CHAPTER 27 ENVIRONMENTAL REVIEW: EXISTING WEST 135TH STREET MTS

27.1 Introduction

The results of the environmental analyses of the Existing West 135th Street MTS are presented in the following sections:

27.2 Land Use, Zoning, and Public Policy
27.3 Socioeconomic Conditions
27.4 Community Facilities and Services
27.5 Open Space
27.6 Cultural Resources
27.7 Urban Design, Visual Resources, and Shadows
27.8 Neighborhood Character
27.9 Natural Resources
27.10 Hazardous Materials
27.11 Water Quality
27.12 Waterfront Revitalization Program
27.13 Infrastructure, Solid Waste and Sanitation Services, and Energy
27.14 Traffic, Parking, Transit, and Pedestrians
27.15 Air Quality
27.16 Odor
27.17 Noise

Section 2.4.9 provides a summary description of the site and important characteristics of the facility design. A detailed discussion of the methodologies that were applied in conducting each analysis is provided in Chapter 3. Supplemental information on the site or the study area is provided in the following sections when appropriate to the analysis.

27.2 Land Use, Zoning, and Public Policy

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analyses of the Land Use, Zoning, and Public Policy section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in these respective categories.

27.3 Socioeconomic Conditions

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analysis of the Socioeconomic Conditions section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

27.4 Community Facilities and Services

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analysis of the Community Facilities and Services section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

27.5 Open Space

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analysis of the Open Space section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

27.6 Cultural Resources

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analysis of the Cultural Resources section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

27.7 Urban Design, Visual Resources, and Shadows

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analyses of the Urban Design, Visual Resources, and Shadows section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in these respective categories.

27.8 Neighborhood Character

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analysis of the Neighborhood Character section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

27.9 Natural Resources

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analysis of the Natural Resources section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

27.10 Hazardous Materials

The Existing West 135th Street MTS is located at the site of the West 135th Street Converted MTS. The analysis of the Hazardous Materials section of the West 135th Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

27.11 Water Quality

The Existing West 135th Street MTS has a smaller footprint than the West 135th Street Converted MTS. Since there are no unmitigatible significant adverse environmental water quality impacts from the West 135th Street Converted MTS, there will be no unmitigatible significant adverse environmental water quality impacts from the Existing West 135th Street MTS.

27.12 Waterfront Revitalization Program

The Existing West 135th Street MTS has a smaller footprint than the West 135th Street Converted MTS. Since there are no unmitigatible significant adverse environmental WRP impacts from the West 135th Street Converted MTS, there will be no unmitigatible significant adverse environmental WRP impacts from the Existing West 135th Street MTS.

27.13 Infrastructure, Solid Waste and Sanitation Services, and Energy

It is assumed that the staffing levels of the Existing West 135th Street MTS would be equal to or less than the staffing levels of the West 135th Street Converted MTS. Therefore the analyses performed for the West 135th Street Converted MTS to assess impacts to water supply, sanitary sewage, and solid waste would also apply to the assessment of these utilities for the Existing West 135th Street MTS.

27.14 Traffic, Parking, Transit, and Pedestrians

The Existing West 135th Street MTS may receive the same amount of DSNY-managed and potential commercial waste as the West 135th Street Converted MTS. See the Traffic, Parking, Transit, and Pedestrians section of the West 135th Street Converted MTS chapter in this FDEIS. If the amount of waste delivered to the Existing West 135th Street MTS is less than or equal to that analyzed, there will be no unmitigatible significant adverse environmental impacts.

27.15 Air Quality

The Existing West 135th Street MTS would have less on-site emission-generating equipment, and the sources located farther from the property line receptors, than the West 135th Street Converted MTS. Since there are no unmitigatible significant adverse environmental air quality impacts from the West 135th Street Converted MTS, there will be no unmitigatible significant adverse environmental air quality impacts from the Existing West 135th Street MTS.

27.16 Odor

In addition to the odors from waste processing operations in the building that will be controlled through an odor neutralizing system, the Existing West 135th Street MTS would have full and empty barges moored and queued outdoors during operations. This section presents the results of the odor analysis for the Existing West 135th Street MTS operating at 4,800 tpd.

27.16.1 Potential Impacts with the Existing West 135th Street MTS

27.16.1.1 Odor Source Types and Locations Considered in the Analysis

The anticipated number and types of odor sources that would be associated with waste processing operations at peak design capacity at the Existing West 135th Street MTS are provided in Table 27.16-1.

Table 27.16-1
Odor Sources Included in Odor Analysis
Existing West 135th Street MTS

Type of Emission Source	Number of Sources Operated During Peak Design Capacity
Exhaust Fans from Processing Building	1
Moving Vehicles[(1)]	46
Barge	2

Notes:
(1) This is the number of collection vehicle sources inbound and outbound from the MTS. The actual number of vehicles is 10.

An odor control system (e.g., scrubber, neutralizing agent misting system injected into the exhaust duct work system, etc.) would be included in the design to control odorous emissions from the processing building. Odor control systems can remove between 90% and 99% of odorous compounds. For purposes of modeling odor dispersion, a 90% reduction of odorous emissions was conservatively assumed for the Existing West 135th Street MTS.

27.16.1.2 Results of the Odor Analysis

The highest estimated odor concentrations at any of the receptor sites considered and the concentrations at the closest sensitive receptor are presented in Table 27.16-2. The predicted OU values at sensitive receptor locations are compared to an OU of 5, which represents the level of odor impact that would begin to be detected by an average observer. The highest predicted OU associated with the Existing West 135th Street MTS at any nearby sensitive receptor is less than 1, so odors from the Existing West 135th Street MTS would not be detectable by off-site sensitive receptors and the facility would comply with NYSDEC requirements for effective odor control. Therefore, no significant adverse impacts from odors on receptors are expected to occur as a result of this facility.

Table 27.16-2
Highest Predicted Odor Concentration(s) from On-Site Sources
Existing West 135th Street MTS

Parameter	Resulting Odor Unit[1]
Estimated Detectable Concentration	5.0
Highest Result Type of Receptor Location of Receptor[2]	1.37 Fence Line Receptor Site Boundary
Closest Sensitive Receptor Result Type of Receptor Distance to Receptor(3)	0.40 Riverbank State Park 60 Feet

Notes:
(1) D/T ratio is dimensionless.
(2) Measured from the site boundary.
(3) Measured from the site property line.

27.17 Noise

The noise analysis addresses on-site and off-site sources of noise emissions from Existing West 135th Street MTS-related solid waste management activities. It is based on Section R of the 2001 CEQR Technical Manual for both on-site and off-site sources, and, for on-site sources only, the Performance Standards of the New York City Zoning Code for Manufacturing Districts and the Current New York City Noise. Section 3.19 provides a general discussion of the relevant regulatory standards and methodologies used in this analysis.

27.17.1 Existing Conditions

27.17.1.1 Introduction

Figure 27.17-1 shows the location of the Existing West 135th Street MTS, the surrounding area and the points that represent the property boundary (D1, etc.) for all noise analyses. See Section 21.17.1.1 for further information.

27.17.1.2 On-Site Noise Levels

See Section 21.17.1.2.

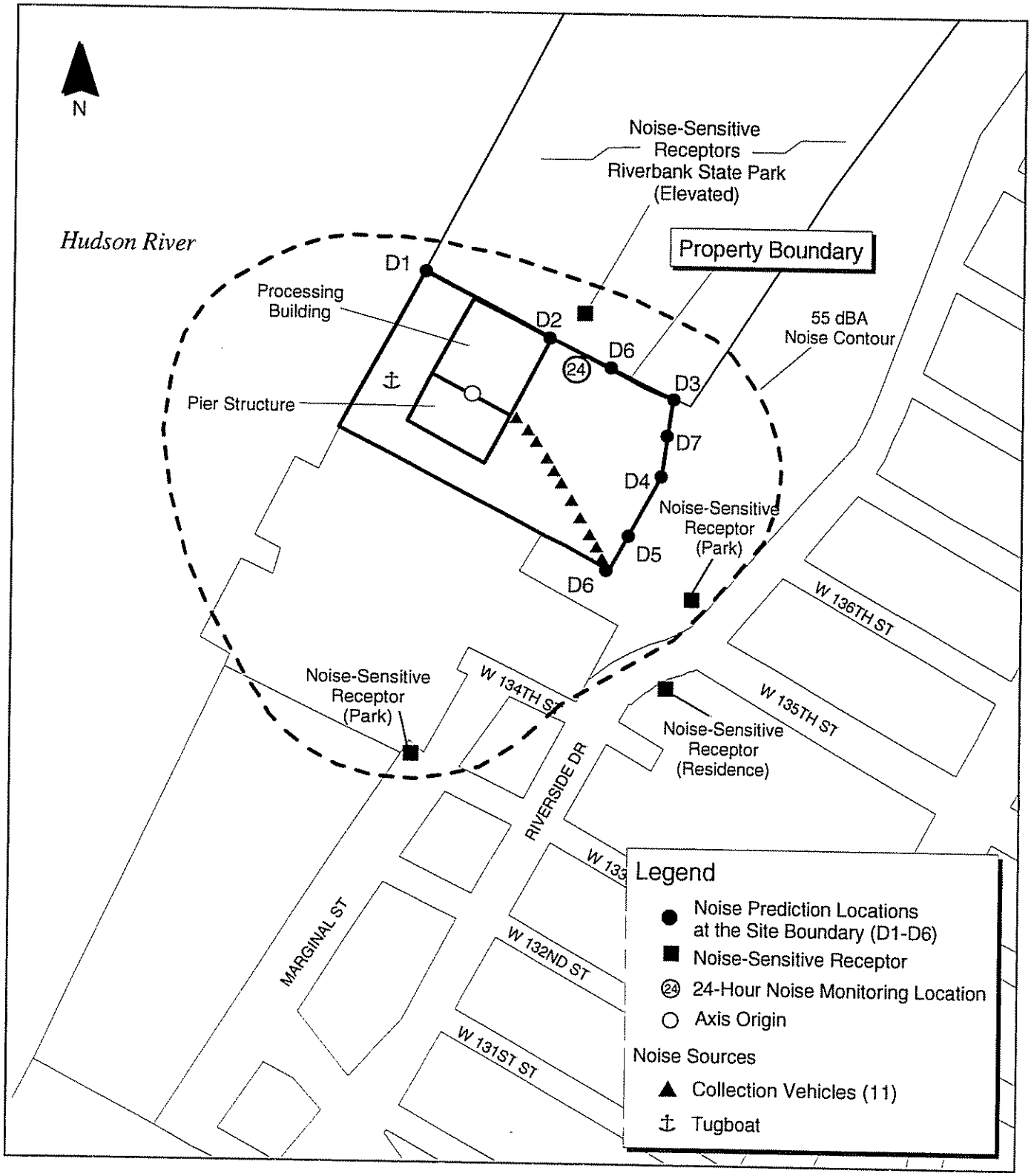
27.17.1.3 Off-Site Noise Levels

See Section 21.17.1.3.

27.17.2 Future No-Build Conditions

27.17.2.1 On-Site Noise Levels

See Section 21.17.2.1.



Site delineations are approximate
Base Map Source: New York City Department of City Planning

200 0 200 Feet

HDR URBITRAN EEA Cambridge Environmental Inc HydroQual PB

Figure 27.17-1 Noise Sources and Receptors
Existing West 135th Street MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

THE CITY OF NEW YORK DEPARTMENT OF SANITATION

27.17.2.2 Off-Site Noise Levels

See Section 21.17.2.2.

27.17.3 Potential Impacts with the Existing West 135th Street MTS

27.17.3.1 On-Site Noise Levels

Equipment assumed to be operating at the Existing West 135th Street MTS and its reference noise levels, used in the CEQR and Current Noise Code analysis, are shown in Table 27.17-1. The number and types of equipment assumed for this analysis were based on the Existing West 135th Street MTS's peak design capacity. Shown earlier, Figure 27.17-1 indicates the Existing West 135th Street MTS layout, the locations of the points along its boundary where overall noise predictions were calculated and the predicted 55 dBA contour line.

Table 27.17-1
Equipment Modeled in the Noise Analysis and Reference Noise Levels (L_{eq})
Existing West 135th Street MTS

Equipment Name (quantity)[1]	**Reference Sound Pressure Noise Level at 50 feet (dBA)**[2]
Indoor	
Moving/Queuing Collection Vehicle (7)	~~73~~79.0
Outdoor	
Moving/Queuing Collection Vehicle (10)	67
Oceangoing Tugboat (1)	73

Note:
(1) Instantaneous maximum number of pieces of equipment on site at any given time.
(2) Noise level representative of each piece of equipment.

27.17.3.2 CEQR Analysis

A screening analysis was conducted to determine if a detailed noise analysis would be required for the on-site operations at the Existing West 135th Street MTS. Noise levels from indoor and outdoor sources were combined to determine the location of the 55 dBA contour line. The 55 dBA contour line is approximately 61 meters (200 feet) from the property boundary in the direction of Riverbank State Park, which is approximately 27 meters (90 feet) away from the property boundary. The 55 dBA contour line is approximately 76 meters (250 feet) from the property boundary in the direction of Riverside Ramparts, which is approximately 67 meters (220 feet) away from the property boundary. Similarly, the 55 dBA contour line is approximately 69 meters (225 feet) from the property boundary in the direction of the apartment building on Riverside Drive, which is approximately 99 meters (325 feet) away from the property boundary. The 55 dBA contour line is approximately 213 meters (700 feet) from the property boundary in the direction of Harlem Piers Park, which is approximately 183 meters (600 feet) away from the property boundary. The 55 dBA contour line was selected as a limit for the study area because 55 dBA (i.e., the point off site where noises generated on site attenuate to 55.dBA) is considered an acceptable noise level in an urban environment. Section 3.19.5.1discusses this concept in greater detail. The results of the screening analysis show that three of the four noise-sensitive receptors are located within the 55 dBA contour line (see Figure 27.17-1). Therefore, an on-site noise analysis, including noise monitoring at the Riverbank State Park, Riverside Ramparts and Harlem Piers Park noise-sensitive receptors, was required to determine if an impact is predicted under Section R of the 2001 CEQR Technical Manual.

Noise monitoring was conducted at the noise-sensitive receptors during the quietest hour based on monitoring data provided in Table 21.17-1. Table 27.17-2 below identifies the existing background noise level during the quietest hour. The table shows the distance from the Existing West 135th Street MTS to the noise-sensitive receptors, the monitored existing background noise level at the noise-sensitive receptors, Existing West 135th Street MTS-related predicted noise levels at the noise-sensitive receptors, and the predicted noise levels with both facility noise and

Table 27.17-2
CEQR Analysis
Existing and Predicted Noise Levels (L_{eq}) at the Nearest Noise-Sensitive Receptor
Existing West 135th Street MTS

Noise-Sensitive Receptor ID	Distance from Facility (meters/ feet)	Existing Noise Levels During Quietest Hour (dBA)[1][2]	Predicted Facility Noise Level at Noise-Sensitive Receptor (dBA)[3]	Combined Facility and Background Noise Level at the Noise-Sensitive Receptor (dBA)	Increase over Existing Noise Levels (dBA)	Impact[4] (yes or no)
Riverbank State Park	27 / 90	64.2	66.0	68.1	3.9	Yes
Riverside Ramparts Park	67/220	62.4	58.2	63.8	1.4	No
Riverside Drive Apartment	119/389	59.3	56.0	61.0	1.7	No
Harlem Piers Park	183 / 600	62.2	58.8	63.8	1.6	No

Notes:

(1) Twenty-minute noise level readings measured at the nearest noise-sensitive receptor during the quietest hour determined from the 24-hour noise level readings.

(2) Existing noise levels at the proposed Harlem Piers Park were measured July 16, 2004 at 10:15 a.m. Existing noise levels at Riverside Ramparts were measured at August 18, 2004 at 10:40 a.m. Existing noise levels at Riverbank State Park were measured on April 16, 2003 at 2:45 p.m. Existing noise levels at Riverside Drive Apartment were measured on May 9, 2003 at 2:30 a.m.

(3) Predicted noise level calculations at noise-sensitive receptor include on-site and off-site shielding from structures.

(4) According to CEQR, an increase of 3 dBA during the daytime if the existing noise level is greater than 62 dBA is considered an impact. The impact analysis compares the loudest noise emissions from daily operations at the Existing West 135th Street MTS with the quietest background noise levels that occur during its operation. Only an analysis during the quietest daytime noise levels was performed, since the parks are not expected to be opened during the nighttime hours.

background noise combined. The table also provides the difference between this combined noise level and the existing noise level at the noise-sensitive receptors. This difference represents the predicted incremental change in noise level from the Existing West 135th Street MTS. Because this incremental change is less than the CEQR threshold of 3 dBA, since the existing background noise level is 62 dBA or greater at all of the noise-sensitive receptors analyzed, there is ~~no~~ a predicted impact that would be caused by the Existing West 135th Street MTS on-site operations at the Riverbank State Park

The data presented in this section is for the analysis to date. If this facility is chosen to be part of the New SWMP, a supplementary refined analysis, including refining utilization factors for equipment, will be performed.

27.17.3.3 Performance Standards for Zoning Code Analysis

Performance Standards do not apply to the Existing MTS analyses since the only on-site equipment are DSNY and other agency collection vehicles and tugboats, which are not to be included in the analyses per the Zoning Code (assuming tugboats are transportation facilities).

27.17.3.4 NYC Noise Code Analysis – Current

Overall noise predictions were calculated at the locations of the points (D1, etc.) representative of the Existing West 135th Street MTS boundary to determine the total L_{eq} from all indoor and outdoor sources for comparison to the current Noise Code. This is shown in Table 27.17-3. Based on this analysis, the total L_{eq} does exceed the current Noise Code Standard of 70 dBA at the property boundary.

The data presented in this section is for the analysis to date. If this facility is chosen to be part of the New SWMP, a supplementary refined analysis, including refining utilization factors for equipment, will be performed.

Table 27.17-3
Current Noise Code Analysis
Existing West 135th Street MTS

Location at Plant Boundary	Total L_{eq} Contribution at Plant Boundary (dBA)
D1	61.1
D2	65.1
D3	65.1
D4	**70.2**
D5	**72.7**
D6	**75.1**
D7	65.2
D8	67.6

Notes:
D1 through D8 are points representative of the Existing West 135th Street MTS boundary that are used in all noise analysis.
Bold= exceedence

27.17.3.6 Off-Site Noise Levels

An off-site noise analysis was performed in Section 21.17 for the West 135th Street Converted MTS. The trucks routed to the Existing West 135th Street MTS would be equivalent to or less than this analysis. Therefore, no additional off-site noise analysis is required for the Existing West 135th Street MTS.

27.17.3.7 Combined On-Site and Off-Site Noise Levels

An on-site and off-site noise analysis was performed for the Existing West 135th Street MTS. Since the potential impacts of these analyses can affect the same noise-sensitive receptor, a screening analysis must be conducted to determine if a combined noise analysis would be required for the operations at the Existing West 135th Street MTS.

If this facility is chosen to be part of the New SWMP, a supplementary refined on-site noise analysis will be performed, including a combined noise analysis.