## FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE CROTON WATER TREATMENT PLANT AT THE HARLEM RIVER SITE

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### 7.6. NEIGHBORHOOD CHARACTER

#### 7.6.1. Introduction

The character of a neighborhood is a composite of different elements, including land use patterns, urban design, visual character, historic resources, socioeconomic conditions, traffic and pedestrian patterns, noise, and air quality. For a project to have a significant impact on the character of a neighborhood, it would have to result in a change in the overall quality of the neighborhood, modifying it substantially from other uses in the area. Such a change would be considered negative if it adversely affected the public's ability to view and enjoy the neighborhood and its visual features. These elements are evaluated individually in other sections of this document; however, an analysis of a neighborhood's character considers how these elements combine and interact to create the context and feel of a neighborhood.

For the purpose of this analysis, a study area with a one-half mile radius around the water treatment plant site has been identified. The methodology used to prepare this analysis is presented in Data Collection and Impact Methodologies, Section 4.6, Data Collection and Impact Methodologies, Neighborhood Character.

#### 7.6.2. Baseline Conditions

#### 7.6.2.1. Existing Conditions

Seven different neighborhoods are located within the study area. The neighborhood delineations are generally based on those provided by New York City Department of City Planning (NYCDCP) maps, community board maps, and street maps. The neighborhoods found within the study area are: Van Cortlandt Village, Kingsbridge, Marble Hill, Kingsbridge Heights, Spuyten Duyvil, Inwood, and University Heights (Figure 7.6-1). Portions of the study area are largely residential, while other areas are predominantly industrial or commercial/retail. As a result, traffic patterns and congestion vary throughout the study area. In general, some of the residential areas receive less traffic (and the accompanying noise and commotion) than some of the commercial and retail areas, which typically draw increased traffic particularly during business hours (see Section 7.9, Traffic and Transportation and Section 7.10, Noise). Some commercial and retail uses are located along the major thoroughfares, which further contribute to the traffic and congestion in these areas. This congestion affects Broadway and more heavily used roads such as Sedgwick Avenue and West 225<sup>th</sup> Street. Based on observations made during field visits, the industrial uses within the study area tend to draw less traffic than the commercial and retail uses; rather, much of the traffic within these areas seems to involve more specialized or industry-specific vehicle trips. The study area also contains numerous large facilities that contribute additional traffic to the neighborhoods (Bronx Community College, the U.S. Veterans Medical Center, and the New York Presbyterian Hospital - Allen Pavilion) and other facilities that draw additional traffic on a seasonal or event basis (Columbia University Baker Field/Wein Football Stadium).





2003 NYCDCP maps and community districts maps. Croton Water Treatment Plant The water treatment plant site is a narrow strip of property adjacent to the Harlem River in the vicinity of both University Heights and Kingsbridge Heights. The water treatment plant site is characterized primarily by industrial uses (Storage Post self-storage facility, XCEL Ready-Mix Concrete batch plant, railway storage area, Con Edison property, New York City Department of Transportation (NYCDOT) property, and a sand and gravel storage area). Along the eastern portion of the water treatment plant site and cutting diagonally between the northern part of project site and the CSX Transportation property, following the Harlem River, are rail lines used for freight/carrier trains and public transportation. The water treatment plant site has historically been used for illegal dumping and, although a large portion of the property has been cleaned up in recent years (prior to opening the current cement factory approximately three years ago), evidence still exists throughout the property of previous and current dumping.

University Heights. Among the notable features of University Heights are the Hall of Fame of Great Americans and Bronx Community College, located west of Martin Luther King Junior Boulevard and north of West 180<sup>th</sup> Street. The Bronx Community College provides a regular influx of people and traffic from outside the study area; however, the trees and open space provided on the campus contribute a valuable green space to the surrounding community. The Hall of Fame of Great Americans also contributes an influx of people and traffic from outside the study area; however, in general, the traffic along Hall of Fame Terrace between these two facilities is less substantial than that found on some of the surrounding roadways. North of the Hall of Fame of Great Americans is the Robert P. Patterson Army Reserve Center. In the vicinity of the Robert P. Patterson Army Reserve Center and along Sedgwick Avenue, single and multiple family dwellings are found. The streets in this area are much less congested than some of the major roads of the surrounding area, such as Martin Luther King Junior Boulevard, West Fordham Road, Sedgwick Avenue, and Jerome Avenue. Other sections of University Heights include some commercial/retail areas along the major roads; however, the neighborhood primarily consists of large apartment buildings. Also located within University Heights, in the southernmost portion of the study area, is the northern section of Roberto Clemente State Park, which provides space for public recreation and public waterfront access for persons within and outside of the study area.

*Kingsbridge Heights.* Within Kingsbridge Heights, east of the water treatment plant site, are the U.S. Veterans Affairs Medical Center and the Jewish Home and Hospital for the Aged. Both of these facilities draw in people and traffic from outside of the study area. The U.S. Veterans Affairs Medical Center is especially dominating, as it is a large, modern complex with a vast parking area. Residential areas abut these facilities to the south and east. Houses and some apartments characterize the grid streets in these areas.

Neighborhood shops and services characterize the section of West Kingsbridge Road in this portion of the study area. The Kingsbridge Armory, located at the corner of West Kingsbridge Road and Jerome Avenue, is a large building that visually dominates this area. The nineteenth century masonry building is reportedly the largest armory in the world. Immediately south of Kingsbridge Heights, the study area encompasses a small piece of the northern portion of the Fordham neighborhood in the vicinity of St. James Park.

*Van Cortlandt Village.* The portion of Van Cortlandt Village that occurs within the study area includes the southwestern corner of Jerome Park Reservoir and the neighborhoods immediately southwest of the reservoir. Sedgwick Avenue, which runs along the western and southwestern side of the reservoir, is a curvilinear street with well-maintained buildings and two rows of trees that form a canopy above the roadway. While the reservoir is not visible from the street level of Sedgwick Avenue, the grassy embankments that border the reservoir provide a strip of green on the east side of the avenue. West of Sedgwick Avenue, the land slopes steeply downhill to the Major Deegan Expressway. Most of the streets between Sedgwick Avenue and the Major Deegan Expressway are narrow and hilly. In a few places the topography is so steep that the City built pedestrian staircases (known as step streets) to connect the streets. Houses with small yards are scattered among the low-rise apartment buildings. Interspersed among the apartments are parks, open spaces, schools, and a few houses.

Immediately south of the reservoir, the neighborhood contains medium-density residential development on grid blocks (consisting of a mixture of houses and low-rise apartments), which establishes a more urban appearance than those residential areas to the west of the reservoir. These streets have less traffic than some of the surrounding thoroughfares, based on field observations, due in part to the one-way streets that occur in this area (see Section 7.9, Traffic and Transportation, for further details on traffic volumes). Some of these roadways have trees planted adjacent to the roads, though less densely planted than those areas west of the reservoir. Additionally, the on street parking along these roadways constricts the available space for vehicular traffic. This portion of the neighborhood is at a higher elevation than the reservoir. The Fort Independence Park is also located in this area, which provides open space for the surrounding community.

*Kingsbridge.* Continuing west to Broadway, the area transitions to a commercial and light industrial-type area with moderate traffic levels and interspersed residential parcels (see Section 7.9, Traffic and Transportation). An elevated train overshadows Broadway and the topography along and adjacent to Broadway is relatively flat. There are few open spaces in this area. Numerous mid-rise brick apartment buildings are scattered among houses and other buildings, creating a discontinuous streetscape. Ewen Park, a forested park located beyond the limits of the Kingsbridge neighborhood, presents a prominent visual feature for the neighborhood due to the rise in topography from the surrounding area. Located to the west of Ewen Park, also beyond the limits of the Kingsbridge neighborhood and at an elevation higher than areas to the east, are several large apartment buildings that represent dominant visual features of the area.

*Marble Hill.* North of the water treatment plant site, immediately north of West 225<sup>th</sup> Street, is a group of high-rise apartments known as the Marble Hill Housing Projects. The nine uniform buildings line the perimeter of the block with an open area in the middle. Each building is roughly ten stories tall. These tall apartment buildings create a distinct and abrupt feature of the viewscape. The Marble Hill Housing Projects have been noted to be in need of improvements by the New York State Comptroller's Office (as noted in a July 1999 report, *Deterioration of Public Housing in the State and City Projects Operated by the New York City Housing Authority.*) The western portion of the Marble Hill area is characterized by a rise in

topography and lower density residential development with single and multiple family homes. The residences in this area are closely situated to one another and the streets are congested primarily due to the on street parking on both sides of the roads.

*Spuyten Duyvil.* A small section of Spuyten Duyvil is located within the northwest portion of the study area. The Spuyten Duyvil area of the Bronx presents a contrast to some of the more heavily congested areas of the nearby neighborhoods. The topographical features of this area are prominent, especially where the land slopes down to the Hudson and Harlem Rivers. Much of the area is heavily treed and there are portions where the residential development is low-density with larger lot sizes than in the nearby neighborhoods, especially towards Spuyten Duyvil Shorefront Park (below the Henry Hudson Bridge). There is also a commuter train platform (beyond the limits of the study area) below the Henry Hudson Bridge, adjacent to the Harlem River, which draws in commuter traffic, especially during the workweek.

Inwood. The Inwood area of Manhattan consists of the northern portion of Manhattan and is surrounded on three sides by water (the Harlem and Hudson Rivers). Two of the most prominent features of Inwood are Inwood Hill Park and Fort Tryon Park, which provide a significant portion of the area for public recreation, as well as public waterfront access. Located within Fort Tryon Park is the Cloister Museum, which provides a significant cultural amenity for the area. Located at the north section of Inwood, west of Broadway, are the New York Presbyterian Hospital - Allen Pavilion and the Columbia University Baker Field/Wein Football Stadium. Both of these facilities draw in people and traffic from outside the study area. In the eastern section of Inwood, along the Harlem River, the most significant feature is the expanse of industrial uses. In the center portion of Inwood, along Broadway and west of Tenth Avenue, a mixture of apartment buildings and commercial/retail uses dominate the area, with the highest concentration of commercial/retail uses occurring along Broadway and Dyckman Street. Broadway and Dyckman Street are also the most congested roadways in the area. In the western portion of Inwood, along Inwood Hill Park, lower density residential development is mixed with apartment buildings, while in the southwestern corner of the study area parkland is intermingled with large residential dwellings at the Nagle Housing Complex (between Nagle Avenue and 10<sup>th</sup> Avenue). This intermingling of parkland with the large residential dwellings softens the visual impact of these buildings on the surrounding area.

## 7.6.2.2. Future Without the Project

The Future Without the Project conditions were developed for the anticipated peak year of construction (2009) and the anticipated year of operation (2011) for the proposed plant. The anticipated peak year of construction is based on peak truck traffic and the peak number of workers because such inputs to the community would likely cause the most noticeable land use changes.

Various agencies, planning documents, and other sources were contacted, reviewed and referenced to determine what approved, proposed, or potential projects and changes may reasonably occur in the Future Without the Project. The agencies contacted include the following: New York State Department of Transportation (NYSDOT), NYCDCP, the NYCDCP Waterfront Division, New York City Division of Real Estate Services, New York City Economic

Development Corporation, New York City Department of Parks and Recreation, New York City Department of Housing Preservation and Development, the Bronx Borough President's Office, the New York Public Library, and Montefiore Medical Center.

The analyses and projections within this section are based on information available at the time of document preparation. Due to the extended dates for analysis (to 2011), and the likelihood that new projects, proposals, and/or plans and policies would surface during this time frame, it is recognized that there is a potential for neighborhood character issues to arise that cannot be reasonably identified at this time. However, it is anticipated that if and when such other proposals are made, they would consider the proposed project in their own analyses.

In the Future Without the Project, it is anticipated that the water treatment plant site would remain largely unchanged from its existing condition. There are numerous projects and proposals in the Future Without the Project in the vicinity of the water treatment plant site and within the study area; however, the majority of the projects and plans that would facilitate these changes are only proposed (see Section 7.2, Land Use, Zoning, and Public Policy) and no definitive schedule for implementation is known. These proposed projects would not be anticipated to alter the character of the surrounding area. Rather, many of these projects are anticipated to contribute to the existing character of these areas. One exception to this may be the River Plaza project currently under construction south of West 225<sup>th</sup> Street. This project is anticipated to open in the spring of 2004. Although this project would contribute a facility that is generally consistent with the surrounding highly developed community and may not significantly alter the overall feel of the area, it would introduce a new large retail complex into an area formerly occupied by numerous auto-related businesses and a vacant Columbia Presbyterian Hospital Building. This project is anticipated to attract a significant number of shoppers to the area and increase the level of economic activity (during the day as well as evening) in the vicinity. Additionally, it is likely that this development would contribute to the overall existing traffic congestion of the area (see Section 7.9, Traffic and Transportation).

A second exception is a proposed housing project known as Fordham Landing. The project would substantially alter the character of the land located south of the University Heights Bridge by introducing a large housing complex onto a section of land formerly occupied by an automobile impound facility. This property is currently being used for the storage of school buses and highway equipment. According to a recent proposal, this project could introduce up to 500 affordable housing units and a parking garage contained within four 17-story buildings.

Other proposed activities within the study area may have the potential to alter the character of the neighborhoods, although as of yet there are no definitive schedules. Among these proposed activities are the rezoning of the industrial uses to residential uses in the area south of River Plaza, the numerous Greenway and park proposals, the rezoning of the area of Jerome Park Reservoir, and the re-utilization of Kingsbridge Armory. The rezoning of the area south of River Plaza, if implemented, would represent a substantial change to the character of the area. In areas where there is currently industrial development, the effects of the rezoning would be gradual over time. For vacant portions of this area, the rezoning would have a greater immediate effect since land for residential development would be readily available. If implemented, the numerous Greenway and park projects (including Regatta Park and the NYCDOT property enhancement

proposals) would introduce green space, public waterfront area, recreational areas, and pedestrian and bicycle routes throughout neighborhoods that are currently characterized by intense development.

Community Board 8 in the Bronx is pursuing a 197-a plan with numerous proposals for the area of Jerome Park Reservoir. Included in this proposal is the rezoning of residential areas west of the reservoir to reduce permitted densities, the mapping of a scenic district around the reservoir, and the creation of a more park-like setting around the reservoir. If this plan were implemented, there is a potential that the neighborhood setting would be enhanced by some of the proposed actions.

Finally, the re-utilization of the Kingsbridge Armory would potentially introduce new public facilities for the neighboring communities, depending on the final plans. Current proposals include implementation of institutional, commercial, retail, and entertainment uses. Additionally, the facilities introduced into the Kingsbridge Armory could result in increased traffic and congestion into an area that is already affected by intense traffic pressures.

## 7.6.3. Potential Impacts

# 7.6.3.1. Potential Project Impacts

The anticipated year of operation for the proposed plant is 2011. Therefore, potential project impacts have been assessed by comparing the Future With the Project conditions against the Future Without the Project conditions for the year 2011.

As noted above, the water treatment plant site is characterized primarily by industrial uses (NYCDOT storage/staging area, Con Edison property, self-storage facility, batch plant, and a sand and gravel storage area). The site has historically been used for illegal dumping and, although a large portion of the property has been cleaned up in recent years, evidence still exists throughout the property of previous and current dumping activities. With the implementation of the proposed project, the existing industrial uses found on the site would be removed and the water treatment plant site would be redeveloped with above-ground water treatment buildings, as well as underground structures and conduits. Most of the proposed plant would be constructed on the south and central portions of the water treatment plant site, where the self-storage facility, Con Edison property, and batch plant are presently located. The northern portion of the site, in the vicinity of the sand and gravel storage area, would be converted into publicly accessible land with park-like amenities as well as created wetlands. Similarly, the southernmost portion of the site between the proposed plant and the University Heights Bridge would be converted into publicly accessible land with park-like amenities and a created wetland.

As noted in Section 7.2, Land Use, Zoning, and Public Policy, the loss of the self-storage facility, batch plant, and sand and gravel storage area is not anticipated to impact businesses and communities in the neighboring areas. Rather, it is anticipated that the proposed project would enhance the surrounding community as a result of the general clean-up and landscaping of the site and the addition of publicly accessible waterfront land with park-like amenities and created wetlands with greater wildlife values than the existing rip-rapped shoreline (see Section 7.4,

Community Facilities, Section 7.5, Open Space Analysis, and Section 7.14, Natural Resources). The proposed plant would revitalize a portion of the eastern bank of the Harlem River and would provide public access along the waterfront, which would compliment multiple plans and policies affecting the study area, whose purpose includes enhancement of the community and natural resources (Section 7.2, Land Use, Zoning, and Public Policy). The proposed project is also anticipated to result in overall beneficial impacts to the visual quality of the area (see Section 7.3, Visual Character). It is anticipated that views would change from some of the higher surrounding areas, including from portions of the multiple story buildings located to the east. However, as discussed in the Visual Character section, the change would be minimal since a majority of the surrounding areas are high enough to be able to maintain a view over the proposed facility of the dominant feature of the study area, but overall, changes to the study area visual character are anticipated to be improvements due to the landscaping, general clean-up, and restoration activities associated with the proposed project.

As discussed in Section 7.9, Traffic and Transportation, operation of the proposed project is not anticipated to have significant traffic impacts on the roadways and communities in the study area. Traffic levels would not substantially increase as a result of the proposed project. The primary roads that would be anticipated to convey project-generated traffic would include the Major Deegan Expressway and West Fordham Road. The Major Deegan Expressway is a major interstate highway with a substantial capacity to accommodate project-generated traffic. During operations, traffic conditions would not be anticipated to be worse than the Future Without the Project conditions. Therefore, the anticipated traffic due to project-related activities would not be anticipated to affect or alter the character of the surrounding neighborhoods.

There would be no substantial anticipated changes to the neighborhood character of the surrounding area as a result of the proposed project. The proposed project would be anticipated to change the site from an industrial use to institutional/public facility and open space uses. This change is not anticipated to substantially change the character of the surrounding area. The site is isolated from its surroundings by the Major Deegan Expressway and Metro-North tracks to the east and north, Fordham Road to the south, and the Harlem River to the west, thus preventing any changes on the proposed project site from influencing development or zoning regulations in the surrounding area. The introduction of waterfront access and public open space could provide a benefit to the surrounding community. The introduction of waterfront access could assist in the implementation of a number of the waterfront proposals presented in the Land Use and Public Policy Section. Therefore, it is anticipated that no significant adverse impacts would occur to the neighborhood character of the surrounding areas as a result of the proposed project.

## 7.6.3.2. Potential Construction Impacts

The anticipated year of peak construction for the proposed plant is 2009. Therefore, potential construction impacts have been assessed by comparing the Future With the Project conditions against the Future Without the Project conditions for the year 2009.

The water treatment plant site is currently characterized primarily by industrial uses (NYCDOT storage/staging area, self-storage facility, Con Edison property, batch plant, and a sand and gravel storage area). The removal of the existing uses and implementation of the proposed project-related construction activities would not be anticipated to result in a substantial change in the character of the surrounding area. The existing operations utilize construction equipment (cement trucks, large transportation vehicles, back hoes, etc.) as part of their operations, much like the proposed construction activities associated with the proposed project.

The areas surrounding the water treatment plant site are largely separated from the site due to features within the surrounding area. These features include a large concrete embankment for the Major Deegan Expressway and railroad tracks to the east, the Harlem River to the west, University Heights Bridge to the south, and railroad tracks, vacant land, and commercial development to the north. In addition to separating the site from the surrounding areas, these features also provide limited screening for the site (see Section 7.3, Visual Character). As a result, anticipated visual effects resulting from proposed construction activities are anticipated to be minimal and would not be anticipated to have the potential to alter the character of the surrounding areas. However, the site would be directly visible from some of the areas at higher elevations, including from the higher floors of some of the large buildings in the area, and from areas west of the Harlem River.

As discussed in Section 7.9, Traffic and Transportation, construction activities associated with the proposed project may produce significant impacts at three intersections in the vicinity of Harlem River Site. However, it is not anticipated that these potential impacts would affect the defining elements of the neighborhood character. Similarly, the existing and anticipated no build traffic levels in the area are already substantially congested and the introduction of the additional proposed project construction induced traffic would not alter the character of the area.

Similarly, the noise levels associated with the construction-related activities would not be anticipated to change the neighborhood character. The area already has elevated noise levels generated by traffic on the Major Deegan Expressway and industrial uses in the area such as the subway yard in Manhattan across the Harlem River from the proposed site, the addition of noise generated by construction related to the proposed project would not substantially alter the noise environment of the area.

The introduction of air emissions associated with the construction of the proposed project would not substantially alter the air quality environment of the surrounding area. The area already is subject to substantial mobile air emission levels related to traffic traveling on the Major Deegan Expressway and stationary air emissions generated currently on the site by the batch plant of the proposed project at the Harlem River Site.

Therefore, no significant adverse impacts are anticipated to neighborhood character of the area surrounding the proposed project site during the construction of the proposed project.