17. Contaminated Materials

This chapter evaluates the anticipated environmental consequences that would result from the Proposed Project and summarizes the analyses and results. It evaluates potential contaminated materials that could be encountered in the study area and disturbed during construction of the Proposed Project. Measures to minimize adverse effects to public health and the environment are included in this chapter. Appendix K, "Contaminated Materials Supporting Documentation" provides further details.

17.1 KEY CONCLUSIONS

The Proposed Project would not result in any adverse impacts with respect to possible contaminated materials in the project area. Key conclusions from this analysis include the following:

- During construction of the Proposed Project, some contaminated materials—due to historical rail operations, dumping, and historical site uses—could be encountered in the station areas and corridor.
- Based on historical use of the proposed sites and neighboring properties, possible soil contaminants include polychlorinated biphenyls (PCBs), pesticides and herbicides, heavy metals, and petroleum constituents, including polycyclic aromatic hydrocarbons (PAHs). Groundwater contamination caused by petroleum products and chlorinated solvents is possible. Lead-based paint, asbestos-containing material, and mold could be present on existing structures (including bridges undergoing rehabilitation).
- MTA conducted preliminary surveys and subsurface investigations during the Proposed Project's design phase to assess the nature and extent of contamination. Some material was found to be contaminated, but no samples indicated hazardous conditions. Although many soil samples exceeded at least one New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use or Commercial Soil Cleanup Objective, MTA did not find the samples to be hazardous, because there were no exceedances of the U.S. Environmental Protection Agency Toxicity Characteristic Leaching Procedure and Resource Conservation and Recovery Act standards. Several groundwater samples exceeded New York Technical and Operational Guidance 1.1.1 Class GA Groundwater Standards and Guidance Values and Effluent Limitations criteria and there were exceedances of the New York City sewer discharge parameters.
- The results of the subsurface investigation and any additional investigations conducted by the design-builder will be used to prepare a project-specific Hazard Materials Management Plan and site-specific Health and Safety Plan. The purpose of those documents is to minimize the potential impacts to workers and the public.
- Overall, environmental contamination is anticipated to be low to moderate and no remediation should be necessary. The design-builder will implement best practices (such as dust control, use of tarps for spoils storage areas, and community air monitoring for particulate matter and volatile organics) to minimize impacts to adjacent sites and surrounding neighborhoods.

17.2 METHODOLOGY

MTA divided the Hell Gate Line (HGL) Corridor into four segments (as described in Chapter 2, "Project Alternatives") and four proposed station area locations, focusing this evaluation for potential contaminated materials on environmental conditions at the four proposed station sites and the proposed New Rochelle Yard expansion. MTA examined areas within at least 200 feet of each of these sites to include potentially contaminated neighboring properties within the immediate vicinity, increasing the radius around each proposed site if warranted by site and area conditions or known environmental contamination conditions.

Methodology included site reconnaissance and review of Sanborn fire insurance maps, New York City Directories, NYSDEC databases, and readily available information (internet resources) regarding contaminated sites. Appendix K, "Contaminated Materials Supporting Documentation," Attachment A, summarizes information obtained from historical Sanborn fire insurance maps.

MTA searched the New York City Directories for the proposed site and the surrounding properties as well as any alternative addresses. Appendix K includes the full New York City Directory Abstract. Environmental Data Resources, Inc. of Milford, Connecticut, conducted the search of the regulatory database records on May 8, 2018, and provided the records in the form of a regulatory agency database report. Appendix K includes the full report.

This evaluation also addresses the proposed infrastructure improvements along the railroad right-of-way (including bridge rehabilitations or replacements and new two-span bridge) where new track, third rail, catenary and signals are proposed in addition to the proposed substation sites and the interlocking sites and improvements. MTA evaluated these sites by reviewing existing environmental reports, existing environmental database radius reports of nearby properties, readily available online environmental resources, and site reconnaissance, when feasible.

The proposed sites are primarily within the railroad right-of-way and have historically been used as a part of railroad operations. The proposed locations consist of soils, fill, and ballast that could possibly be contaminated due to this historical railroad association. Possible contaminants include PCBs, pesticides and herbicides, heavy metals, and petroleum constituents, including PAHs.

MTA collected environmental samples between September 2019 and January 2020 in conjunction with a boring program to be used to further the design. Approximately 167 grab and 105 composite soil samples and 38 groundwater samples were collected within the Proposed Project study area, along the railroad corridor and at the locations of the proposed stations, bridges, substations, and interlockings (summary tables are found in Appendix K). MTA collected soil grab samples from 0.5 to 2 feet below ground surface and soil composite samples from 0 to 10 feet or 0 to 5 feet below ground surface, based on proposed development plans, with some 6 to 9 feet below ground surface due to apparent indications of contamination observed in the boring. MTA analyzed grab samples for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), PCBs, pesticides, and metals, and general chemistry and all composite samples were analyzed for U.S. Environmental Protection Agency Toxicity Characteristic Leaching Procedure and Resource Conservation and Recovery Act characteristics for waste disposal purposes. Although many soil samples exceeded at least one NYSDEC Unrestricted Use or Commercial Soil Cleanup Objective, the samples were not found to be hazardous, as there were no exceedances of the U.S. Environmental Protection Agency Toxicity Characteristic Leaching Procedure and Resource Conservation and Recovery Act standards.

MTA collected the groundwater samples via a peristaltic pump and high-density polyurethane tubing and/or dedicated bailers and groundwater depth ranged from approximately 1.5 feet to 20 feet below ground surface. Groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, and dissolved and total metals. Several samples exceeded New York Technical and Operational Guidance 1.1.1 Class GA Groundwater Standards and Guidance Values and Effluent Limitations criteria and there were exceedances of the NYC Sewer Discharge Parameters. Site-specific contaminant concerns are described in the following sections.

17.3 EXISTING CONDITIONS

17.3.1 Segment 1 (Corridor)

Segment 1 begins near the existing Woodside Station in central Queens and generally extends northeast along the elevated HGL toward the Hell Gate Bridge separating Queens and Randall's and Wards Islands. The area is a mix of commercial, industrial, and residential properties. Segment 1 includes three locations that were reviewed in this evaluation: the proposed Woodside, Gate, and Bowery Bay Substation sites.

17.3.1.1 Proposed Woodside Substation Site

The proposed Woodside Substation site would be located north of the "Y" where the Amtrak HGL and Long Island Rail Road Main line tracks diverge. Properties to the north, northeast, and south of the proposed locations have typically been used for industrial purposes. The NYSDEC Environmental Remediation Database lists the former Cleaners Products Supply at 50-45 Barnett Avenue, approximately 250 feet south of the proposed substation site, as a State Superfund site. A soil vapor extraction system was installed on June 26, 2017, and has reportedly removed a substantial amount of perchloroethylene from the subsurface soils. Based on NYSDEC's determination on the extent of soil and groundwater contamination, MTA does not expect perchloroethylene to affect construction of the proposed substation at this location. However, the potential for soil vapor intrusion exists, and the design-builder will investigate prior to any construction.

17.3.1.2 Proposed Gate Substation Site

The proposed Gate Substation site would be within the "Y" where Amtrak HGL and CSX tracks diverge, near the eastern terminus of 28th Avenue in Astoria Heights, Queens. The proposed substation location and the rail lines are upgradient of nearby commercial and residential properties. Historical Sanborn fire insurance maps starting in 1980 identify six metal-parts manufacturing operations or machine shops and one plastics molding company along Borough Place approximately 200 feet upgradient of the proposed Gate Substation. Petroleum fuels, waste oils, and some solvents (including chlorinated solvents) are typically used as a part of metal manufacturing processes. The track is elevated in this area, and it is unlikely that any contaminated material would be encountered during the planned construction work. Contaminant migration and potential for soil vapor intrusion exists, and the design-builder will investigate if any excavation to the groundwater table is planned.

Based on historical aerial photos, the proposed substation site was graded and potentially filled with material of unknown quality. The NYSDEC online files show records of some minor gasoline spills and/or leaks from underground storage tanks potentially affecting groundwater quality in the general vicinity of the proposed substation site; however, these spill cases have either been closed, or have not resulted in an NYSDEC remediation site, and are not expected to affect the proposed substation site.

17.3.1.3 Proposed Upgrade of Bowery Bay AC Substation Site

The Bowery Bay AC Substation site is east of the tracks between 48th and 49th Streets in Astoria Heights, Queens. Commercial and industrial uses are prevalent east of the substation site, and residential use is common to the west. Prosperity Cleaners is 40 feet and cross-gradient from the Bowery Bay Substation. Historical Sanborn fire insurance maps identify Prosperity Cleaners as a large dry-cleaning operation from 1948 to 2007. The HGL remains elevated in this area, and it is unlikely any contaminated material would be encountered during the planned construction work; however, potential for contaminant migration and soil vapor intrusion exists, and the design-builder will investigate if any excavation work to depth is planned.

The NYSDEC Environmental Remediation Databases show records of some minor petroleum spills and/or leaks from underground storage tanks potentially affecting groundwater quality in the general vicinity of the substation site; however, these spill cases have either been closed or are not expected to affect the substation site.

17.3.2 Segment 2 (Corridor and Hunts Point Station Area)

The area surrounding Segment 2 is generally used for industrial and transportation/utility purposes. These uses are concentrated along Segment 2 with some commercial uses and open space to the west of the railroad right-of-way. Segment 2 includes the following five proposed project elements that MTA reviewed in this evaluation:

- Leggett Interlocking
- Young Interlocking
- Oak AC Substation
- New Bronx River Bridge
- Hunts Point Station

17.3.2.1 Corridor

PROPOSED LEGGETT INTERLOCKING SITE

The site proposed for construction of the new Leggett Interlocking is within the railroad right-of-way, located near the Oak Point Yard, south of Leggett Avenue. The neighboring properties at this location are generally used for industrial, commercial, and transportation/utility purposes. The Environmental Data Resources, Inc. Historical Auto Station database revealed 13 historical auto service stations along Bruckner Boulevard from 149th Street to Hunts Point Avenue, upgradient and adjacent to the proposed Leggett Interlocking site. Historical uses of these operations vary from gasoline service stations to auto repair and operational years date back to as far as 1969 to present day. While these historical uses could affect groundwater beneath the section, construction activity would not occur at or below the groundwater table depth.

A 1994 spill in the Oak Point Yard was in the vicinity of the proposed Leggett Interlocking site. For a number of years, the spill source was a locomotive that reportedly leaked diesel fuel to the ground every time it was filled. Sampling efforts included soil and groundwater sampling, and remediation consisted of vacuum enhanced fluid recovery of the groundwater in the area. The spill was closed in 2014 and is no longer considered a threat to public health. If residual contamination is encountered during construction activities, the design-builder will employ appropriate mitigation efforts to protect workers and the public from exposure.

The NYSDEC Environmental Remediation Databases show records of some minor petroleum spills and/or leaks from underground storage tanks potentially affecting groundwater quality in the general vicinity of the proposed interlocking site; however, these spill cases have either been closed, or have not resulted in active remediation, and are not expected to affect the proposed interlocking site.

PROPOSED YOUNG INTERLOCKING SITE

The site proposed for construction of the new Young Interlocking is within the railroad right-of-way, located between Lafayette Avenue and Tiffany Street. Due to its proximity to the Leggett Interlocking site location, environmental contaminants and areas of concern are largely duplicative between the two interlocking locations, as described above.

PROPOSED OAK SUBSTATION SITE

The exact site of the proposed Oak AC Substation would be determined during final design but it would be adjacent to the HGL tracks, in the vicinity of Longwood Avenue and Garrison Avenue; Bruckner Boulevard is northwest of the approximate site location.

This location sits at a relatively lower elevation than the nearby roadways and adjacent properties, is within the railroad right-of-way, and has historically been used as a part of railroad operations. Therefore, the proposed location possibly consists of soils and fill that are contaminated due to this historical railroad association. Possible contaminants here would include PCBs, pesticides and herbicides, heavy metals, and petroleum constituents, including PAHs.

Possible contamination was found in the vicinity of the proposed substation. As discussed above, the location is at a relatively lower elevation (approximately 15 feet above sea level) than the nearby roadways and adjacent commercial and industrial properties (approximately 20 feet above sea level). Additionally, NYSDEC Environmental Remediation Databases show gasoline and petroleum spills at neighboring properties, including a former gas station approximately 500 feet from the proposed location. NYSDEC closed this gas station spill location on July 9, 2014, and it is unlikely—given the distance from the proposed location—that groundwater was severely affected on-site. Other spills have either been closed or have not resulted in a listed NYSDEC remediation site and are not expected to affect the proposed substation site.

PROPOSED BRONX RIVER BRIDGE

To accommodate a third passenger track within this segment, MTA would construct an additional two-span bridge north of the existing Bronx River Bridge. Historically this location contained a bridge and was used as a part of rail operations; therefore, the proposed location possibly consists of soils and fill that are contaminated. Possible contaminants here include PCBs, pesticides and herbicides, heavy metals and petroleum constituents, including PAHs.

MTA identified multiple off-site listings within the minimum search radius during the review of the regulatory databases. Most of these off-site listings are downgradient, or at distances from the site which would likely prevent migration of contaminants. MTA deemed the following two off-site listings adjacent to or upgradient from the site as relevant and may have adversely affected site conditions, including soil, groundwater, and soil vapor:

- LKQ Hunts Point Auto Parts Corp, located directly adjacent to the proposed new Bronx River Bridge. The LKQ Hunts Point Auto Parts Corp operates as a vehicle dismantling facility and chemical bulk storage facility, although regulatory status for both is currently listed as inactive.
- Expressway Service Station, located approximately 100 feet upgradient from the proposed new Bronx River Bridge. The service station is listed for auto repair operations from 1980 to 2014.

The Bronx River itself is a known terminal receiving water for historical industrial operations in the area including the nearby, upstream Bronx Works manufactured gas plant). However, the NYSDEC Environmental Remediation Database reports that a study was conducted to determine if the Bronx Works site had affected the adjacent Bronx River. No site-related impacts were found in the river or in the sediments in the river bottom. Additionally, the location of the proposed new bridge historically contained a bridge and large foundational elements that are still present. Therefore, MTA anticipated that limited foundation and in-water construction activity would expose workers to any contaminants in the Bronx River, if present.

17.3.2.2 Proposed Hunts Point Station Site

East 167th Street to the north, Colgate Avenue to the east, East 156th Street to the south, and Hewitt Place to the west in Hunts Point, Bronx, bound the greater Hunts Point Station area. The proposed Hunts Point Station would be within the railroad right-of-way, southwest of the Hunts Point Avenue Bridge near Bruckner Boulevard.

The review of Sanborn fire insurance maps indicated a likelihood of environmental conditions associated with historical uses at the site and surrounding areas. Adjacent properties to the proposed site were largely used for auto repair from 1950 to the present. The proximity of auto repair shops located adjacent to the site could have adversely affected the quality of the site, including soil, groundwater, and soil vapor.

The reviewed federal or state regulatory databases did not list the proposed Hunts Point Station area. The review of the regulatory databases identified multiple off-site listings within the minimum search radius. Most of these off-site listings are downgradient, or at distances from the site, which would likely prevent migration of contaminants. MTA deemed relevant the following three off-site listings adjacent to or upgradient from the site, which may have adversely affected site conditions, including soil, groundwater, and soil vapor:

- A former dry cleaner is listed at 880 Hunts Point Avenue, approximately 210 feet southeast from the proposed Hunts Point Station, operated from 1988 through 2014.
- The former Gaseteria gasoline service station is listed at 925 Hunts Point Avenue, approximately 260 feet northwest of the proposed site. Volatile organic compounds were found on-site, including benzene, toluene, ethyl benzene, and total xylene. The on-site tanks were excavated in 2014, and a soil vapor extraction system was installed on April 5, 2016.
- The 925 Hunts Point Avenue property (Lot 20, Tax Block 2735) is also listed as an E-Designation site for hazardous materials and noise (E-No: E-258).[1] The 925 Hunts Point Avenue site has not been fully remediated since obtaining an 'E' designation.

[1] Lots designated with an 'E' on the City of New York Zoning Maps have potential for hazardous materials contamination, and air and/or noise quality impacts.

MTA found no city directory documents for the subject property, in likelihood due to its imprecise physical address.

17.3.3 Segment 3 (Corridor and Parkchester-Van Nest, Morris Park, and Co-op City Station Areas)

The area surrounding Segment 3 is generally used for a mix of transportation/utility, single-family residential, commercial, and industrial uses to the south, and predominantly residential uses to the north. Segment 3 includes six locations that MTA reviewed in this evaluation: three proposed stations (Parkchester-Van Nest, Morris Park, and Co-Op City), one proposed interlocking site (Pelham Bay Interlocking), and two proposed substation sites/improvements (Van Nest AC Substation and Co-op City Substation).

17.3.3.1 Corridor

PROPOSED PELHAM BAY INTERLOCKING SITE

The Pelham Bay Interlocking is proposed to be reconfigured, located near the newly proposed Co-op City Station at De Reimer Avenue and under the I-95 and Hutchinson River Parkway overpasses. The "Proposed Co-op City Substation" section below, provides additional information on the proximity of the interlocking site to the Pelham Bay Landfill.

PROPOSED VAN NEST AC SUBSTATION REPLACEMENT

The existing Van Nest AC Substation proposed to be replaced as a part of the Proposed Project is on the west side of the adjacent Con Edison parking lot near the intersection of Baker Avenue and Unionport Road. The neighboring area is mainly industrial and commercial with residential areas farther south of the tracks and toward the north and northwest.

The site is used as a Con Edison substation facility. Both the existing site and the proposed new location could have been exposed to contaminants typical with use as a substation facility, including dielectric fluid, which can contain PCBs, and petroleum constituents.

Due to its proximity to the Parkchester-Van Nest Station location, environmental contaminants and areas of concern are largely duplicative between the proposed station location and this substation site, as described in the station section.

PROPOSED CO-OP CITY SUBSTATION

The proposed Co-op City Substation location within the railroad right-of-way would be east of the Hutchinson River Parkway, near Pelham Bay Park in Co-op City and the proposed Co-op City Station site. The surrounding area is generally residential with several public park areas nearby, including the Hutchinson River Parkway and Pelham Bay Park.

The former Pelham Bay Landfill is approximately ½ mile from the proposed substation location. The former Pelham Bay Landfill is a known source of soil and groundwater contamination. Due to its proximity to the proposed Co-op City Station site, environmental contaminants and areas of concern are largely duplicative between the proposed station and this substation site, as noted in the station's section.

17.3.3.2 Proposed Parkchester-Van Nest Station

The proposed station would be within the existing railroad right-of-way just north of the intersection of East Tremont Avenue and Dogwood Drive. The neighboring area is mainly industrial and commercial with residential areas farther south of the tracks and toward the north and northwest. A Con Edison Van Nest Maintenance Facility is north of the proposed station across the railroad tracks.

The MTA's review of Sanborn fire insurance maps indicated a likelihood of environmental conditions associated with historical uses at the site and surrounding areas. A Con Edison substation facility is directly west of the proposed site. The proposed Van Nest AC Substation location could have been exposed to contaminants typical with use as a substation facility, including dielectric fluid, which can contain PCBs, and petroleum constituents.

From 1950 to the present, neighboring properties to the proposed site were largely used for commercial purposes, including auto repair and dry-cleaning operations, which could have adversely affected the quality of the site, including soil, groundwater, and soil vapor.

The reviewed federal or state regulatory databases did not list the proposed Parkchester-Van Nest Station site. MTA identified multiple off-site listings within the minimum search radius during the review of the regulatory databases. Most of these off-site listings are downgradient or at distances from the site that would likely prevent migration of contaminants. MTA deemed the following off-site listings located adjacent to or upgradient from the site as relevant:

- A Con Edison substation facility northwest of the proposed station site has a history of spills, including a 4,000-gallon spill of dielectric fluid in 1991 that is still listed with the NYSDEC (Spill No: 9113331).
- Two historical dry cleaners are approximately 400 to 450 feet from the proposed station.
- Three historical auto operations are near the proposed station (one with known leaks from underground storage tanks).
- A Brownfield Cleanup Program site near the proposed station (Site Code: C203079) is inactive and made up of vacant buildings on each of the five lots (Lots 1, 7, 8, 17, and 23) that previously accommodated a gas station, two dry cleaners, and a possible unregistered fuel oil underground storage tank.

17.3.3.3 Proposed Morris Park Station

The proposed Morris Park Station area is in the Morris Park neighborhood of the Bronx. The neighboring properties are generally used for industrial, residential, and commercial purposes. The proposed station would be within the existing railroad right-of-way, adjacent to Morris Park Avenue and Basset Road.

A large contingent of institutional property uses exist near the site as well. West of Eastchester Road, the campus of Yeshiva University - Albert Einstein College of Medicine includes several academic buildings, a residence complex, and the affiliated Jack D. Weiler Hospital. Large institutional uses east of Eastchester Road include Calvary Hospital and the Bronx Psychiatric Hospital complex. To the south, the Montefiore Medical Park and a rail yard owned by MTA and New York City Transit are the dominant uses, located near the intersection of Eastchester Road and Waters Place. The northeastern section of the station area includes the existing Hutchinson Metro Center, Mercy College, and the New York Police Department Call Center.

The MTA's review of Sanborn fire insurance maps indicated a high likelihood of environmental conditions associated with historical uses at the site and surrounding areas. Neighboring properties to the proposed site were largely used for commercial purposes, including auto repair and gasoline service stations. The proximity of auto repair shops and dry cleaners located adjacent to the site could have adversely affected the quality of the site, including soil, groundwater, and soil vapor.

The reviewed federal or state regulatory databases did not list the proposed Morris Park Station area. MTA identified multiple off-site listings within the minimum search radius during the review of the regulatory databases. Most of these off-site listings are downgradient, or at distances from the site, which would likely prevent migration of contaminants. MTA deemed one off-site listing located adjacent to or upgradient from the site as relevant:

- The Environmental Data Resources Inc. US Historical Auto database identifies potential auto service sites that were historically or currently utilized. Three historical auto operations are near the proposed Morris Park Station.

17.3.3.4 Proposed Co-op City Station

The proposed Co-op City Station would be within the existing railroad right-of-way, with an entrance at De Reimer Avenue along Erskine Place. The use of surrounding properties is generally residential with some designated public spaces, including the Hutchinson River Parkway and Pelham Bay Park.

The MTA's review of Sanborn fire insurance maps indicated a high likelihood of environmental conditions associated with historical uses at the site and surrounding areas. Neighboring properties to the proposed site were typically a mix of residential and commercial.

The reviewed federal or state regulatory databases did not list the proposed Co-op City Station area. MTA identified multiple off-site listings within the minimum search radius during the review of the regulatory databases. Most of these off-site listings are downgradient or at distances from the site that would likely prevent migration of contaminants. MTA deemed one off-site listing located adjacent to or upgradient from the site as relevant:

- The former Pelham Bay Landfill, located approximately 0.3 mile southeast from the proposed station site, is listed as a State Superfund Program site. From 1963 until early 1978, the New York City Department of Sanitation operated the landfill as a disposal site for mixed municipal waste. Contaminants of concern on-site include ammonia nitrogen, volatiles organic compounds, semi-volatile organic compounds, heavy metals, cyanide, and benzene, toluene, ethyl benzene, and total xylene.

MTA found no city directory documents for the subject property, in likelihood due to its imprecise physical address.

17.3.4 Segment 4 (Corridor)

Segment 4 spans the railroad right-of-way and begins near Pelham Bay Park in the south and extends northeast to New Rochelle. The surrounding area is generally used for a mix of residential, commercial, transportation/utility, and open space uses. The southern portion of the segment bisects the Pelham Bay and Split Rock Golf Courses. Segment 4 includes three locations that were reviewed in this evaluation: the proposed Bronx Interlocking site, New Rochelle AC Substation, and New Rochelle Yard expansion.

17.3.4.1 Corridor

PROPOSED BRONX INTERLOCKING SITE

The proposed Bronx Interlocking site is located along the railroad right-of-way in Pelham Bay Park. The proposed site is near the Hutchinson River Parkway ramp and north of the Hutchinson River. The surrounding area is a mix of public and private uses, including the Pelham Bay Park, Turtle Cove Golf Center, and the Split Rock Golf Course.

The area near the proposed location is low-lying and historically subject to inundation with surface water and sediments, which, according to NYSDEC sources, could be contaminated with metals and organic compounds that were initially introduced by the former Pelham Bay Landfill.

PROPOSED NEW ROCHELLE AC SUBSTATION REPLACEMENT

The New Rochelle AC Substation is north of Webster Avenue and east of I-95, near the confluence of the HGL (to the south) and the New Haven Line (NHL) (to the north). Neighboring properties are predominantly mixed use, with areas of commercial and industrial lots and residential properties.

The former Industrial Overall Service Corporation located at 10 Bartels Place, approximately 590 feet northeast of the railroad, operated as a uniform and industrial clothing dry-cleaning/laundering facility, historically cleaning heavily soiled clothing from industrial services from 1956 until 2010. The listing is registered as a NYSDEC Hazardous Waste site (HW No. 413917). Groundwater monitoring events have delineated a groundwater contaminant plume spreading off-site including onto Metro North Railroad property. Testing on the railroad adjacent to the site revealed perchloroethylene concentrations in groundwater over 3,600 parts per billion. While this historic use has the potential to impact groundwater beneath the section, construction activity is not planned to occur at or below the groundwater table depth. If residual contamination is encountered during construction activities, appropriate mitigation efforts will be employed to protect workers and the public from exposure.

The surface grade at the proposed substation is generally above the grade of nearby properties. Rock outcrops are present along Webster Avenue beneath I-95 and the elevated rail lines. The NYSDEC online files show records of some minor gasoline spills and/or leaks from underground storage tanks that could affect groundwater quality in the general vicinity of the proposed substation site; however, these spill cases have either resulted in an NYSDEC remediation site being closed, or are negligibly small in volume and are not expected.

PROPOSED NEW ROCHELLE YARD EXPANSION

The New Rochelle Yard is along the railroad right-of-way southeast of I–95, near the intersection of Garden Street and Cedar Street, in New Rochelle. Neighboring properties are a mix of commercial, industrial, and residential. A Con Edison substation facility is located east of the proposed yard expansion area.

MTA review of Sanborn fire insurance maps indicated a high likelihood of environmental conditions associated with historical uses at the site and surrounding areas. The American Gas Company/New Rochelle Gas and Fuel Company operated as a manufactured gas plant, approximately 250 feet east of the proposed yard expansion area from before 1892 through 1931. The proximity of this former manufactured gas plant located adjacent to the site could have adversely affected the quality of the site, including soil, groundwater, and soil vapor.

A Con Edison substation facility in the area of the former New Rochelle Yard has operated from approximately 1974 to present day. This area could have been exposed to contaminants typical with use as a substation facility, including dielectric fluid, which can contain PCBs, and other petroleum constituents.

The reviewed federal or state regulatory databases did not list the proposed New Rochelle Yard expansion area. MTA identified multiple off-site listings within the minimum search radius during the review of the regulatory databases. Most of these off-site listings are downgradient or at distances from the site that would likely prevent migration of contaminants.

MTA found no city directory documents for the subject property likely because of its imprecise physical address. A review of the adjoining property listings indicates the adjacent uses as a mix of commercial, industrial, and residential.

MTA conducted a general site and area reconnaissance on May 20, 2013, and May 31, 2018, to observe the conditions in the area of the former New Rochelle Yard. The northernmost area of the former rail yard property is now a Con Edison substation facility. Two temporary frac tanks were present on-site at the time of inspection; the contents of which are unknown. Frac tanks are typically associated with groundwater storage and can be associated with active remediation. However, the research did not identify any active remediation at this address.

17.4 NO ACTION ALTERNATIVE

Under the No Action Alternative, railroad operations and associated activities will continue. Railroad operations and its associated activities provide a potential for spills and environmental contamination as a part of daily operation. These activities are not anticipated to affect or remove the existing contaminants within the station areas or along the HGL Corridor. There is also no evidence that these conditions significantly affect human health or the environment beyond the site, nor will they in the future. Likewise, MTA may not be able to identify contamination that could result from nearby commercial operations, which are largely automotive-related.

17.5 PROPOSED PROJECT

During construction of the Proposed Project, some contaminated materials caused by historical rail operations, dumping, and site uses in the station areas could be encountered. Ballast and underlying soil and historical fill could contain contaminants, including PCBs, pesticides and herbicides, heavy metals, PAHs, and petroleum products, as described previously. Groundwater contamination caused by petroleum products and chlorinated solvents could be expected based on historical use of the proposed sites and neighboring properties. Lead-based paint, asbestos-containing material, and mold could be present on existing structures. The design-builder will conduct appropriate surveys prior to any demolition or construction activities.

Potential environmental impacts vary at each proposed station location and other project areas due to the surrounding site uses. Overall, MTA anticipates environmental contamination to be low to moderate and no remediation should be necessary. Existing on-site contamination in ballast, soil and/or fill material is likely to be present and is a result of historical rail operations and/or runoff from surrounding properties.

The following sections summarize site-specific potential environmental impacts by segment.

17.5.1 Segment 1 (Corridor)

Under the Proposed Project, the design-builder could encounter some contaminated materials during construction in Segment 1 caused by historical rail operations, dumping, and historical site uses in the substation areas. Underlying soil and historic fill could contain contaminants, including PCBs, pesticides and herbicides, heavy metals, PAHs, and petroleum products. Groundwater contamination caused by petroleum products and chlorinated solvents could be expected based on historical use of the proposed sites and neighboring properties. Lead-based paint, asbestos-containing material, and mold could be present on existing structures. The design-builder will conduct appropriate surveys prior to any demolition or construction activities. Section 17.6, "Measures to Protect Workers, the Public, and the Environment" describes additional protective actions.

17.5.2 Segment 2 (Corridor and Hunts Point Station)

17.5.2.1 Corridor

With the Proposed Project, the design-builder could encounter some contaminated ballast, soil, or fill during construction in Segment 2 at substation locations and the Hunts Point Station site.

17.5.2.2 Hunts Point Station

There is potential for off-site soil and groundwater contamination surrounding the proposed station site. The shallow rock along the southern slope of the property would likely minimize the degree of impact near the proposed Hunts Point Station. MTA conducted further studies during the design phase of the Proposed Project to determine if the station area has been contaminated. The analyses found that no remedial action will be required. Actions to protect workers, the public, and the environment detailed in Section 17.6 will be in place during construction.

17.5.3 Segment 3 (Corridor and Parkchester-Van Nest Station, Morris Park Station, Co-op City Station)

17.5.3.1 Corridor

With the Proposed Project, the design-builder could encounter some contaminated ballast, soil or fill that has been affected due to rail operations and runoff from adjacent commercial properties during construction in Segment 3. The design-builder would likely encounter lead-based paint during rehabilitation of the Bronx River Bridge, and rehabilitation or replacement of the Bronxdale Avenue and Eastchester Road bridges. Detailed impacts of the Proposed Project on Segment 3 are discussed below. Section 17.6 details actions to protect workers, the public, and the environment.

17.5.3.2 Parkchester-Van Nest Station

Contaminated groundwater could be present at the proposed Parkchester-Van Nest Station site due to underground storage facilities that operated on nearby properties. There is potential for off-site soil and groundwater contamination surrounding the proposed station site.

17.5.3.3 Morris Park Station

Historical fill, which appears to be widespread in the proposed Morris Park Station area, could contain contaminants, including PCBs, pesticides and herbicides, heavy metals, PAHs, and petroleum products. Groundwater contamination caused by petroleum products and chlorinated solvents could be expected based on historical use of the site and neighboring properties.

17.5.3.4 Co-op City Station

Historical fill, which appears to be widespread in this area, could contain contaminants, including PCBs, pesticides and herbicides, heavy metals, PAHs, and petroleum products. Potential for groundwater impacts from nearby contaminated sites is possible.

17.5.4 Segment 4 (Corridor)

With the Proposed Project during construction in Segment 4, the design-builder could encounter some contaminated materials caused by historical rail operations, dumping, and historical site use in and around the area. The Pelham Lane Pathway Bridge likely has lead-based paint, which would require appropriate handling. Electrical supply operations conducted at the nearby Con Edison substation and maintenance facility could also have introduced contaminants, including PCBs, into the area. MTA does not know the extent or delineation of any contamination from the neighboring former manufactured gas plant at this time.

Potential for groundwater impacts from nearby contaminated sites (Con Edison substation and the former manufactured gas plant) exists.

17.6 MEASURES TO PROTECT WORKERS, THE PUBLIC, AND THE ENVIRONMENT

Sites containing potential environmental contaminants pose a potential for adverse impacts to workers, the public, and the environment during construction activities. The design-builder will implement the following summary of actions, with oversight by MTA, to avoid these potential adverse impacts.

17.6.1 Subsurface Investigations

As the design is further developed, the design-builder would consult the detailed results of the subsurface investigation performed between September 2019 and January 2020 and may perform additional subsurface investigations to further delineate the presence and extent of contamination in the areas of proposed subsurface disturbance and/or excavation. Additionally, the design-builder will conduct subsurface imaging (i.e., a geophysical survey) to find any buried utilities, tanks, or voids as needed based on site conditions and review of existing information.

Dust control measures and community air monitoring would be implemented by the design-builder, as appropriate, during any subsurface investigations. In the event that contaminated soil and/or groundwater are encountered during construction, the design-builder will follow the procedures in the project-specific Remedial Action Plan and Accident Protection Plan. These plans will be prepared by the design-builder and reviewed and approved by MTA prior to construction.

17.6.2 Health and Safety Plan

The design-builder will use the results of the subsurface investigations, along with the previously performed historical review and site reconnaissance, to prepare a site-specific Health and Safety Plan, with participation from FTA. The plan will be reviewed and approved by MTA. The purpose of this document is to minimize the potential impacts to workers and the public. All construction, demolition, excavation, or any other work involving soil disturbance under this Proposed Project will be conducted under the procedures outlined in the plan. This plan will specify site-specific health and safety measures including, but not limited to the following:

- All necessary personal protection equipment for workers involved in the Proposed Project
- Emergency service locations and details
- Applicable standard operating procedures for health and safety institutional controls to mitigate public exposure to contamination (including dust suppression techniques as described in Section 19.5.10, "Air Quality")
- Any appropriate air monitoring action levels and standard operating procedures for response actions in the event of action level exceedance
- Appropriate testing and monitoring procedures to be implemented if contaminated environmental media, including soil, soil vapor, and groundwater, is encountered during work activity
- Notification procedures of regulatory agencies, in the event contaminated environmental media is encountered during work
- Procedures for transporting contaminated materials off-site to appropriate disposal facilities

17.6.3 Hazardous Materials Management Plan

The design-builder would develop a project-specific Hazardous Materials Management Plan, with participation from FTA. The plan will be submitted for MTA's approval and address safe handling, storage, treatment and disposal of hazardous materials encountered at or brought onto the construction site and the following components:

- Applicable regulations for addressing hazardous materials encountered during construction
- Assessment of any releases into ground, groundwater or surface water
- Procedures for handling unanticipated contamination encountered
- Components that must be included in the Investigation Work Plans and Site Investigation Reports
- HAZWOPER training for all contractor employees handling hazardous materials

If hazardous materials are encountered during construction, MTA will notify FTA immediately. MTA and the design-builder will provide FTA with anticipated next steps based on the approved Health and Safety Plan and Hazardous Materials Management Plan, and following guidance from NYSDEC. Work will not resume at the site until FTA responds and appropriate public notice requirements will be followed.

In addition, MTA requires the design-builder identify the following elements related to the handling hazardous and non-hazardous materials encountered during construction:

- Permits required for transporter and disposal facilities
- NYSDEC requirements and guidances (6 NYCRR Part 375 and DER-10)
- Waste staging and storage requirements
- Safe practices to prevent carryover of contaminated materials during transportation off-site
- Soil erosion and sediment control measures
- Stormwater pollution prevention measures
- Establishment of work and exclusion areas as per Occupational Safety and Health Administration

Any surface-level contamination would be addressed through proper erosion control, stormwater pollution prevention, and water material safe storage/transportation practices. There is the potential to create unanticipated exposure to contamination during dewatering activities below groundwater levels. MTA would require the design-builder to meet the following requirements for dewatering:

- Obtain all necessary groundwater withdrawal permits from New York State. The permit application requires calculations to show the proposed system does not negatively impact contamination to or from the project site to neighboring properties.
- Construct the groundwater withdrawal system following review of design by MTA and applicable regulatory agencies. Monitor performance daily with piezometers and installed observation wells.
- Design, construct and operate the effluent discharge system per the applicable discharge permit and regulatory requirements. The treatment system performance must be monitored periodically as required by the discharge permit for each site.

17.7 CONCLUSION

During construction of the Proposed Project, the majority of activities would take place within the railroad right-of-way. The design-builder could encounter some contaminated materials caused by historical rail operations, dumping, and historical site uses in the station areas and corridor. MTA conducted preliminary surveys and subsurface investigations as part of the Proposed Project's preliminary design phase to assess the nature and extent of contamination. To minimize the potential impacts from contaminated materials to workers and the public under the Proposed Project, the design-builder will use the results of the subsurface investigation, and any additional investigations conducted by the design-builder, to prepare a project-specific Hazard Materials Management Plan and a site-specific Health and Safety Plan. These measures will ensure no adverse impacts from contaminated materials under the Proposed Project.