CHAPTER 23 ENVIRONMENTAL REVIEW: EXISTING SOUTH BRONX MTS

23.1 Introduction

The results of the environmental analyses of the Existing South Bronx MTS are presented in the following sections:

23.2 Land Use, Zoning, and Public Policy
23.3 Socioeconomic Conditions
23.4 Community Facilities and Services
23.5 Open Space
23.6 Cultural Resources
23.7 Urban Design, Visual Resources, and Shadows
23.8 Neighborhood Character
23.9 Natural Resources
23.10 Hazardous Materials
23.11 Water Quality
23.12 Waterfront Revitalization Program
23.13 Infrastructure, Solid Waste and Sanitation Services, and Energy
23.14 Traffic, Parking, Transit, and Pedestrians
23.15 Air Quality
23.16 Odor
23.17 Noise

Section 2.4.5 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.

23.2 Land Use, Zoning, and Public Policy

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

23.3 Socioeconomic Conditions

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

23.4 Community Facilities and Services

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

23.5 Open Space

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

23.6 Cultural Resources

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

23.7 Urban Design, Visual Resources, and Shadows

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

23.8 Neighborhood Character

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

23.9 Natural Resources

The Existing South Bronx MTS is located at the site of the South Bronx Converted MTS. The analysis of the Natural Resources section of the South Bronx Converted MTS chapter in this FDEIS provides the necessary information of the review of this facility in this category.

23.10 Hazardous Materials

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

23.11 Water Quality

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

23.12 Waterfront Revitalization Program

The Existing South Bronx MTS has a smaller footprint than the South Bronx Converted MTS. Since there are no unmitigatible significant adverse environmental WRP impacts for the South Bronx Converted MTS, there will be no unmitigatible significant adverse environmental WRP impacts from the Existing South Bronx MTS.

23.13 Infrastructure. Solid Waste and Sanitation Services, and Energy

It is assumed that the staffing levels of the Existing South Bronx MTS would be equal to or less than the staffing levels of the South Bronx Converted MTS. Therefore, the analyses performed for the South Bronx 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 South Bronx MTS.

23.14 Traffic, Parking, Transit, and Pedestrians

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

23.15 Air Quality

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

23.16 Odor

In addition to the odors from waste processing operations in the building that will be controlled through an odor neutralizing system, the Existing South Bronx 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 South Bronx MTS operating at 4,800 tpd.

Table 23.16-1
Highest Predicted Odor Concentration(s) from On-Site Sources
Existing South Bronx MTS

Parameter	Resulting Odor Unit [1]
Estimated Detectable Concentration	5.0
Highest Result Type of Receptor Location of Receptor[2]	1.02 Fence Line Receptor Site Boundary
Closest Sensitive Receptor Result [2] Type of Receptor Distance to Receptor [3]	0.16 Prison Barge 340 Feet

Notes:
[1] Odor Unit is defined as concentration that an average person in a laboratory setting could just barely detect.
[2] Sensitive receptors in this analysis are the same as sensitive receptors in the noise analysis.
~~[1] D/T ratio is dimensionless.~~
~~[2] Measured from the site boundary.~~
~~[3] Measured from the site property line.~~

Table 23.16-2
Odor Sources Included in Odor Analysis
Existing South Bronx MTS

Type of Emission Source	Number of Sources Operated During Peak Design Capacity
Exhaust Fans from Processing Building	1
Moving Vehicles[1]	21
Barge	2

Notes:
[1] This is the number of collection vehicle inbound and outbound from the MTS.

23.17 Noise

The noise analysis addresses on-site and off-site sources of noise emissions from Existing South Bronx 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 Code. Section 3.19 provides a general discussion of the relevant regulatory standards and methodologies applied in this analysis.

23.17.1 Existing Conditions

23.17.1.1 Introduction

Figure 23.17-1 shows the location of the Existing South Bronx Converted MTS, the surrounding area and the points that represent the property boundary (D1, etc.) for all noise analyses. See Section 19.17.1.1 for further information.

23.17.1.2 On-Site Noise Levels

See Section 19.17.1.2.

23.17.1.3 Off-Site Noise Levels

See Section 19.17.1.3.

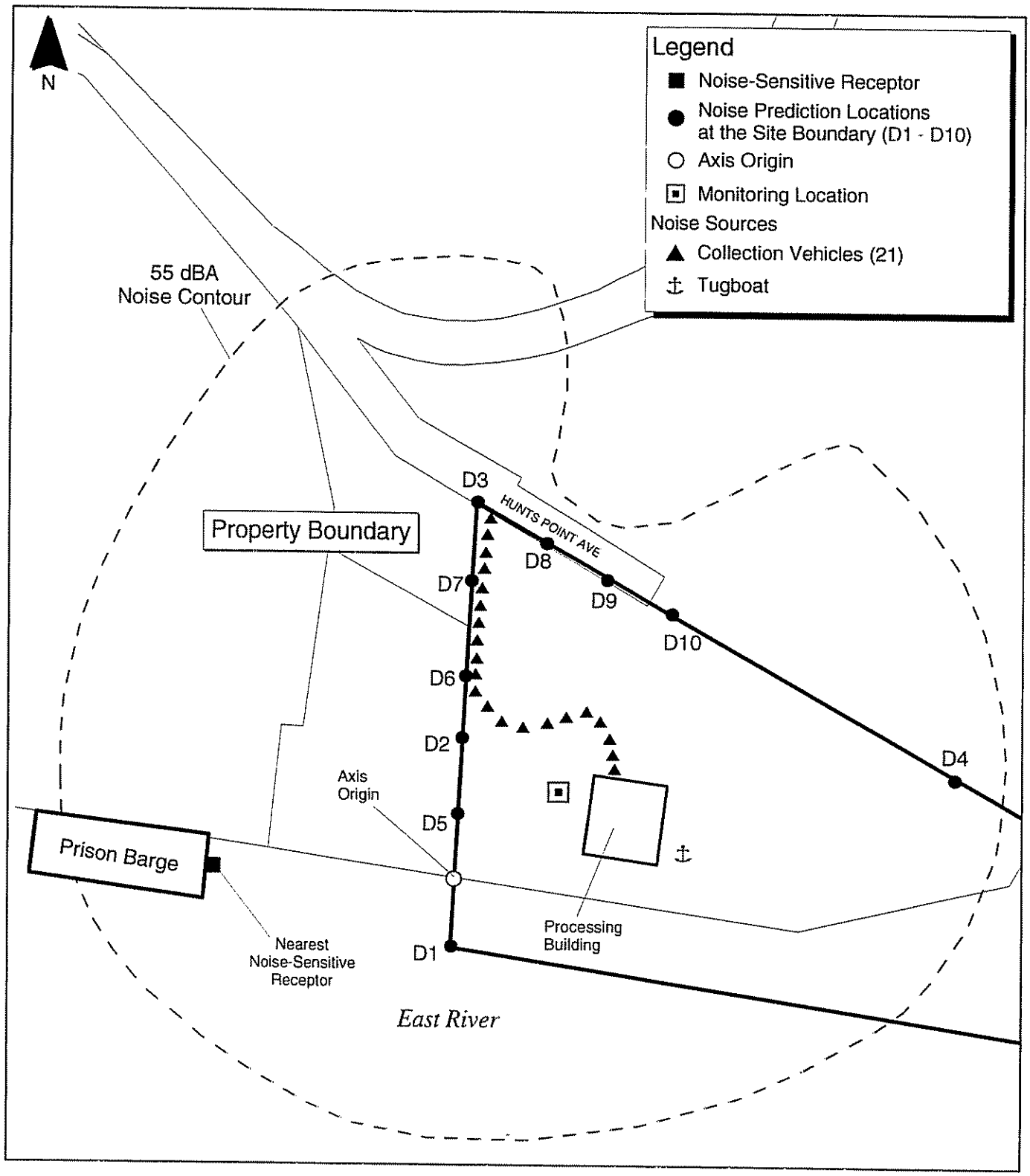
23.17.2 Future No-Build Conditions

23.17.2.1 On-Site Noise Levels

See Section 19.17.2.1.

23.17.2.2 Off-Site Noise Levels

See Section 19.17.2.2.



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

200 0 200 Feet

Figure 23.17-1 Noise Sources and Receptors
Existing South Bronx MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

23.17.3 Potential Impacts with the Existing South Bronx MTS

23.17.3.1 On-Site Noise Levels

Equipment assumed to be operating at the Existing South Bronx MTS and its reference noise levels used in the CEQR and Current Noise Code analysis are shown in Table 23.17-1. The number and types of equipment assumed for this analysis were based on the Existing South Bronx MTS's peak design capacity. Shown earlier, Figure 23.17-1 indicates the Existing South Bronx MTS layout, the locations of the points along its boundary where overall noise predictions were calculated and the predicted 55 dBA contour line.

23.17.3.2 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 South Bronx 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 238 meters (781 feet) from the property boundary in the direction of the nearest noise-sensitive receptor, which is approximately 197 meters (645 feet) 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 3.19.5.1 discusses this concept in greater detail. Since the background noise level at the receptor is 54.0 dBA, which is less than 55 dBA, the contour of the predicted facility L_{eq} equivalent to the background noise level is also shown in Figure 23.17-1. The results of the screening analysis show that noise-sensitive receptors are located within the 55 dBA contour line (see Figure 23.17-1). Therefore, an on-site noise analysis, including noise monitoring at the nearest noise-sensitivereceptor, was required to determine if an impact is predicted under Section R of the 2001 CEQR Technical Manual.

Table 23.17-1
Equipment Modeled in the Noise Analysis and Reference Noise Levels (L_{eq})
Existing South Bronx 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 (21)	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.

Noise monitoring was conducted at the noise-sensitive receptor during the quietest hour based on monitoring data provided in Table 19.17-1. Table 23.17-2 below identifies the existing background noise level during the quietest hour. The table shows the distance from the Existing South Bronx MTS to the noise-sensitive receptor, the monitored existing background noise level at the noise-sensitive receptor, Existing South Bronx MTS-related predicted noise levels at the noise-sensitive receptor, and the predicted noise levels with both facility noise and background noise combined. The table also provides the difference between this combined noise level and the existing noise level at the noise-sensitive receptor. This difference represents the predicted incremental change in noise level from the Existing South Bronx MTS. Because this incremental change is greater than the CEQR threshold of 5 dBA at the nearest noise-sensitive receptor, since the existing daytime noise level is 60 dBA or less, there is a predicted impact that would be caused by the Existing South Bronx MTS on-site operations.

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

Table 23.17-2
CEQR Analysis
Existing and Predicted Noise Levels (L_{eq}) at the Nearest Noise-Sensitive Receptor
Existing South Bronx 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)
Prison Barge	197 / 645	53.5	62.0	62.6	9.1	Yes

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 measured on May 7, 2003 at 3:00 p.m.
(3) Predicted noise level calculations at noise-sensitive receptor include on-site and off-site shielding from structures.
(4) According to CEQR, if the existing noise level is less than 60 dBA, an increase over 5 dBA during the daytime is considered an impact. The impact analysis compares the loudest noise emissions from daily operations at the Existi South Bronx MTS with the quietest background noise levels that occur during facility operation. The quietest hour of background noise levels occurred during the daytime hours for the noise-sensitive receptor; therefore, only daytime impact criteria are discussed in this analysis for this noise-sensitive receptor.

23.17.3.3 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).

23.17.3.4 NYC Noise Code Analysis – Current

Overall noise predictions were calculated at the locations of the points (D1, etc.) representative of the Existing South Bronx 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 23.17-3. Based on this analysis, the total L_{eq} does exceed the current Noise Code Standard of 70 dBA at the property boundary.

Table 23.17-3
Current Noise Code Analysis
Existing South Bronx MTS

Location at Plant Boundary	Total L_{eq} Contribution at Plant Boundary (dBA)
D1	63.9
D2	**71.6**
D3	69.0
D4	62.0
D5	**70.5**
D6	**73.9**
D7	**73.2**
D8	**73.5**
D9	67.7
D10	66.2

Notes:
D1 through D10 are points representative of the Existing South Bronx MTS boundary that are used in all noise analysis.
Bold = Exceedance

The data presented in this section is for the analysis to date. If this facility is chosen to be part of the Nnew SWMP, a supplementary refined analysis will be performed.

23.17.3.6 Off-Site Noise Levels

An off-site noise screening was performed in Section 19.17 for the Existing South Bronx MTS which did not require an off-site noise analysis; the trucks routed to the Existing South Bronx MTS would be equivalent to or less than this analysis. Therefore, no additional off-site noise analysis was required for the Existing South Bronx MTS.

23.17.3.7 Combined On-Site and Off-Site Noise Levels

An on-site noise analysis was performed for the Existing South Bronx MTS. As a result of the off-site screening analysis, which is described above in 19.17, no off-site noise analysis was required. Since an off-site analysis was not required, a combined noise analysis was not performed.

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