CHAPTER 29 ENVIRONMENTAL REVIEW: EXISTING EAST 91ST STREET MTS

29.1 Introduction

The results of the environmental analyses of the Existing East 91st Street MTS are presented in the following sections:

29.2 Land Use, Zoning, and Public Policy
29.3 Socioeconomic Conditions
29.4 Community Facilities and Services
29.5 Open Space
29.6 Cultural Resources
29.7 Urban Design, Visual Resources, and Shadows
29.8 Neighborhood Character
29.9 Natural Resources
29.10 Hazardous Materials
29.11 Water Quality
29.12 Waterfront Revitalization Program
29.13 Infrastructure, Solid Waste and Sanitation Services, and Energy
29.14 Traffic, Parking, Transit, and Pedestrians
29.15 Air Quality
29.16 Odor
29.17 Noise

Section 2.4.11 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.

29.2 Land Use, Zoning, and Public Policy

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analyses of the Land Use, Zoning, and Public Policy section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in these respective categories.

29.3 Socioeconomic Conditions

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analysis of the Socioeconomic Conditions section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

29.4 Community Facilities and Services

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analysis of the Community Facilities and Services section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

29.5 Open Space

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analysis of the Open Space section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

29.6 Cultural Resources

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analysis of the Cultural Resources section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

29.7 Urban Design, Visual Resources, and Shadows

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analyses of the Urban Design, Visual Resources, and Shadows section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in these respective categories.

29.8 Neighborhood Character

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analysis of the Neighborhood Character section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

29.9 Natural Resources

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analysis of the Natural Resources section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

29.10 Hazardous Materials

The Existing East 91st Street MTS is located at the site of the East 91st Street Converted MTS. The analysis of the Hazardous Materials section of the East 91st Street Converted MTS chapter in this FDEIS provides the necessary information for the review of this facility in this category.

29.11 Water Quality

The Existing East 91st Street MTS has a smaller footprint than the East 91st Street Converted MTS. Since there are no unmitigatible significant adverse environmental water quality impacts from the East 91st Street Converted MTS, there will be no unmitigatible significant adverse environmental water quality impacts from the Existing East 91st Street MTS.

29.12 Waterfront Revitalization Program

The Existing East 91st Street MTS has a smaller footprint than the East 91st Street Converted MTS. Since there are no unmitigatible significant adverse environmental WRP impacts from the East 91st Street Converted MTS, there will be no unmitigatible significant adverse environmental WRP impacts from the Existing East 91st Street MTS.

29.13 Infrastructure, Solid Waste and Sanitation Services, and Energy

It is assumed that the staffing levels of the Existing East 91st Street MTS would be equal to or less than the staffing levels of the East 91st Street Converted MTS. Therefore, the analyses performed for the East 91st 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 East 91st Street MTS.

29.14 Traffic, Parking, Transit, and Pedestrians

The Existing East 91st Street MTS may receive the same amount of DSNY-managed and potential commercial waste as the East 91st Street Converted MTS. See the Traffic, Parking, Transit, and Pedestrians section of the East 91st Street Converted MTS chapter in this FDEIS. If the amount of waste delivered to the Existing East 91st Street MTS is less than or equal to that analyzed, there will be no unmitigatible significant adverse environmental impacts.

29.15 Air Quality

The Existing East 91st Street MTS would have less on-site emission-generating equipment, and the sources located farther from the property line receptors, than the East 91st Street Converted MTS. Since there are no unmitigatible significant adverse environmental air quality impacts from the East 91st Street Converted MTS, there will be no unmitigatible significant adverse environmental air quality impacts from the Existing East 91st Street MTS.

29.16 Odor

In addition to the odors from waste processing operations in the building that will be controlled through an odor neutralizing system, the Existing East 91st 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 East 91st Street MTS operating at 4,800 tpd.

29.16.1 Potential Impacts with the Existing East 91st Street MTS

29.16.1.1 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 East 91st Street MTS are provided in Table 29.16-1.

Table 29.16-1
Odor Sources Included in Odor Analysis
Existing East 91st Street MTS

Type of Emission Source	Number of Sources Operated During Peak Design Capacity
Exhaust Fans from Processing Building	1
Moving Vehicles[(1)]	14
Barge	2

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

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% percent and 99% percent of odorous compounds. For purposes of modeling odor dispersion, a 90% percent reduction of odorous emissions was conservatively assumed for the Existing East 91st Street MTS.

29.16.1.2 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 29.16-2. The predicted odor unit OU values at sensitive receptor locations are compared to an OU odor unit of 5, which represents the level of odor impact that would begin to be detected by an average observer. The highest predicted odor unit OU associated with the Existing East 91st Street MTS at any nearby sensitive receptor is less than 1, so odors from the Existing East 91st 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 29.16-2
Highest Predicted Odor Concentration(s) from On-Site Sources
Existing East 91st Street MTS

Parameter	Resulting Odor Unit[1]
Estimated Detectable Concentration	5.0
Highest Result	2.55
Type of Receptor	Fence Line Receptor
Location of Receptor[2]	Site Boundary
Closest Sensitive Receptor Result	0.46
Type of Receptor	Apartment Building
Distance to Receptor(3)	360 Feet

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

29.17 Noise

The noise analysis addresses on-site and off-site sources of noise emissions from Existing East 91st 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 Code. Section 3.19 provides a general discussion of the relevant regulatory standards and methodologies used in this analysis.

29.17.1 Existing Conditions

29.17.1.1 Introduction

Figure 29.17-1 shows the location of the Existing East 91st Street MTS, the surrounding area and the points that represent the property boundary (D1, etc.) for all noise analyses. See Section 6.7.1.1 for further information.

29.17.1.2 On-Site Noise Levels

See Section 6.17.1.2.

29.17.1.3 Off-Site Noise Levels

See Section 6.17.1.3.

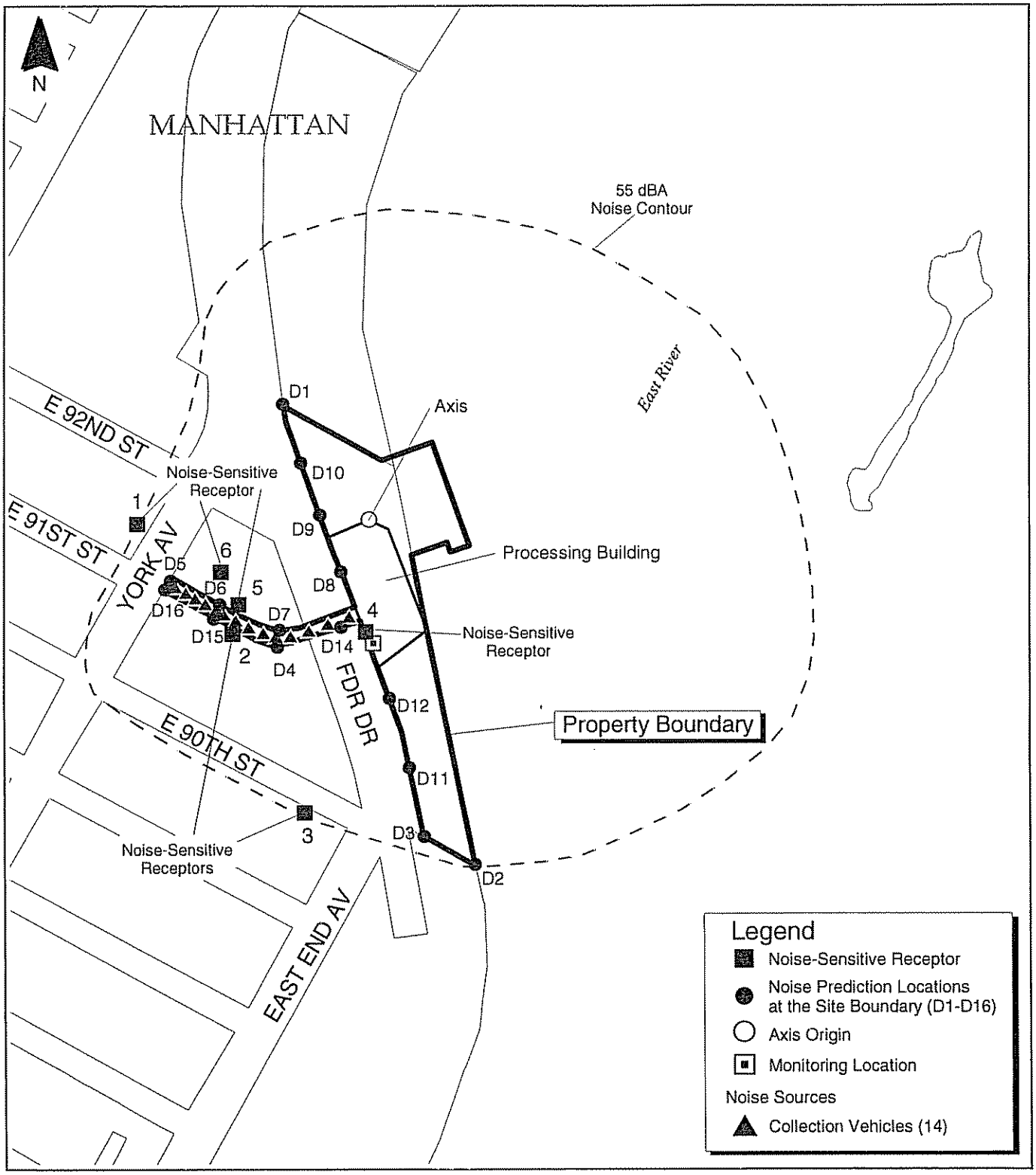
29.17.2 Future No-Build Conditions

29.17.2.1 On-Site Noise Levels

See Section 6.17.2.1.

29.17.2.2 Off-Site Noise Levels

See Section 6.17.2.2.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

200 0 200 Feet

HDR Hydroqual URBITRAN PB EEA Cambridge Environmental Inc

Figure 29.17-1 Noise Sources and Receptors
Existing East 91st Street MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

THE CITY OF NEW YORK DEPARTMENT OF SANITATION

29.17.3 Potential Impacts with the Existing East 91st Street MTS

29.17.3.1 On-Site Noise Levels

Equipment assumed to be operating at the Existing East 91st —Street MTS, and its reference noise levels, which were used in the CEQR and Noise Code analysis, are shown in Table 29.17-1. The number and types of equipment assumed for this analysis were based on the facility's peak design capacity. Shown earlier, Figure 29.17-1 indicates the Existing East 91st Street MTS layout, the locations of the points along its boundary where overall noise predictions were calculated and predicted the 55 dBA contour line.

Table 29.17-1
Equipment Modeled in the Noise Analysis and Reference Noise Levels (L_{eq})
Existing East 91st 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 (14)	67
Oceangoing Tugboat (1)	73

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

29.17.3.2 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 East 91st 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 50 meters (164 feet) from the property boundary in the direction of the York Avenue Apartment Building, which is approximately 40 meters (131 feet) from the property boundary; approximately 114 meters (373 feet) from the property boundary in the direction of the Asphalt Green Recreational Field, which is directly abutting the property boundary; approximately 136 meters (446 feet) from the property boundary in the direction of

the East 90th Street Apartment Building, which is approximately 114 meters (375 feet) from the property boundary; approximately 160 meters (523 feet) from the property boundary in the direction of the Bobby Wagner Walk, which is directly abutting the property boundary; approximately 107 meters (353 feet) from the property boundary in the direction of Asphalt Green, which is directly abutting the property boundary; and approximately 144 meters (473 feet) from the property boundary in the direction of the Asphalt Green Playground, which is directly abutting 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. The results of the screening analysis show that receptors are located within the 55 dBA contour line (see Figure 29.17-1); therefore, an on-site noise analysis, including noise monitoring at the nearest noise-sensitive receptor, was required to determine if an impact is predicted under Section R of the 2001 CEQR Technical Manual.

Noise monitoring was conducted at the receptor during the quietest hour based on monitoring data provided in Table 6.17-1. Table 29.17-2 identifies the existing background noise level during the quietest hour. The table shows the distance from the Existing East 91st Street MTS to the noise-sensitive receptor, the monitored existing background noise level at the noise-sensitive receptor, Existing East 91st Street 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 the combined noise level and the existing noise level at the noise-sensitive receptor. The difference represents the predicted incremental change in noise level from the Existing East 91st Street MTS. Because this incremental change is greater than the CEQR threshold of 3 dBA during the nighttime hours or during the daytime hours when the daytime background noise level is greater than 62 dBA at the nearest noise-sensitive receptor, there is a predicted impact that would be caused by the Existing East 91st Street 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 29.17-2
CEQR Analysis
Existing and Predicted Noise Levels (L_{eq}) at the Nearest Noise-Sensitive Receptor
Existing East 91st 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 Sensitive Receptor (dBA)[3]	Combined Facility and Background Noise Level at the Sensitive Receptor (dBA)	Increase over Existing Noise Levels (dBA)	Impact[4] (yes or no)
York Avenue Apartment Building-	40 / 131	~~63.6~~63.4	~~65.1~~65.2	67.4	~~3.8~~4.0	Yes
Asphalt Green Recreational Field[5]	Directly abutting truck ramp	~~69.0~~71.1	~~74.0~~76.5	~~75.2~~77.6	~~6.2~~6.5	Yes
East 90th Street Apartment Building	114 / 375	~~64.5~~63.4	~~63.8~~64.0	~~67.2~~66.7	~~2.7~~3.3	~~No~~Yes
Bobby Wagner Walk	Directly abutting property boundary	68.0	~~68.6~~75.4	~~71.3~~76.1	~~3.3~~8.1	Yes
Asphalt Green Building[5]	Directly abutting truck ramp	71.1	76.1	77.3	6.2	Yes
Asphalt Green Playground[5]	Directly abutting truck ramp	69.0	71.7	73.6	4.6	Yes

Notes:

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

(2) Existing noise levels measured on ~~July 22, 2003~~August 10, 2004 at 3:00 a.m. at the York Avenue Apartment Building; ~~July 7, 2004~~September 1, 2004 at 5:00 p.m. for the Asphalt Green Recreational Field and ~~Playground~~Building; ~~January 30, 2003~~ August 10, 2004 at ~~5~~3:00 ~~p~~a.m. for the East 90th Street apartment building; July 8, 2004 at 5:00 p.m. at the Bobby Wagner Walk; and ~~September 1st~~July 7, 2004 at 5:00 p.m. for the Asphalt Green Playground.

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

(4) According to CEQR, an increase over 65 dBA at daytime is considered an impact. However, if the existing noise level at the receptor during the daytime is 62 dBA or greater or if the analysis is for a nighttime hour, an increase over 3 dBA would be considered an impact. The impact analysis compares the loudest noise emissions from daily operations at the Existing East 91st Street MTS with the quietest background noise levels that occur during facility operation

(5) This noise-sensitive receptor was assumed to only be in use during daytime hours. Therefore, noise monitoring and noise analysis were only performed for the quietest daytime hour.

29.17.3.3 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).

29.17.3.4 NYC Noise Code Analysis-Current

Overall noise predictions were calculated at the locations of the points along the facility boundary to determine the total L_{eq} from all indoor and outdoor sources. This is shown in Table 29.17-3. 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 Nnew SWMP, a supplementary refined analysis, including refining utilization factors for equipment, will be performed.

29.17.3.5 Off-Site Noise Analysis

An off-site noise analysis was performed in Section 6.17 for the East 91st Street Converted MTS. The trucks routed to the Existing East 91st Street MTS would be equivalent to or less than this analysis. Therefore, no additional off-site noise analysis is required for the Existing East 91st Street MTS.

29.17.3.6 Combined On-Site and Off-Site Noise Levels

An on-site and off-site noise analysis was performed for the Existing East 91st 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 East 91st Street Converted 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.

Table 29.17-3
Current Noise Code Analysis
Existing East 91st Street MTS

Location at Plant Boundary	Total L_{eq} Contribution at Plant Boundary (dBA)
D1	61.9
D2	60.4
D3	61.5
D4	**77.2**
D5	**73.0**
D6	**75.9**
D7	**76.3**
D8	69.7
D9	65.9
D10	61.6
D11	62.7
D12	66.3
D13	**73.6**
D14	**80.8**
D15	**79.6**
D16	**73.4**

Notes:
D1 through D16 are points representative of the Existing East 91st Street MTS boundary that are used in all noise analysis.
Bold= exceedence