitive receptors such as schools, parks, hospitals and residential districts, and thus would be more protective of public health than are the 1998 rules. The proposed action would not lead to an increase in vehicular traffic or increase exposure to hazardous material or contaminants. The action would amend the rules governing the siting of solid waste transfer stations and encourage the use of rail or vessel to transport waste. This could potentially help decrease the public exposure to emissions of diesel-fueled trucks that otherwise might have been used to transport waste. In addition, any permits issued for new transfer station capacity would be subjected to an individualized environmental review, which would include an assessment of the potential for significant public health impacts.