

## 4.0 LAND USE AND LOCAL LAWS

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### 4.1 Applicable Regulatory Requirements

This section addresses several types of issues, required under PSL §164(1)(a) and (c), 16 NYCRR 1001.1(a), and 16 NYCRR 1001.3, as covered in Stipulation 5: compatibility with local laws, existing land uses, zoning districts, and land use planning. Land use analysis studies the patterns of local human settlement and life. Potential impacts, which may be experienced by existing land uses within the Project vicinity during the construction phase, are also discussed. Mitigation, where necessary, has been identified to reduce the effect of potential impacts.

The analysis of local laws is included in this section because many local laws are generally related to land use. However, in New York City, there are numerous other types of local laws, including comprehensive environmental protection, building and fire safety codes. These are also included in this section and in a table listing compliance with local laws ([Table 4-19](#)). The Public Service Law requires the Siting Board to issue a Certificate only if it finds that the Project “is designed to operate in compliance with applicable state and local laws and regulations.” PSL §168.2(d). However, in the case of local requirements, the Siting Board has discretion to grant relief from such provisions if it finds that they are “unreasonably restrictive in view of the existing technology.” PSL §168.2(d). The proposed Project is expected to operate in full compliance with all existing local laws and ordinances.

In addition to analyzing technical compliance with local law, this section documents consistency with certain planning documents listed in Stipulation 5. The Project site is located within a coastal zone, requiring a demonstration of compatibility with the applicable New York State and New York City coastal zone policies. Coastal zone management is federally mandated through the federal Coastal Zone Management (CZM) Act of 1972. Findings of coastal zone consistency are based on Coastal Management Policies, as contained in NYS Coastal Management Program, as well as Local Waterfront Revitalization Programs (LWRP), drafted pursuant to the New York Waterfront Revitalization and Coastal Resource Act (Executive Law, Article 42) and approved by New York Department of State (DOS), at the federal level, and the Secretary of Commerce. This section includes an evaluation of the Project's consistency with applicable State and City coastal policies, the approved Williamsburg Waterfront and Greenpoint 197-a plans, the New York City Comprehensive Waterfront Plan, the Plan for the Brooklyn Waterfront and the other plans listed in Stipulation 5.

## 4.2 Existing Land Use

In accordance with Stipulation 5, Clause 2, a land use study was undertaken for a one-mile radius study area, as well as for interconnection routes. CEQR Technical Manual methodology (Section 3A of the October 2001 edition) was used as appropriate. Study methods included both research of available published information and field surveys. Although not required by the stipulations, the land use study also took into account the entirety of the Brooklyn Community Board 1 district, because much of the land use study area is within this district, and because the Greenpoint-Williamsburg Waterfront Task Force asked that the entire district be considered.

### 4.2.1 Near Field Land Uses

#### 4.2.1.1 Project Site Description

The Project site is located at the existing Bayside Oil Terminal at North 12th Street and Kent Avenue, in Brooklyn, New York. [Figure 4-1](#) presents an aerial and a bird's-eye view of the site. [Figure 4-2](#) presents photographs of existing on-site facilities. The site consists of approximately 8 acres, bounded on the north by the Bushwick Inlet, on the east by Kent Avenue, on the south by North 12th Street, and on the west by the East River. Traffic access to the site is currently available along North 12<sup>th</sup> Street.

For over 100 years, the site has been operated as an oil storage and distribution terminal. The current uses of the site include oil storage, oil pipeline to tank transfer operations, oil tank to truck transfer operations, truck parking, and related fuel services. The present owner/operator is Bayside Fuel Oil. The facility dispenses (wholesale) kerosene, diesel fuel, No. 1 and No. 2 fuel oil, and is also licensed to dispense gasoline. There are twelve above-ground storage tanks (ASTs) located on the northwestern half of the Project site, with the largest tank having a capacity of 1,260,000 gallons. Total storage on-site is approximately 5,000,000 gallons. Fuel deliveries to the site are made primarily by the Buckeye Pipeline Company. Fuel is then transported from the site by truck. Tank-to-truck loading racks are located on the eastern portion of the site. Each loading rack has a drain which discharges to a wastewater holding tank and an oil/water separator. Both entry and departure are controlled by a manned security system.

A maintenance garage is located on the southeastern portion of the property. Petro, a wholesale oil company, currently leases this building as a truck maintenance garage. A warehouse and dispatch building on a concrete slab is located along the southwest border of the subject property. This building includes a maintenance area with cable-operated freight elevators, loading docks facing North 12<sup>th</sup> Street, and a boiler area that includes compressors. The same building also includes occupied space, which is used on the first floor by Bayside Oil offices, a TGE field

office, and a dispatch/control room. The second and third floors are occupied by commercial tenants, including a sound recording studio, clothing design, woodworking and similar uses. Formerly, a truck washing operation also occupied the site and discharged wastewater to the NYC sewer system. Other ancillary structures on-site include utility and pipeline-related sheds, transformers and miscellaneous hazardous material storage containment areas, and an emission control vapor recovery system.

The topography is generally flat with a gentle slope westerly towards the East River. Elevation ranges from 6 to 13 feet above mean sea level. A majority of the site is paved over with asphalt. Parking areas for tanker trucks are located to the northeast of the loading racks and to the southeast of the maintenance building. Crushed stone covers the areas surrounding the ASTs. Catch basins are located within the paved and tank farm areas, and storm water is collected within secondary containment dikes. Because of extensive monitoring and studies of subsurface soil and groundwater contamination, the site also contains numerous monitoring wells.

#### *4.2.1.2 Land Uses of Nearest Properties*

Stipulation 5, Clause 2(a-ii) requires a map of all properties within 1,000 feet of the Project site boundary, showing land use, tax parcel number, and owner of record of each property (based on municipal tax assessor office records). A map showing block numbers, tax lot boundaries and land uses within 1,000 feet is found in Figure 4-3 and summarized in Table 4-1, with further detail in Volume 6, Att. L-6. It should be noted that the CEQR Technical Manual recommends a typical radius of 400 feet for a primary, near-field study area, but a larger radius is used here.

Blocks adjacent to the Project site are industrial in character. Active uses adjacent to the site (across the street and/or across the Bushwick Inlet and vacant land to its north) are as follows:

- to the southwest, a 1.8-acre tract dedicated to document warehousing (CitiPostal/CitiStorage) and a 1.8-acre NYC Department of Sanitation truck depot;
- to the south, a 0.9-acre parcel with a long-established manufacturer and distributor of flat glass products (Colonial Mirror and Glass);
- to the southeast, a 0.8-acre lot occupied by Nations Rent construction rental equipment;
- to the east, the 1.8-acre Albest Metal Stamping plant, which occupies its entire block except for a 0.06-acre mixed use parcel that formerly housed a small Turkish restaurant (now boarded up) with a garage and a non-conforming residential use;
- to the northeast, a 1.0-acre garage used by the NYC Department of Environmental Protection water system maintenance trucks;
- to the north, a 0.7-acre building that houses a clothing distributor, and a 1.9-acre bus washing facility.

The land use context for the Project site shows a pattern of industrial uses and vacant land along the nearest segments of the East River waterfront, with primarily industrial uses for several blocks in all directions. Beyond the several blocks of industry lies mixed use development, consisting largely of converted lofts with live/work space, with a long-established mixed use district in Northside Williamsburg, and an established residential area in Greenpoint. In the Northside, the land use survey revealed the nearest substantial residential presence spaced consistently at a four-block walk from the site: along Berry Street below North 10<sup>th</sup> Street, along Wythe Avenue below North 9<sup>th</sup> Street and at Kent Avenue below North 8<sup>th</sup> Street. In Greenpoint, the land use survey revealed a substantial residential presence at the intersection of Franklin and Calyer Streets, along Clifford Place at Calyer Street and Meserole Avenue, and along Guernsey Street at Norman and Nassau Avenues. All of these areas are three or four blocks away from the Project site, which is situated inside an industrial pocket that, while dilapidated in appearance, serves to support vibrant manufacturing uses. Within the nearest several blocks, covering nearly 70 acres of land area around the site, only 5 residences were observed.

**Table 4-1: Tax Block Information Within 1000 Feet of Project Site**

Block no.	Percentage of Land Dedicated to Listed Use				
	Industrial	Commercial	Residential	Public	Other
2277	100	–	–	–	–
2278	100	–	–	–	–
2279	100	–	–	–	–
2282	100	–	–	–	–
2283	100	–	–	–	–
2287	100	–	–	–	–
2288	100	–	–	–	–
2289	100	–	–	–	–
2294	75.5	–	–	–	24.4
2295	79.7	–	7.8	–	12.5
2296	100	–	–	–	–
2301	100	–	–	–	–
2302	96.5	–	1.7	–	1.8
2303	91.5	4.6	–	–	4.0
2308	–	–	–	–	100
2309	85.7	3.6	7.2	3.5	–

<b>Table 4-1: Tax Block Information Within 1000 Feet of Project Site (CONTINUED)</b>					
<b>Block no.</b>	<b>Percentage of Land Dedicated to Listed Use</b>				
	<b>Industrial</b>	<b>Commercial</b>	<b>Residential</b>	<b>Public</b>	<b>Other</b>
2567	100	–	–	–	–
2570	100	–	–	–	–
2571	–	39.1	60.9	–	–
2589	91.5	–	8.5	–	–
2590	46.7	2.9	–	–	50.4
2592	100	–	–	–	–
2593	100	–	–	–	–
2613	100	–	–	–	–
2614	100	–	–	–	–
2615	100	–	–	–	–
2616	91.4	–	8.6	–	–
2639	100	–	–	–	–
2641	82.9	17.1	–	–	–
2642	71.0	29.0	–	–	–

Notes: “Industrial” include industrial/manufacturing and transportation/utility uses. “Commercial” includes parking and exclusively commercial land uses. “Residential” also includes mixed commercial/residential lots. Public includes public facilities and open spaces. “Other” includes vacant and unclassified land uses. Area values based on the portion of each block that is found within the 1,000 foot radius area.

#### **4.2.2 Land Uses in Broader Vicinity**

Stipulation 5, Clause 2(a-i) requires a map of all existing land uses within the Study area, as well as within a block of all interconnections to the extent the interconnections are outside the Study area, which map must identify property lines, as well as the Project’s relationship to adjacent properties and land uses. (A separate requirement of this clause – that the map address land use plans – is addressed in Section 4.5.4 below.)

Existing land uses within the study area are shown in Figures 4-4, 4-5 4-5A and 4-6. Figure 4-4 identifies land uses on the basis of available New York City Planning Department mapping and field surveys conducted as part of this land use study. Figure 4-5 provides an oversize aerial photograph of the existing development in the vicinity of the Project site, dating from 2000. Figure 4-5A is a closeup of that aerial. Figure 4-6 identifies notable specific land uses in the site vicinity.

#### 4.2.2.1 *Land Uses in Brooklyn*

Outside of the predominantly industrial area surrounding the Project site is a mix of industrial, vacant, commercial, open space and residential land uses. The study area includes the Greenpoint waterfront, characterized by dilapidation and mostly vacant formerly industrial sites; the Greenpoint neighborhood, with a commercial area along Manhattan and Nassau Avenues, an historic district and extensive residential uses; portions of the industrial land east of Greenpoint along the Newtown Creek (the nearest such use being the Newtown Creek Water Pollution Control Plant); McCarren and McGolrick parks<sup>1</sup>, which serve their adjacent neighborhoods; portions of residential East Williamsburg, separated from Greenpoint and the Northside by the elevated Brooklyn-Queens Expressway; the Northside mixed use area; portions of the Southside and South Williamsburg neighborhoods.

Residential uses within the Brooklyn study area are found primarily in Greenpoint, East Williamsburg and, to a lesser degree, on the Northside. Medium densities predominate, and low-scale housing is the norm. Rowhouses are a notable feature of the Greenpoint Historic District. Wood frame and masonry houses are located throughout residential areas of eastern Greenpoint. The Brooklyn-Queens Expressway (BQE) bisects the study area and forms a physical and visual barrier. Southeast of the expressway, residential development predominates, anchored around commercial areas along Graham and Metropolitan Avenues. To the west of the BQE, residential areas are found mostly within a mixed-use context, especially in the Northside. Building forms within the Northside include wood frame houses and converted industrial loft buildings. A former industrial building on the Northside waterfront – 184 Kent Avenue – is undergoing conversion to residential housing, having completed a variance process. Beyond the study area, but within Community District 1, the residential profile changes significantly, with several high-rise residential complexes to the south and east of the study area, including Lindsay Park Houses, Independence Towers, Williamsburg Houses, Havermeyer Houses, Cooper Park Houses and Bushwick Houses.

Commercial uses within the Brooklyn study area can most often be found within mixed commercial/residential sections, as occur along Nassau Avenue, portions of Manhattan Avenue, Graham Avenue, Beford Avenue, and portions of Metropolitan Avenue (east of the BQE). Manhattan Avenue forms the commercial heart of Greenpoint, and is almost exclusively commercial for several blocks. This area is also occupied by several churches and other public or quasi-public uses. The architectural and land use pattern and solid retail frontage contributes to a vibrant street life along Manhattan Avenue and immediately adjacent areas. One block to

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<sup>1</sup> This park is spelled throughout available literature as either McGolrick or McGoldrick. For internal consistency, “McGolrick” is adopted throughout this document.

the east, along McGuinness Boulevard, commercial uses of a different nature can be found, with gasoline stations, repair shops and mixed commercial/manufacturing activities.

Industrial uses in the Brooklyn study area are concentrated in areas on or within several blocks of the waterfront. Declining industrial use has led to many dilapidated areas while others remain actively used, generating employment, as is the case in the vicinity of the Project site. On the Greenpoint waterfront, north of the site, are a trucking terminal (for sale due to bankruptcy of the nationwide corporate owner, Consolidated Freightways), the Greenpoint Terminal Market site, and several blocks of active waterfront manufacturing uses in the vicinity of Kent, Java, India, Huron and Green Streets, including electrical contractors, HVAC and sheet metal work shops, furniture/furnishing establishments and a full-service printing press. North of Green Street is the Greenpoint Lumber Exchange site, which recently ceased operations. At the Northside waterfront, industrial or traffic/utility uses are located north of North 9<sup>th</sup> Street, between North 6<sup>th</sup> and 7<sup>th</sup> Streets, and south of North 3<sup>rd</sup> Street. Domino Sugar maintains a several-block area in active industrial use south of Grand Street. Within the entire Northside Mixed Use District, both residential and industrial uses can be found.

Open space and public recreational uses are discussed in [Section 4.2.7](#) below.

#### *4.2.2.2 Land Uses in Manhattan*

Unlike the Brooklyn study area, characterized by mixed uses, the Manhattan study area is composed of discrete, varied land uses. The FDR Drive and East River Park form the waterfront section. East River Park, and other open spaces in this area, are discussed in detail in [Section 4.2.7](#) below. The East River Generating Station industrial complex occupies several blocks on both sides of East 14<sup>th</sup> Street. Immediately across Avenue C from the East River Station are the Stuyvesant Houses, a post-World War II affordable housing development now undergoing conversion to market-rate housing. High-rise residential housing (20-30 floors) can be found north of East 10<sup>th</sup> Street. Walkup residential housing is prevalent south of East 10<sup>th</sup> Street and west of Avenue D. East of Avenue D are the Jacob Riis Houses, Lilian Wald Houses and Baruch Houses, all post-World War II affordable residential complexes consisting of multiple houses ranging from 6 to approximately 25 floors. Commercial uses such as bodegas and supermarkets are found within the area, servicing the neighborhood.

#### *4.2.2.3 Land Uses along Interconnections*

Most interconnections are within the land use study area, with two exceptions: approximately one-quarter of the steam interconnection route and most of the proposed water supply line (a non-potable water main connecting MTA subway dewatering locations to the Project site). The steam interconnection and a related alternatives analysis are described in detail in [Section 6](#). The steam interconnection will be constructed in a deep bedrock tunnel, with a conceptual Manhattan

exit point as shown in Figure 4-7 as well as Attachment L-7. A deep bedrock tunnel under First Avenue is presently under construction independent of the Project, and the proposed interconnection point is a deep tunnel shaft, such that no new shaft would need to be constructed in Manhattan. The water supply line is described in Section 7.1.6 and 7.1.11. It will be approximately 6.4 miles long and will be constructed along appropriately routed city streets. Routing alternatives are considered in Section 7.1.6. Land uses along the portions of this route that are outside the 1-mile land use study area are shown in Figure 4-7.

Land uses along East 20<sup>th</sup> Street in Manhattan (above the conceptual steam line tunnel) are predominantly high-rise residential housing set back from the street, on both the north and south sides, with infill low-rise commercial development on the south side. The north side is occupied by the Peter Cooper Village and the south by Stuyvesant Town. Zoning corresponds to land use in this location, with an R7-2 zone applicable to blocks north and south of the street, except for a 100-foot strip of commercial area (zoned C1-5) along the south side of East 20<sup>th</sup> Street. The street is used by both local and through traffic. It is a four-lane two-way street between First Avenue and FDR Drive, and provides access between these two major thoroughfares.

In Brooklyn, the water supply line, in the portion beyond the study area, extends southward along Kent Avenue, past Division Avenue into a mixed industrial, commercial and residential area. The Brooklyn Navy Yard is to the west of this segment of the route. The route continues eastward along Wallabout Street, where uses are primarily industrial, with some residential buildings. Along the northern portion of the Nostrand Avenue segment of the line, industrial uses are prevalent toward the west, and commercial and residential to the east. Further south along Nostrand Avenue, commercial uses continue along the street, with residential uses prevalent in the adjacent blocks. As the route heads west from Nostrand to Rogers Avenue, it follows for one block along the Fulton Street commercial corridor, in preference to residential Herkimer Street. The longest segment of the line, Rogers Avenue, is primarily residential. The final two segments – Clarendon Road and once again Nostrand Avenue – are likewise primarily residential, except for the junction of Nostrand and Flatbush Avenues, at the south end of the route.

Zoning along the water supply interconnection is largely reflective of the land use patterns. Heavy (M3) and light (M1) industrial as well as residential (R6) districts are found along Kent Avenue and light industrial (M1) along Wallabout Street. Along Nostrand Avenue, parcels are zoned for light manufacturing (M1), commercial (various districts along the streetfront, including C1, C2 and C4) and residential (R6). The Rogers Avenue segment is mostly zoned R7, R6, and R5, with pockets of R2, C8 and M1 districts. Zoning along Clarendon Road is primarily R6, and along the southern Nostrand Avenue stretch it is a mix of C1, C2 and R6. At the terminus of the line (Flatbush Avenue), the area is zoned C4 and C8.

Several schools, churches, and a firehouse are encountered along the proposed interconnection route. These include PS 54 at Nostrand Avenue and Hart Street, the Pharmacy College at Nostrand Avenue and Lafayette Avenue, a firehouse at Monroe Street and Nostrand, and several churches near Rogers Avenue and Dean Street. Additionally, PS 92 and PS 246 are located on Rogers Avenue, at Parkside Avenue and Albermarle Road, respectively. Finally, St. Jerome’s School and PS 269 are along the stretch along Nostrand to Flatbush Avenue. Two open spaces are encountered along the proposed interconnect route. The Marcy Houses Playground is a 3-acre park located east of Nostrand Avenue, on the north side of Myrtle Avenue. The PS 269 Playground is found at Nostrand and Foster Avenues.

#### 4.2.3 Brooklyn Community District 1 Profile

As described above, the Project site is located to southwest of the Greenpoint neighborhood and to the northwest of the Northside neighborhood. The site is part of a generally dilapidated and underutilized waterfront along the East River. The surrounding area is within Community District 1 in the Borough of Brooklyn. Land use characteristics for this district and for the Borough of Brooklyn are presented in Table 4-2.

<b>Table 4-2: Brooklyn Land Use Characteristics</b>			
<b>Land Use, 2000 – Brooklyn Community District 1</b>			
<b>Total Land Area: 3,168 Acres, 4.95 Square Miles</b>			
	<b>Lots</b>	<b>Acres</b>	<b>Percentage</b>
1-2 Family Residential	2,656	122	6.1
Multi-Family Residential	5,452	403	20.1
Mixed Residential/Commercial	2,180	122	6.1
Commercial/Office	419	48	2.4
Industrial/Manufacturing	1,922	752	37.5
Transportation/Utility	284	118	5.9
Public Facilities/Institutions	343	113	5.6
Open Space/Outdoor Recreation	42	71	3.6
Parking Facilities	628	62	3.1
Vacant Land	892	115	5.7
Other (e.g. land under water)		80	4.0
<b>Total Lot Area</b>	14,818	2,007	100.0
Land Outside Lot Areas (e.g., streets)	–	1,162	+36.7

<b>Table 4-2: Brooklyn Land Use Characteristics</b>			
<b>Land Use, 2000 – Borough of Brooklyn</b>			
<b>Total Land Area: 52,330 Acres, 81.77 Square Miles</b>			
	<b>Lots</b>	<b>Acres</b>	<b>Percentage</b>
1-2 Family Residential	154,362	8,643	22.5
Multi-Family Residential	62,183	5,924	15.4
Mixed Residential/Commercial	21,780	1,265	3.3
Commercial/Office	6,127	1,026	2.7
Industrial/Manufacturing	5,752	2,019	5.3
Transportation/Utility	2,349	1,797	4.7
Public Facilities/Institutions	3,860	2,940	7.7
Open Space/Outdoor Recreation	568	2,470	6.4
Parking Facilities	3,812	509	1.3
Vacant Land	14,636	2,293	6.0
Joint Interest Areas	84	9,206	24.0
Other (e.g. land under water)		316	0.8
<b>Total Lot Area</b>	14,818	38,408	100.0
Land Outside Lot Areas (e.g., streets)	–	13,922	+36.2

Source: New York City Department of City Planning, Community District Needs, Brooklyn, Fiscal Year 2002/2003.

Brooklyn constitutes an urban land area of 81.8 square miles, with a lot area (not counting streets) of 60.0 square miles. Industrial and transportation/utility uses account for 10% of total lot area. Institutional and open space/recreational uses account for 14%. Purely residential areas account for 38%.

Community District 1 is the far northern district in Brooklyn. It abuts both the East River and Newtown Creek, creating a waterfront along the majority of the district boundary. Historical land use patterns along the water have made this district home to nearly a quarter of Brooklyn's industrial and transportation/utility land.

In the Fiscal Year 2002/2003 *Statement of Community District Needs*, Community Board 1 outlines key goals and concerns for the district, which include the following:

- **Parkland Development and Greening.** The Community Board supports playground renovation and park reconstruction. Lighting improvements to McCarren Park, a new park at the northern street end of Manhattan Avenue, and the implementation of a proposal to

convert the WNYC transmitter site (at the foot of Greenpoint Avenue) are all endorsed by the Community Board. The Community Board also requests more information on the use of the Brooklyn Eastern District Terminal (BEDT) site along the East River for college athletic fields. After an Asian long horned beetle infestation in 1996, street and backyard trees were cut down, to prevent the further spread of disease, in significant numbers. The Community Board supports comprehensive greening and tree planting.

- ***Infrastructure and Environmental Issues.*** The Community Board supports Williamsburg Bridge improvements, most notably the new walkway allowing travel between Manhattan and Brooklyn by foot. The Brooklyn Queens Expressway bisects the district, and issues relating to highway noise, maintenance, etc., are noted. Reconstruction of streets is highlighted as a community need, especially for Flushing Avenue and the Kent Avenue/Franklin Street roadway. The Community Board seeks alleviation of truck traffic generated by various sanitation-related uses. Two dozen transfer stations for public and private solid waste are located within the district, mostly along the Newtown Creek waterfront. Because of its infrastructure and geography, the district handles a disproportionate amount of garbage, compared to other areas, and this raises concerns related to air quality from trucks, noise and odors. Also, the largest sewer treatment plant in New York City – the Newtown Creek Water Pollution Control Plant (WPCP) – is also found in this district. The treatment plant serves lower Manhattan, northern Brooklyn, and portions of Queens. The Community Board opposes any expansion in secondary treatment capacity of this plant.
- ***Waterfront and Industry.*** The Community Board states that “industry constitutes the economic backbone of Community District No. 1, and a substantial percentage of our residents are still employed by local industries. While Greenpoint/Williamsburg has shared in the City-wide decline of manufacturing jobs and suffers from chronic security, sanitation, facility and infrastructure problems, the core itself is strong and, with proper governmental support, should endure and prosper in the coming years.” The Community Board describes the district’s East River waterfront as follows: “Still solidly industrial, the waterfront has experienced considerable infusion of residential loft conversion during the last ten years, especially in the vicinity of Broadway and Grand Street” in Southside Williamsburg. The Board opposes loft legalization in industrial buildings as proposed by the City Planning Commission, supporting instead the 197-a plans for the Williamsburg Waterfront and Greenpoint (discussion in [Section 4.5.4](#) below).

#### ***4.2.4 Development Patterns and Trends***

In accordance with the CEQR Technical Manual, the land use study presents the development history of the study area, which can be helpful in understanding the area's development trends. Census data, employment data, community-based plans, and studies by academic and other organizations provide a description of the trends within the land use study area. At play are several factors, including: industrial, manufacturing and commercial business cycles; environmental constraints; gentrification and displacement; and public policy actions and decisions.

##### *4.2.4.1 Manufacturing and Mixed Use*

Greenpoint and Williamsburg first grew as manufacturing centers in the pre-Civil War era. Growth was very rapid, particularly in the areas of shipbuilding, printing, glassmaking, petroleum refining and gas manufacture. In the late 19<sup>th</sup> century, this was a manufacturing center with working-class tenements that housed local employees. The area's working-class, immigrant base swelled with the opening of the Williamsburg Bridge in 1903. Much of today's waterfront (including, for example, the Project site) was created by filling land for industrial purposes. Thanks in part to this program of industrial expansion, manufacturing grew in the 20<sup>th</sup> century, reaching its apogee during World War II. The post-war years saw a precipitous decline, leaving in the last several decades an industrial base that is smaller and more scattered than it had once been.

Manufacturing uses also left an environmental legacy of subsurface contamination, while also contributing to a lack of potable drinking water in the plentiful shallow aquifer that underlies the area. For example, on the Project site itself, significant coal gasification waste and petroleum contamination has occurred. This contamination continues to migrate to the site from upgradient off-site sources, slowly progressing in the direction of the East River and Bushwick Inlet. The contamination at the Project site is of particular concern to Brooklyn Community Board 1, which has experienced "numerous environmental problems, including underground oil spills and other contamination(s) for heavy industry, thus requiring clean-ups." The Brooklyn Borough President has also stated support for "the development and clean up of our waterfront properties, which would be consistent with the needs of the community," and asked to be apprised of the cleanup effort.<sup>2</sup>

It should be noted that the historic manufacturing decline was not uniform. Certain industries stabilized, thrived or expanded even as others continued to decline. Thus, for example, textiles

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<sup>2</sup> Letter dated 3 June 2002, from Vincent Abate, Chairman, to Mary Ellen Kris, NYSDEC Region 2 Director. Letter dated 30 July 2002, from Marty Markowitz, Brooklyn Borough President, to Thomas Kunkel, Acting NYSDEC Region 2 Director.

played a significant economic role in recent years, but declined in the 1990s. For example, food production, chemicals, lumber, building products and printing/publishing continued to be strong performers, while textiles declined in the 1990s. Overall land utilization in the manufacturing districts of Greenpoint and Williamsburg improved in the past decade, and the availability of vacant land sharply decreased. In its June 2001 report for the Municipal Arts Society on the state of manufacturing in New York City, the Pratt Institute assessed Greenpoint-Williamsburg's manufacturing in terms of both their land use and employment trends (PICCED, 2001). The study, entitled *Making It in New York*, identified development patterns and trends relative to Greenpoint/Williamsburg:

- The land area of Greenpoint-Williamsburg's Manufacturing districts is dominated by manufacturing and transportation/utility uses, and more than 90% of all manufacturing uses are within manufacturing districts.
- In the decade 1989-2000, automotive storage and service uses grew very rapidly, especially within manufacturing districts. Land allocated to manufacturing declined, but building area used for manufacturing increased. Employment in manufacturing sectors declined in Greenpoint and Northside Williamsburg by approximately 3,000 jobs, or 25%, between 1992 and 1999.
- Land allocated to residential and mixed residential/commercial uses increased by 2.2%, and building area used for these increased by 3.3 million square feet (or 4.5%), with 88% of the increase occurring outside manufacturing districts. Thus, there was a slight increase in residential uses within manufacturing districts. The Northside mixed use district, in particular, witnessed growth in residential uses.
- Greenpoint-Williamsburg is a predominantly industrial mixed use area. Its growth in transportation, utility, automotive, commercial and residential uses has outpaced New York City as a whole. Its manufacturing decline has been attenuated, as compared to New York City as a whole. It still has a "large and diverse concentration of manufacturing jobs."
- In Greenpoint, the strongest manufacturing sectors in terms of the number of firms and employees are fabricated metals (metal stamping, sheet metals), furniture and fixtures (especially office furniture), and food production. In Northside Williamsburg, food and apparel are the strongest manufacturing sectors. Transportation and utility sectors are not counted in this assessment.

- The scattered availability of scarce vacant land “represent[s] an issue of concern for the stability and growth of manufacturing and mixed use activity” in Greenpoint-Williamsburg.

#### 4.2.4.2 Differences in Localized Trends

Compared to the average trend in Greenpoint-Williamsburg, the singular success of the area surrounding the Bushwick Inlet and the Project site in attracting new industrial businesses and new industrial jobs is noteworthy. Based on Department of Labor data comparing 1997 to 2002, the industrial area that is bounded approximately by North 9<sup>th</sup>, Berry, Dobbin and Calyer Streets grew economically on the basis of several sectors. The wages paid in this area have more than tripled in *each* of the major industrial economic categories – construction, manufacturing, transportation/utilities, and wholesale trade. Conversely, non-industrial wage growth lagged behind the Greenpoint-Williamsburg average. Thus, industry remains quite vibrant in the vicinity of the Project site.

<b>Sector</b>	<b>Greenpoint-Williamsburg</b>	<b>Near Project Site and Bushwick Inlet</b>
Construction	67%	261%
Manufacturing	- 12%	246%
Transport and Utilities	4%	420%
Wholesale Trade	13%	326%
Commercial*	67%	27%

\* Commercial employment includes Retail Trade; Finance, Insurance and Real Estate; and Services.

#### 4.2.4.3 Population and Housing Trends

The study area has also seen an increase in population and a changing trend in the population’s character. These issues are detailed in [Section 12](#). As explained in that analysis, the Northside and Greenpoint areas (unlike other portions of the community district) have seen an influx of relatively well-educated dwellers in the decade 1990-2000. The population with a higher education more than doubled. The number of individuals who have not finished high school shrank by 4,000 individuals. A trend toward non-family households occurred. The places of employment for the new immigrants are less localized (*e.g.*, a professional who moves to Greenpoint but works in Manhattan), and out-of-borough commuting is on the rise. Professional immigrants and artists using joint live/work quarters have contributed to the area’s population increase. The increased residential demand, combined with the non-family status of most immigrants, as well as their greater buying power, has translated into a higher demand for housing and increase in housing prices, spurring loft conversions as well as some new housing

construction. Loft conversions have been enabled through mixed use zoning in special districts, loft legalization provisions in certain limited areas, and use variances granted by the Boards of Standards and Appeals. New housing construction has been limited to infill housing in residential areas.

On the Manhattan side of the study area, with the exception of one major industrial employer, Con Edison, the majority of the socioeconomic transition relates to changes in residential use. Here, as in Greenpoint-Williamsburg, processes of gentrification are occurring. For example, the Stuyvesant Town complex is in the process of conversion to residential housing. Its owner, MetLife, rents out rent-stabilized vacant units on the open housing market, with an approximate doubling of the rent. Units are being renovated and modernized as they are shifted to market rents. New immigrants are typically young professionals. Several hundred apartments have been converted to date.<sup>3</sup>

#### *4.2.4.4 Conclusion*

Greenpoint and Williamsburg continue to exhibit a strong presence of manufacturing, transportation and utility uses, while at the same time experiencing residential in-migration. As the economy, and productivity, grew in the 1990s, available vacant land declined. The trend in the past decade is somewhat reflective of the area's long history of mixed use and the need to balance housing with industry and the jobs that it brings. Arising out of an understanding that such a balance is desirable, several community planning efforts took place in the 1990s, as described in greater detail in Section 4.5 below. These have included a variety of methods – rezoning, industrial sanctuaries, higher environmental performance, and the conversion of underutilized land to public open space. Since vacant land is scarce, however, these goals can sometimes be in tension if not outright conflict. Thus, the development trend indicates a need for the compatibility and coexistence of a variety of land uses.

#### *4.2.5 Profile of Zoning Districts in Study Area*

This section addresses Stipulation 5, Clause 2(b), which calls for a map of the existing zoning districts within one mile of the Project, a description of the permitted and prohibited uses within each district, and documentation of special use permits or zoning use variances issued by the Board of Standards and Appeals for residential use in the Project vicinity.

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<sup>3</sup> *New York Times*, July 13, 2001, “Two Big Projects Deregulating Vacant Units.”

#### 4.2.5.1 *Summary of Existing Zoning*

The Project site is inside a heavy manufacturing (M3) zoning district that stretches along the entire East River waterfront between the Williamsburg Bridge and Newtown Creek. The M3 zoning district continues along Newtown Creek. Inland, there is a buffer of light industrial land followed by a variety of commercial and residential districts. The Special Franklin Street and Northside Mixed Use Districts, which allow both manufacturing and residential land uses, lie about one-half mile to the north of the Project site and one-quarter mile southeast of the Project, respectively. In the Manhattan portion of the study area, zoning is primarily residential, with the exceptions being open space (the East River Park) and industrial land (mostly occupied by the East River Generating Station).

The individual zoning districts within the land use study area are depicted on the zoning map included as [Figure 4-9](#). These districts include: M1-1, M1-2, and M1-4 Light Manufacturing Districts; M3-1 and M3-2 Heavy Manufacturing Districts; C1-1, C1-3, C1-5, and C1-6A Local Retail Districts; C2-1, C2-3, and C2-5 Local Service Districts; C4-3 General Commercial Districts; C8-1 and C8-2 General Service Districts; R6, R7-2, and R8 General Residence Districts; and the Special Northside and Franklin Street Mixed Use Districts. The permitted uses and bulk regulations in each of these zoning districts are described in [Attachment L-1](#).

#### 4.2.5.2 *CEQR Restrictive Declarations*

The New York City zoning map includes restrictive declarations on certain parcels through the City Environmental Quality Review (CEQR) process. Such parcels are designated with an “E” on the zoning map, and a list of environmentally restricted sites accompanies the map. Restrictive declarations made for non-environmental purposes, such as the consolidated treatment of two parcels as one lot for zoning purposes, are also marked on the zoning map, with a “D” designation. Within the study area, “E”-designated sites are located only south of the Williamsburg Bridge (Designation no. E-82, shown in [Figure 4-9](#)). This and other designated sites in Community District 1 (but outside the study area) are listed in [Attachment L-2](#). All designations relate either to noise attenuation or underground gasoline tanks.

#### 4.2.5.3 *Existing Residential Loft Conversion Areas*

Chapter 5 of Article I of the *Zoning Resolution* sets forth rules governing the conversion of non-residential buildings erected before December 1961 into dwelling units in certain areas of the city, including the study area. These rules are set forth to protect the safety and health of the public, help maintain locations for job-producing industrial and commercial uses, and at the same time provide more housing for the residents of the city and allow property owners to

receive more profitable returns on their land. The provisions of this chapter, as they apply to properties within the land use study area, are summarized below.

All dwelling units converted from buildings used for other uses in residential, commercial, and mixed use districts must comply with the special bulk requirements listed in this chapter, unless otherwise exempted. Dwelling units in buildings in which a referenced commercial or manufacturing activity takes place (as listed in §15-50 of the *Zoning Resolution*) must comply with the special structural requirements set forth for such buildings.

In C8 or M1 Districts, no new residential uses shall be allowed except within certain designated areas inside Community Districts 1 and 2 in Brooklyn. The designated areas within one-mile of the site are indicated on [Figure 4-10](#). In these areas, residential uses are allowed as-of-right in the dwelling units created in buildings occupied on June 4, 1981, in which more than 45% of the floor area was used for residential use at that time, provided that a complete application for a determination of occupancy was filed before May 30, 1986. A proposed text amendment expanding the loft conversion areas is described in [Section 4.3.3](#).

#### *4.2.5.4 Existing Use Variances*

Loft conversions and other non-conforming uses may be permitted by obtaining a variance from the Board of Standards and Appeals (BSA). As discussed in [Section 4.6](#) below, the BSA reviews variance applications related not only to use but also to fire safety, buildings, etc, but the focus of the land use study is on use variances or amendments to buildings that were previously granted use variances. All BSA use variance applications on record have been reviewed and documented in [Attachment L-3](#) and are shown in [Figure 4-10](#). There are 176 use variance locations in all. For applications since 1997, grant or denial of the application is documented, as well. The table and map show that the heaviest concentration of such variances has been in South Williamsburg (south of the Williamsburg Bridge and Broadway). A secondary concentration has occurred to the west of the Northside Mixed Use District, mostly south of North 6<sup>th</sup> Street, with two such variances between North 7<sup>th</sup> and North 9<sup>th</sup> Streets on the east side of Kent Avenue. In Greenpoint, variances are less frequent. None have occurred on waterfront blocks west and south of the Franklin Special Mixed Use District.

#### **4.2.6 Open Space and Recreation Inventory**

Open space and recreation areas were studied as receptor points of potential concern. Viewpoints were chosen from various open space locations. Noise monitoring locations were chosen only after taking into account the nearest open spaces. A selection of open space areas is also listed as community receptor points for which air modeling results are reported individually.

Open spaces and recreation facilities were identified on the basis of New York City Department of City Planning publications, MTA neighborhood maps, aerial photography and field surveys. An open space and recreation map is found in [Figure 4-11](#). The following narrative discusses the activities, uses and distribution patterns of the major recreational areas.

#### *4.2.6.1 McCarren and McGolrick Parks*

McCarren Park is the largest and most highly used open space in the Brooklyn portion of the study area. This park is spread over five city blocks, and contains 36 acres of parkland. The outermost boundaries are formed by Nassau Avenue, Leonard Street, Bayard Street, North 12<sup>th</sup> Street and Berry Street, but excluding the Automotive High School between Nassau and Berry Avenues. This park is approximately 1,000 feet from the Project site (measuring between the two closest points). McCarren Park features seven hard-surface tennis courts, a hard-surface softball field and three baseball diamonds. Toward the east, between Driggs Avenue and Lorimer Street, is a large rubberized running track and a soccer field. Further east, between Lorimer and Leonard Streets, is the closed, dilapidated McCarren Park pool, constructed as an open-air Olympic-size facility. Efforts to rehabilitate and reopen or adaptively reuse the pool are dependent upon the availability of funding sources. North of the pool, between Lorimer Street and Manhattan Avenue, is the Vincent Abate playground. Further east, on the grounds of JHS 126, and therefore outside the park, are hard-surface courts and a softball field. Passive recreation opportunities in McCarren Park may be found in Fr. Jerzy Popieluszko Square at the corner of Bedford and Nassau Avenue and at Raymond Nulty Square, located at Union and Driggs Avenues, across North 12<sup>th</sup> Street from the Transfiguration Cathedral. McCarren Park lies between Greenpoint and the Northside. It serves both neighborhoods, and pedestrian traffic into and out of the park toward both the north and south is notable on warm days, especially during the weekends. Highly traveled pedestrian corridors to the park are Bedford, Manhattan and Nassau Avenues. Land uses adjacent to McCarren Park include industries to the west and northwest, mixed use residential and commercial to the north, and predominantly mixed industrial and residential to the east, southeast, south and southwest.

Monsignor McGolrick Park is the second largest park in the Brooklyn portion of the study area. This 9-acre park is bounded by Nassau and Driggs Avenues on the north and south, and Monitor and Russell Streets on the east and west. This park is approximately 0 miles from the Project site (measuring between the two closest points). It constitutes a different type of open space resource, as compared to McCarren Park, because of its emphasis on passive recreation and its solidly residential surroundings. Surrounding buildings form an enclosure, consistent in terms of architecture and scale, which lends the park a strong sense of place. The park is regularly shaped, traversed by symmetrical pedestrian pathways, and centered around a pavilion and statue

dedicated to the Civil War ironclad the *USS Monitor*. The park is well vegetated, with a mature tree canopy.

#### 4.2.6.2 *Brooklyn Upland Open Spaces Within One Mile*

At the northern end of Franklin and West Streets are the Greenpoint Park and the Newtown Barge Terminal Playground. Greenpoint Park is situated on a small triangle bounded by Commercial, Franklin and DuPont Streets. The Newtown Barge Terminal Playground is located north of Commercial Street. Among its amenities are swing sets and seating areas. The adjacent playground includes a hard-surface softball field. Nearer to the Project site, at a distance of approximately 1,600 feet due north, is the American Playground. This playground is located on the west side of Franklin Street and occupies the full frontage between Noble and Milton Streets, with the Greenpoint Terminal Market property occupying the western end of the playground. Basketball courts and children's play areas are found here. Further east, the Greenpoint YMCA is located on Meserole Avenue, approximately 1,800 feet from the Project site. It has a 40' by 20' indoor pool and offers swimming lessons, as well as aerobics, basketball, yoga and a weight room. The YMCA also hosts a summer day camp, as well year-round guest rooms.

In the Northside, an important center is the Metropolitan Avenue Pool, located on the southeast corner of Bedford and Metropolitan Avenues. This popular facility features a 75' by 30' indoor swimming pool. Generally, the Southside is served by smaller but more frequently spaced playgrounds, whereas playgrounds available to Northside residents are found mostly within McCarren Park. Southside playgrounds include the Sheridan Playground at Wythe Avenue and South 1<sup>st</sup> Street, the Bedford Playground at South 3<sup>rd</sup> Street, the "Under the Tracks" playground by the Williamsburg Bridge, Continental Army Plaza and LaGuardia playgrounds at South 5<sup>th</sup> Street (also near the bridge), and several open space areas alongside the Brooklyn Queens Expressway (bounded by Marcy Avenue and Rodney Street), the largest being the Jaime Campiz Playground.

About two dozen small squares are also found in Community District 1, many of which are in the study area. In conjunction with the NYC Department of Parks and Recreation's (DPR) Greenstreets program, irregularly-shaped intersections, with traffic islands or similar "dead" space, have been vegetated, landscaped and repaired. Nearby examples include the Mother Pearl Triangle at Franklin and Calyer Streets, Private Sonsire Square at North 11<sup>th</sup> and Roebling Streets, and the larger Mt. Carmel Square at Meeker and Union Avenues.

#### 4.2.6.3 *Brooklyn Upland Open Spaces Beyond One Mile*

Recreational facilities and open spaces that are within Community District 1 but more than one mile from the Project site have also been inventoried on the basis of available publications. This inventory has been further extended to cover recreation facilities within a block of the proposed water interconnection route, which is partially outside the study area.

New York City Housing Authority open spaces include playgrounds, passive recreation areas and courts. The spaces are intended to serve residents of the several publicly assisted housing developments. While no such developments are found within the one-mile radius study area, several are located within Brooklyn Community District 1. The largest of these is the Lindsay Park Houses complex, with a large adjacent 4-acre park, two little league fields and an overlapping softball field. Other developments within the study area include the Williamsburg Houses, Havermeyer Houses, Cooper Park Houses and Bushwick Houses. Near the Williamsburg Houses is the 2-acre Thelma Martinez Playground. Near the Cooper Park Houses is the 6-acre Cooper Park. Near the Bushwick Houses is the Bushwick Pool, a 75' by 60' outdoor pool operated by the DPR.. Also in this area is the Eastern District YMCA, which offer after-school programs that include basketball and jumping rope; evening programs featuring karate, basketball, soccer and dancing; and summer day camp featuring basketball and nature-oriented programs. The Eastern District YMCA also features an environmental education center and exhibits, and a garden with native plants.

Some schools co-host publicly accessible recreation facilities. Eastern District High School, at the southeast corner of Grand Street and Bushwick Avenue, offers various active recreation opportunities, subject to oversight by the Department of Education. The school has a baseball and a football/soccer field, six hard-surface tennis courts, and an outdoor asphalt track. In South Williamsburg, a softball field and playground are located adjacent to PS 16 and a playground is located at IS 318.

Several other recreation sites are also listed in Brooklyn Community District 1 outside the one-mile study area radius. These include the Epiphany Playground near the Williamsburg Bridge, the Roberto Clemente ballfield in South Williamsburg near Division Avenue, Clymer Street, and South 9<sup>th</sup> Street. In East Williamsburg, this list includes the McKibben Playground.

Within a block of the water interconnection route, two open spaces were identified, as described in [Section 4.2.2.3](#) above – the Marcy Houses playground and the PS 269 playground.

4.2.6.4 *Brooklyn East River Waterfront*

Grand Ferry Park is approximately 0.5 acres located at the foot of Grand Street. The park includes a lawn, sitting areas and a massive rip rap bank. Until recently, the park constituted the only public access to the East River along the Greenpoint-Williamsburg waterfront. The north side of the park is an industrial site formerly owned for oil storage by Con Edison and presently used by the Power Authority of the State of New York for a 47 MW electric generator. With its small size, Grand Ferry Park is typically used for outdoor reading and relaxation and little active recreation.

The site of former WNYC transmitter towers, which were removed in fall 2002, has been under ownership of the NYC DPR for several years. The site contains some picnic tables, a lawn area, the location of the former towers, and an area that is presently subject to subsidence hazard, adjacent to the East River. This parcel of real estate, while owned by NYC DPR, is not open to the public.

In summer 2002, construction began on an esplanade/pier at Kent and Java Streets in Greenpoint, under the auspices of the New York City Economic Development Corporation and with the assistance of the New York State Office of Parks, Recreation and Historic Preservation. The esplanade, as of November 2002, has been structurally completed, with paving installed and jersey barriers protecting the public from the waterfront.

As part of the open space survey, each potential waterfront access point in the Greenpoint and Northside Williamsburg waterfront (within the one-mile study area) was analyzed in terms of visual and physical access. Visual access is considered obstructed when a building or other solid barrier prevents a view from nearby streets parallel to the waterfront. The survey covered Kent, Wythe and Manhattan Avenues, along with Berry, Banker, West and Franklin Streets. Physical access is considered obstructed when a fence or gate prevents entry to the water's edge, except by trespass.

<b>Table 4-4: Visual and Physical Waterfront Access</b>			
<b>Street</b>	<b>View of Water</b>	<b>View across Water</b>	<b>Physical Access</b>
Manhattan Ave. (north)	No	Yes	No – lot fenced off
Commercial Street	Yes	Yes	No
DuPont Street	Yes	Yes	No
Eagle Street	No	No	No
Freeman Street	No	No	No
Green Street	No	Yes	No

**Table 4-4: Visual and Physical Waterfront Access (CONTINUED)**

<b>Street</b>	<b>View of Water</b>	<b>View across Water</b>	<b>Physical Access</b>
Huron Street	Yes	Yes	No – fence at water
India Street	Yes	Yes	No – fence at water
Java Street	Yes	Yes	Yes
Kent Street	Yes	Yes	Yes
Greenpoint Avenue	Yes	Yes	No
Milton Street	No	No	No
Noble Street	No*	Yes	No
Oak Street	No	No	No
Banker Street	No	Yes	Inland street
Calyer Street	No	Yes	No
Quay Street	No	Yes	No
Meserole Avenue	No	Yes	No
North 15 <sup>th</sup> Street	No	Yes	No
Norman Avenue	No	Yes	Inland street
Nassau Avenue	No	Yes	Inland street
North 14 <sup>th</sup> Street	Yes**	Yes	No
North 13 <sup>th</sup> Street	No	Yes	No
North 12 <sup>th</sup> Street	Yes	Yes	No
North 11 <sup>th</sup> Street	Yes	Yes	Partial – fence at water
North 10 <sup>th</sup> Street	Yes	Yes	No
North 9 <sup>th</sup> Street	Yes	Yes	No
North 8 <sup>th</sup> Street	Yes	Yes	No
North 7 <sup>th</sup> Street	No***	Yes	No
North 6 <sup>th</sup> Street	No	Yes	No
North 5 <sup>th</sup> Street	Yes	Yes	No
North 4 <sup>th</sup> Street	No	No	No
North 3 <sup>rd</sup> Street	Yes	Yes	No
Metropolitan Avenue	Yes	Yes	No
North 1 <sup>st</sup> Street	Yes	Yes	No
Grand Street	Yes	Yes	Yes – Grand Ferry Park
South 1 <sup>st</sup> Street	No	Yes	No
South 2 <sup>nd</sup> Street	Yes	Yes	No
South 3 <sup>rd</sup> Street	No	No	No
South 4 <sup>th</sup> Street	No	Yes	No

<b>Table 4-4: Visual and Physical Waterfront Access (CONTINUED)</b>			
<b>Street</b>	<b>View of Water</b>	<b>View across Water</b>	<b>Physical Access</b>
South 5 <sup>th</sup> Street	Yes	Yes	No
South 6 <sup>th</sup> Street	Yes	Yes	No
Broadway	Yes	Yes	No
<b>Summary</b>	<b>22 of 43</b>	<b>37 of 43</b>	4 of 40

\* View toward water exists and partially available from Manhattan Avenue, but is obstructed from Franklin and West Streets due to solid visual block at the gate to the Greenpoint Terminal Market site.

\*\* View only of Bushwick Inlet, available only at Franklin Street.

\*\*\* View toward water is obstructed by MTA subway tunnel ventilation building.

As shown in the [Table 4-4](#) above, there are plentiful opportunities for views across water, primarily toward Manhattan; relatively plentiful opportunities for views of water, primarily the East River; and very few opportunities for physical public access to the waterfront. The abundance of views to Manhattan is explained by the generally low-rise nature of Greenpoint's and Williamsburg's waterfront blocks. Obstructions to views across the water are caused in places by tall buildings such as the Greenpoint Terminal Market and Domino Sugar. The relatively high number of views of the water is attributable to the absence of marginal highways and to infrequency of multi-block complexes, which tend to include buildings that block a street-end view. It is also a result of the elevation of nearby streets. Manhattan Avenue, Berry Street and Wythe Avenue are located at superior elevations in various places along the waterfront, enabling views from more than 20 feet above sea level in Greenpoint and the Northside, and up to 40 feet above sea level in certain portions of the Southside. The absence of public waterfront access has occurred as part of the historical development pattern, with private waterfront ownership on filled land dedicated to industrial uses. In almost all cases, waterfront access is fenced or walled off. Plans to alter this pattern are documented in [Section 4.3](#) and [4.5](#) below.

#### *4.2.6.5 East River*

The East River supports recreational activity primarily in the form of boat tours. For example, Circle Line operates regular service around the island of Manhattan, with more frequent service along the Lower and Midtown Manhattan shores, including the stretch of the river that flows through the study area. The river is a navigable waterway open to all craft and patrolled by the New York City Police Department and Coast Guard. It is heavily used for waterborne cargo transport. As detailed in [Section 7](#), the East River is a tidal estuary with rapid tidal flows, which is a limiting factor in terms of the river's recreational potential.

#### 4.2.6.6 *Open Spaces in Manhattan Study Area*

The dominant open space feature in the Manhattan portion of the study area is East River Park. After a recent extension of public waterfront access past East 12<sup>th</sup> Street, the park is now part of a connected waterfront esplanade throughout the Manhattan side of the study area (Williamsburg Bridge to East 23<sup>rd</sup> Street). The park ranges in width from 500 feet, near East 7<sup>th</sup> Street, to less than 20 feet at certain points along the esplanade, near East 14<sup>th</sup> Street. Basketball courts, twelve tennis courts, a running track, three softball fields, a baseball field, five joint sports fields (soccer, softball, etc.), and a football field are among the numerous active recreation facilities in the park. Passive recreation is accommodated throughout the park, with lawns and sitting areas. The park is defined and constrained by geography, with access and egress occurring by footbridge over FDR Drive, a major limited-access highway. As a linear park located alongside a highway, traffic noise is generally a constant and dominant source of sound. Although located along the waterfront, the park's access to the water's edge is restricted by a chain-link fence. Bulkhead and/or fencing maintenance will be required prior to the reopening of access to the water's edge. At the recently built esplanade north of East 14<sup>th</sup> Street, access to the water's edge is possible, and such areas are used for fishing, as well as roller blading, walking, jogging, bicycling, and sunbathing. Outdoor seating is ubiquitous.

Several other open space or recreational facilities are located in the Manhattan portion of the study area. A 0.5-acre playground is located at the Lillian Wald Houses at East Houston Street and FDR Drive. The 1.3-acre John J. Murphy Park is located at FDR Drive and East 17<sup>th</sup> Street, near Avenue C and proximate to the Con Edison East River Station. Both these areas are separated from the East River by FDR Drive.

Along the steam interconnection route, no additional open spaces were identified. Two notable facilities beyond the study area should be noted: the Asser Levy complex between East 23<sup>rd</sup> and East 25<sup>th</sup> Streets and the 40-slip New York Skyport Marina, also at East 23<sup>rd</sup> Street.

#### 4.2.7 *Community Facility Inventory*

Schools, health care and nursing care facilities were also identified for the study area. Schools were included as receptor points of potential concern because they frequently include outdoor areas, in some cases on rooftops or in partially enclosed spaces. The nearest school to the Project site, Automotive High School, was selected as a noise monitoring location. Viewpoints were chosen from various schools. School crossings were also considered, in conjunction with the traffic study. Schools in the local community were also listed as community receptor points for which air modeling results are reported individually. Health and nursing care facilities were similarly examined as part of the air modeling study and in the choice of monitoring and

assessment locations for other relevant analyses. More than 200 such points were identified, as shown in Table 1-5 and 1-6.

Figure 4-12 shows schools within the Brooklyn portion of the study area. Because of the concentration of private yeshivas in South Williamsburg, many schools beyond the study area, but within Community District 1, are also shown. Schools are found primarily adjacent to residential and open space areas of the study area. Public schools are found throughout the study area, whereas private and parochial schools are concentrated primarily outside it, especially to the south. Along the water supply line interconnection, several schools are also located, as described in Section 4.2.2.3 above.

#### **4.2.8 Key Neighborhoods and Community Resources**

Some of the areas listed above are neighborhoods with community resources, schools, open spaces, recreation areas, sensitive receptors and historic properties and districts. Stipulation 5, Clause 2(e-ii) requires that TGE distill the broad list of land uses within the context of neighborhoods and community resources, in order to provide a systematic framework for the land use impact analysis. This summary was made in consultation with certain New York State agencies, New York City and the Greenpoint-Williamsburg Waterfront Task Force.

On the basis of field surveys (weekday and weekend), available literature, including the Williamsburg Waterfront and Greenpoint 197-a Plans, and the required consultation, the following list of neighborhoods has been identified.

1. McCarren Park, including the Automotive High School and JHS 126. This area includes tennis courts, softball fields, a running track and the architecturally prominent, but dilapidated and closed, McCarren Park pool. McCarren Park is a focal point of recreational activity (both active and passive). Its geographic situation is also important in that it has frontage onto three disparate (odd-angle) grids, thus accentuating its centrality from an urban design standpoint. By extension, analysis of this area includes its connection to the waterfront along North 14<sup>th</sup> Street, as described in the Greenpoint 197-a Plan (Section 4.3.4). Although located at North 15<sup>th</sup> Street, the Holy Family Church also faces this departure point from McCarren Park, and is grouped in this resource area. Land uses surrounding the park are mixed industrial and residential.
2. Greenpoint Core and Historic District. Primarily centered around Manhattan and Nassau Avenues, Greenpoint's commercial core is characterized by a strong presence of streetwalls and active shopping and other commercial activities. West of Manhattan Avenue lies the Greenpoint Historic District, listed on the National and State Register of

Historic Places and also designated as a New York City Landmark district. Notable architectural features of this area include St. John's Lutheran and St. Anthony's churches. In the Greenpoint core, north-south streets predominate in terms of pedestrian traffic and activity. Cross streets such as Kent, Milton, Noble, Oak and Calyer have a more uniformly residential character, with several houses of worship but few commercial establishments. Several of these streets, and others outside the historic district, provide views of the Manhattan skyline. Greenpoint Avenue is the widest and most important east-west axis, combining commercial establishments and walk-up residences in historic buildings within one long block between Franklin Street and Manhattan Avenue. Greenpoint Avenue is heavily used by both motor vehicles, because it is a principal route to Queens, and pedestrians, including subway and bus commuters along the Greenpoint and Manhattan Avenue intersection.

3. **Greenpoint Waterfront.** The western portion of the Greenpoint Historic District faces a two-block deep waterfront zone characterized by large industrial buildings (both former and active) including the Greenpoint Terminal Market complex. At the center of this interface is Franklin Street. Park spaces in the area include the American Playground, a New York City Parks Department site at the foot of Greenpoint Avenue (the former WNYC transmitter tower site), a new promenade along the East River at Java and Kent Streets, and, further to the north, the Greenpoint Park and Newtown Barge Terminal Playground. Franklin Street, as the northern continuation of Kent Avenue, is heavily used by vehicular traffic. West Street is much less heavily used, as its only outlets are to the Franklin Street corridor. The area has seen a decline in manufacturing jobs, but light manufacturing continues to be prevalent in the Franklin Street mixed use district, located along the northern stretches of Franklin Street.
4. **The Bushwick Inlet Area.** This area is dominated by active industrial/manufacturing and transportation/utility uses, both along the waterfront and on upland parcels. It also includes a surface water resource – the Bushwick Inlet, a remnant of Bushwick Creek. On the north side of Quay Street, past an MTA bus washing facility, is a Consolidated Freightways truck depot, recently offered for sale as part of the bankruptcy of this national trucking concern. This truck depot was once the site of the Continental Iron Works, the launch site of the USS Monitor, the Civil War ironclad, in 1862. While the site is not listed on the National or State Register of Historic Places, nor been found eligible for such listing, this area has been proposed as the home of a museum dedicated to the history of the USS Monitor and more generally to Greenpoint's industrial heritage. At present, however, no public waterfront access exists along the Bushwick Inlet.

5. Northside Waterfront and Kent Avenue. Anchored by the former Eastern District Terminal site, this area is generally characterized by relatively open views, but little uniformity. An industrial building at Kent Avenue and North 4<sup>th</sup> Street has been converted to residential lofts. One block to the north, local law enforcement operates a recently opened car pound. At North 1<sup>st</sup> Street, the New York Power Authority has installed a natural gas fired electric generating facility. While the only existing public waterfront access in this area is Grand Ferry Park (at the foot of Grand Street), two blocks of this waterfront are under New York State control for conversion into parkland and active recreation under a partnership with New York University (NYU), which seeks to develop its athletic facilities at this location. A proposed feature of New York City's 2012 Olympic bid is to transform this area into a greater than 25-acre athletic park, bounded by North 4<sup>th</sup> to North 12<sup>th</sup> Streets, which would be a host site for archery and beach volleyball competition.
6. Northside Mixed Use Core. Unlike the Northside waterfront, the Northside mixed use district is highly developed and growing, with nearby subway access at North 7<sup>th</sup> Street and Bedford Street, and notable pedestrian activity along Berry Street, North 6<sup>th</sup> Street, and others. Industrial building conversions have enabled a diversification of economic activity in the area, but the textile industry has suffered a significant decline. Significant manufacturing employment can be found toward the Bushwick Inlet, north of North 8<sup>th</sup> Street and west of Berry Street. Residential uses extend toward the waterfront south of North 8<sup>th</sup> Street.
7. Manhattan East River Waterfront Below 23<sup>rd</sup> Street. Land along FDR Drive and toward the east, including the East River Park, is a destination for residents of Alphabet City and the Stuyvesant Town housing development. The area is separated from the neighborhood by FDR Drive, but, once reached, offers active and passive recreation, with a linear connection south beyond the Williamsburg Bridge and a recently extended promenade north toward midtown Manhattan. This area also offers views in several directions, with the most open views toward Brooklyn.

### 4.3 Build Year Conditions

#### 4.3.1 Approved Land Uses

Stipulation 5, Clause 2(e) requires that, in accordance with 16 NYCRR Part 1001.3(b)(1)(i), the application provide a qualitative assessment of the compatibility of the Project with existing and approved land uses within the Study area, as well as within one block of interconnection routes to the extent the interconnection routes are outside the Study area. The assessment will distinguish near-field land uses of particular concern to the community. Similar to this requirement, the CEQR Manual provides that a future no action condition be developed for the year when the proposed project is completed.

To understand the future no-build scenario, TGE conducted research and consultation with various agencies and entities, including the New York City Department of City Planning, Brooklyn Chamber of Commerce, New York City Economic Development Corporation, Brooklyn Development Corporation, Office of Brooklyn Borough President, Community Board 1, and private real estate developers. The analysis of the consultation results shows that there are several approved land uses within the study area, as listed in Tables 4-5 through 4-7 below.

<b>Table 4-5: Pending and Approved Land Uses (Build Year)</b>	
<b>Location/Project Name</b>	<b>Description/Comment</b>
BSA use variances	All approved as well as pending use variances as of December 10, 2002, are included in <u>Figure 4-10</u> above.
184 Kent Avenue conversion, Ramlu Trading	Conversion approved and ongoing
Stuyvesant Cove Park	This northward extension of East River Park recently completed
Schaefer Brewery Redevelopment	City Planning Commission has approved a 350-unit development, with 140 units set aside as subsidized housing. Project is sponsored by NYC Housing Preservation and Development Department
Kent Ave. / South 11 <sup>th</sup> Rezoning (adjacent to Schaefer Brewery). ULURP no. 000087 ZMK	Wythe Gardens LLC and Water View Condos LLC have applied for rezoning from M3-1 to R7A, subject to a new CEQR Declaration (E-112) and a Restrictive Declaration (D-145). Hearing was closed October 2002.
64-84 Harrison Avenue housing ULURP no. C 020590 ZMK	NYC Department of Housing Preservation and Development has applied to rehabilitate a school building (outside study area but within Community District 1)

<b>Table 4-6: Open Space/Recreational Development (Build Year)</b>	
<b>Location/Project Name</b>	<b>Description/Comment</b>
Stuyvesant Cove Park, Manhattan	This northward extension of East River Park recently completed; has been taken into account in the existing land use study.
Java to Kent Street Esplanade – NYC EDC	Partial construction of project completed; access exists. Finishing, landscaping, etc., not completed.
Manhattan Avenue Street End Park - - NYCDRP	Project is in design stage with NYC Dept. of Design and Construction
WNYC Transmitter Site -- NYCDRP	Transmitters removed; parcel is not open to public; State funding (\$170,000) provided for master plan and design

<b>Table 4-7: Transportation Projects</b>	
<b>Location/Project Name</b>	<b>Description/Comment</b>
Williamsburg Bridge Reconstruction	This is an ongoing multi-year project nearing completion. Bridge is being reconstructed while remaining open at all hours. Pedestrian and bicycle pathways and amenities are part of the reconstruction effort.
Kent Avenue / Franklin Street Reconstruction	Project is commencing design stage, and is scheduled for 2004. TGE is in communication with NYC Dept. of Design and Construction.

The list of approved and pending land use changes indicates that, given the availability of public funding in constrained times, greater open space opportunities will exist in the study area in the build year than exist today. Overall, the study area immediately surrounding the Project will continue to be heavily industrial, with mixed use in much of Greenpoint and Northside Williamsburg, and residential/commercial in the Greenpoint core as well as some portions of the Northside Williamsburg core. At the Project site itself, in the absence of the proposed Project, Bayside Oil has for several years consistently stated that it will “develop the site for increased distribution.” This entails expanding operations to “bring the terminal to its full potential as a gasoline depot” – an activity for which it is already licensed but which is not presently occurring at its full potential on the site. (See *Williamsburg Waterfront 197-a Plan*, p. 35; letter in Attachment L-4.)

#### **4.3.2 Loft Legalization and Rezoning Issues**

Stipulation 5, Clause 2(b), requires that, in addition to existing zoning, the Brooklyn Loft Conversion Zoning Text Amendment be analyzed. It is addressed below, along with a

discussion of a recently initiated rezoning effort within the study area by the Department of City Planning.

The Brooklyn Loft Conversion proposed zoning text amendment (N010564.A ZRK) would extend areas where loft conversion is permitted pursuant to Article I, Chapter 5 of the Zoning Resolution. Primarily, this expansion would take place in areas abutting the Northside Mixed Use District and certain additional areas, as shown in [Figure 4-10](#). The closest locations to the Project site are at Kent Avenue/North 9<sup>th</sup> Street, Wythe Avenue/North 11<sup>th</sup> Street, Quay/West Streets and Franklin/Calyer Streets. The intent of the amendment is to address the illegal residential conversions in portions of the study area and throughout Brooklyn. The proposed admendment modifies the areas in which new residential uses in C8 or M1 Districts are allowed. Residential uses would be allowed in places where the Department of Housing Preservation and Development has certified that a floor area was used for a dwelling unit for a continuous 30 day period between September 1, 2000 and November 30, 2000.

In its *Strategic Planning Process* document (April 2002), the The New York City Department of City Planning (DCP) discussed rezoning of portions of the Greenpoint and Williamsburg waterfronts, among other areas of New York City. The rezoning process under Section 197(c) of the New York City charter commenced with public meetings and input, to be followed by a set of recommendations as to the type of rezoning, if any, that should occur within the potential rezoning areas. At present, the initiative is in its early phase. Community Board 1 has convened a rezoning task force in order to communicate its concerns and preferences to the City Planning Commission. No published schedule or time table is available for the process. The proposed rezoning study areas, as published in April 2002 and again in August 2002, are presented in [Figure 4-13](#). The areas cover the Greenpoint waterfront and the Northside Williamsburg waterfront, but do not include the Project site and surrounding areas, where industry remains vibrant and where, according to the DCP, site-specific issues may warrant an assessment separate from the broader rezoning effort. The nearest rezoning study areas are mapped at North 10<sup>th</sup> and Calyer Streets. It should be noted that the rezoning effort grows out of the recently approved community plans for the Williamsburg waterfront and for Greenpoint under Section 197(a) of the New York City Charter (the “197-a plans”), which were themselves based in part on a DCP rezoning study in 1995. The 197-a Plans, and the “rezoning subarea” concepts that they developed, are analyzed in [Section 4.5](#).

The proposed zoning actions are likely to foster greater public waterfront access in the rezoning study areas. The DCP’s waterfront access planning paradigm stresses additional circulation to and from the waterfront, important view corridors at Metropolitan Avenue and the Newtown Barge Terminal and, subject to site-specific constraints, a linear access along the waterfront. Rezoning may also enhance residential growth within the rezoning study areas, depending upon

future housing market conditions, environmental constraints and the new zoning regulations themselves.

### 4.3.3 Map of Publicly Known Proposed Land Uses

As specified in Stipulation 5, Clause 2(c), the applicant was requested during the above-cited consultation effort to map various potential land uses that are being contemplated, beyond the requirements of 16 NYCRR 1003(b)(1)(i). These include both projects and studies or plans, which are listed in Tables 4-8 and 4-9 below and mapped in Figure 4-14. Supporting data are provided in Attachment L-4. Note that multiple documents relative to rezoning and land use plans already exist, and the Project’s consistency with these is discussed in Section 4.5.

<b>Table 4-8: Public and Recreational Development (Beyond Build Year)</b>	
2012 Summer Olympics	New York City selected as United States’ candidate in November 2002. Decision to be reached in 2005. Beach volleyball and archery facility planned from North 4 <sup>th</sup> to North 12 <sup>th</sup> Street; would incorporate and/or displace other planned developments.
Kosciuszko Bridge Reconstruction	Project is in its planning stage under auspices of NYS DOT; work to commence no sooner than 2008
Brooklyn Eastern District Terminal – NYU and OPRHP	Land ownership mostly under NYS OPRHP control. Development financing and schedule not finalized.
“Riverroute”/Brooklyn Waterfront Greenway study	State matching grant (\$250,000) provided for a concept plan for Greenpoint and Williamsburg waterfront public access: identify alternative paths to the river, identify priority locations that build on existing efforts, and identify street ends and other sites that can be developed for public access
El Puente Academy for Peace and Justice expansion project	El Puente plans to develop a school facility at 114 South 4 <sup>th</sup> Street, with the Department of Education as partner, which will accommodate approximately 500 students and provide associated community facilities.
Newtown Creek Upgrade and Open Space – NYCDEP	Project is part of a multi-year phased plant upgrade, contemplating public waterfront access to Newtown Creek and an open space along Greenpoint Avenue.
McCarren Pool Reconstruction -- NYCDRP	Financing not available presently. No timeline or schedule available.
Bushwick Inlet Open Space	Placed onto New York State Open Space Plan. Funding not available presently.

<b>Table 4-9: Private Residential Projects Being Contemplated</b>	
<b>Location/Project Name</b>	<b>Description/Comment</b>
Kedem Windery Site, South 8 <sup>th</sup> Street	Former Kedem Winery occupies a portion of the Schaefer Brewery site.
144 to 162 Kent Avenue, North 4 <sup>th</sup> to North 5 <sup>th</sup> Streets	Kent Avenue Development LLC has indicated an intent to apply for a rezoning of this site, adjacent to the 184 Kent Avenue loft conversion project. No description or timeline available. No applications have been filed.
North 10 <sup>th</sup> to 12 <sup>th</sup> Streets along East River; North 10 <sup>th</sup> to 11 <sup>th</sup> along Kent Avenue	CitiStorage/CitiPostal has indicated its intent to redevelop as a residential property. No description or timeline was provided to TGE. No applications have been filed.
Greenpoint Terminal Market	Owner is Joshua Gutman. No response from Gutman during consultation, but as of December 2001, future development plans were being made for the site. 3,000 units of housing were being contemplated. No further description or timeline available. No applications have been filed.
Greenpoint Lumber Exchange	Under contract with Park Towers Realty. No response from Park Tower during consultation. Press reports indicate that Park Tower is considering conversion of site to residential housing. No description or timeline available. No applications have been filed.
American Package Corporation, 94 West Street	Site is on the east side of Franklin Street between Green and Freeman Streets, adjacent to the Franklin Mixed Use District and the Greenpoint Lumber Exchange site.
64-66 Huron Street	Two buildings, approx. 7,000 s.f. between West and Franklin Streets

#### 4.4 Project Impacts

Stipulation 5, Clause 2(e) requires a qualitative assessment of the compatibility of the Project with existing and approved land uses within the Study area, as well as within one block of interconnection routes to the extent the interconnection routes are outside the Study area. The assessment must distinguish near-field land uses of particular concern to the community. To achieve this, impacts are described separately for the nearest land uses, existing and approved open spaces, key neighborhoods/community resources, development patterns and trends, and overall neighborhood character. These neighborhood-specific subsections refer to the core land use compatibility assessment in [Section 4.4.1](#) below.

#### ***4.4.1 Land Use Compatibility***

The Project is compatible with existing and approved land uses within the study area, as well as the broader region. First and foremost, the Project's beautiful architectural design will aesthetically improve what is currently a mundane industrial pocket surrounded by a dilapidated waterfront. The Project will serve as an anchor for new investment on the waterfront. The Project will also avoid, minimize, or mitigate impacts to land uses, including any potential adverse changes to the ambient air that individuals breathe, the water they consume, the sounds they hear, the traffic they usually encounter, the odors they may smell, and the natural and built environment that they see. The Project will remediate a contaminated site along the waterfront. The following analysis, which relies on the conclusions of various sections of this Application, evaluates overall compliance with land uses.

##### *4.4.1.1 Air Quality*

Impacts to the environment are calculated in terms of air pollutant concentrations at receptor points which are located throughout the land use study area and beyond, as presented in Section 5. The Project will install state-of-the-art pollution controls and will comply with air quality standards that are protective of the health of the most vulnerable human populations. As part of the Federal and State programs of air quality improvement, TGE will obtain emission credits generated from pollution reductions at other facilities. For every unit of emission credits, 30% more emission reductions are required. Finally, because the proposed facility is an energy producing plant which cannot store its inventory, it will directly compete with other plants. If the Project is not more efficient, at any given point in time, than competing plants, it will not run, and no air quality impact will result. Whenever the Project is more efficient than competing plants, it will displace those less efficient plants' emissions, which are generally higher than the Project's. System production modeling, and related air quality modeling, indicates that a net air quality benefit is expected not only in terms of emissions decreases, but also in terms of a decrease in local pollutant deposition in the land use study area. Thus, the Project will have no adverse air quality impacts and is expected to bring air quality benefits, both locally and regionally.

##### *4.4.1.2 Odors*

The TGE Facility will burn the cleanest fossil fuel available, natural gas and, as a backup, very low sulfur fuel oil. Air emissions will not have any discernible odors. Odors are sometimes associated with the storage of residual petroleum product, but no such product will be stored on-site. The gas, electric, process water, and industrial wastewater interconnections to the site will also be odor-free. Odor complaints in the community also result relative to the sewer system,

which is not separated from the storm drainage system and therefore overflows during rain events. However, the Project will not contribute to this problem because it will discharge its industrial flows directly to an interceptor line.

Odors are expected during periods of soil exposure, during the site remediation phase. Continuous odor monitoring for compliance with OSHA odor exposure thresholds will occur throughout the potentially odor-producing period. Also, there are odors during construction associated with the use of diesel-fueled construction vehicles, but these dissipate outside the immediate vicinity of such pieces of equipment. All on-site hazardous substances and oil will be securely contained and properly stored.

#### *4.4.1.3 Water Use and Quality*

By reusing wasted dewatering effluent, the Project is expected to fully supply all its process needs through non-potable sources, as described in Section 7. In addition to the plant's own process, non-potable water can supply a substantial portion of makeup water for steam export. Because New York City's steam system does not recover steam condensate, use of non-potable water can reap notable benefits to the surface water reservoir system, by reducing withdrawals compared to existing levels.

The Project is also avoiding adverse impacts to the wastewater collection system, as outlined in Section 7. By interconnecting directly to a sewer interceptor, the Project will not be contributing to sewer backup and related problems that have been known to generate complaints from neighborhood residents.

#### *4.4.1.4 Noise*

As demonstrated in Section 11, the Project will be designed to be very quiet. The Project will produce a maximum  $L_{eq}$  of 43 dBA at the Quay Street receptor location and less at other off-site locations. At the site property line, Project sound levels will range from 35 dBA at the western tip to 50 dBA along the northern boundary, with most points falling into the 46 to 48 dBA range. See Table 4-10. Thus, the Project will comply with the New York City Noise Code and the New York City Zoning Resolution Performance Standards. It will be consistent with the incremental and absolute values presented in the CEQR Manual, including the noise exposure for open spaces areas where serenity and quiet are extraordinarily important, which is also equivalent to the residential night-time guideline. It is designed to meet a Modified Composite Noise Rating of "C" or better. The predicted levels are also lower than EPA's recommended limit of  $L_{dn}=55$  dBA "to protect the public health and welfare with an adequate margin of safety" and well below the limit  $L_{dn}=65$  dBA that the Department of Housing and Urban Development considers

acceptable for urban housing locations. In conclusion, the Project will be much quieter than existing average sound levels and will not adversely affect the present noise environment. The design is compliant with the standards for a residential or open space environment, as well.

<b>Location</b>	<b>Present Daytime Level</b>	<b>Predicted Daytime Construction Noise</b>	<b>Present Nighttime Level</b>	<b>Predicted Operational Noise</b>
Kent Ave./North 9 <sup>th</sup> St.	63	37	56	35
Wythe Ave./North 10 <sup>th</sup> St.	61	34	55	35
Nassau Ave./North 15 <sup>th</sup> St.	63	35	54	34
Meserole Ave./Guernsey St.	60	35	50	34
Franklin and Oak Streets	62	36	54	38
Quay St. near Franklin, West	64	40	59	40

From [Table 11-1](#), [Table 11-11](#), and [Table 11-15](#) (average across phases).

#### 4.4.1.5 Project Traffic and Lane Closures

The Project will reduce local traffic by displacing oil trucks from the Project area. Project construction will, on peak days, generate the same order of magnitude of truck traffic as exists today, and less on most construction days. Counting additional construction-generated traffic (worker trips to the site), the overall traffic levels are projected to increase very slightly for the brief peak construction period. See [Table 4-11](#). During operations, however, the reduction in traffic volume brought about the Project will be realized, with across-the-board reductions on local truck traffic routes. See [Table 4-12](#). These reductions translate to positive environmental impacts: less localized air pollution and less noise.

<b>Roadway</b>	<b>Segment</b>	<b>Daily Traffic</b>	<b>Baseline Growth</b>	<b>Net Project Construction</b>	<b>Cumulative Traffic</b>
Kent Ave.	N. 14 <sup>th</sup> – S. 5 <sup>th</sup> Streets	8,184	248	10	8,442
Percentage basis			3%	0%	3%
Metropolitan Ave.	Meeker – Kent Aves.	1,131	34	10	1,176
Percentage basis			3%	1%	4%
Franklin St.	Commercial – N 14 <sup>th</sup> Sts.	5,707	173	-53	5,827

<b>Table 4-11: Estimated Daily Traffic on Local Streets (Construction)</b>					
<b>Roadway</b>	<b>Segment</b>	<b>Daily Traffic</b>	<b>Baseline Growth</b>	<b>Net Project Construction</b>	<b>Cumulative Traffic</b>
Percentage basis			3%	-1%	2%
Driggs Ave.	Humboldt – North 12 <sup>th</sup> Sts.	5,839	177	59	6,075
Percentage basis			3%	1%	4%
McGuinness Blvd.	Greenpoint – Meeker Ave.	28,964	878	-70	29,771
Percentage basis			3%	0%	3%
Greenpoint Ave.	BQE – Franklin St.	8,634	262	-53	8,843
Percentage basis			3%	-1%	2%
North 12 <sup>th</sup> St.	Kent – Union Aves.	930	28	59	1,017
Percentage basis		1,131	3%	6%	9%

Notes: All units in vehicles per day. Daily traffic is based on an annual average derived from traffic counts. Data are from [Table 13-1](#) and [Section 13.2.3.2](#). Reduction of 200 truck trips per day from Bayside Oil Terminal is reflected, using the same distribution as the truck distribution for Project traffic. Construction Year is 2005. A baseline growth factor of 1% per year is applied consistent with CEQR guidance. Driggs Ave. values based on traffic counts at nearby Nassau Ave.

<b>Table 4-12: Estimated Daily Traffic on Local Streets (Operation)</b>					
<b>Roadway</b>	<b>Segment</b>	<b>Daily Traffic</b>	<b>Baseline Growth</b>	<b>Net Project Operation</b>	<b>Cumulative Traffic</b>
Kent Ave.	N 14 <sup>th</sup> – S 5 <sup>th</sup> Streets	8,184	417	-206	8,395
Percentage basis			5%	-3%	3%
Metropolitan Ave.	Meeker – Kent Aves.	1,131	58	-206	983
Percentage basis			5%	-18%	-13%
Franklin St.	Commercial – N 14 <sup>th</sup> Sts.	5,707	291	-136	5,862
Percentage basis			5%	-2%	3%
Driggs Ave.	Humboldt – North 12 <sup>th</sup> Sts.	5,839	298	10	6,147
Percentage basis			5%	0%	5%
McGuinness Blvd.	Greenpoint – Meeker Ave.	28,964	1,477	-139	30,302
Percentage basis			5%	0%	5%

<b>Table 4-12: Estimated Daily Traffic on Local Streets (Operation)</b>					
<b>Roadway</b>	<b>Segment</b>	<b>Daily Traffic</b>	<b>Baseline Growth</b>	<b>Net Project Operation</b>	<b>Cumulative Traffic</b>
Greenpoint Ave.	BQE – Franklin St.	8,634	440	-136	8,939
Percentage basis			5%	-2%	4%
North 12 <sup>th</sup> St.	Kent – Union Aves.	930	47	10	987
Percentage basis		1,131	5%	1%	6%

Notes: As per Table 4-11 above.

Construction of the Project’s interconnections will require work within streets that will require temporary lane closure within some streets in the study area, as well as beyond the study area for the water supply interconnection. As described in Sections 7, 14 and 15, for the water/wastewater, electric and gas interconnections, respectively, street opening will be managed so as to be brief and to avoid night-time construction in residential areas. As described in Section 13, TGE will work with the utility companies that will construct the interconnections to ensure that all necessary coordination takes place, and furthermore that such utility work is closely coordinated with the Kent Avenue and Franklin Street reconstruction project (and possibly conducted at the same time as that project). In general, except for the water supply line, interconnection routes are mostly outside residential areas. For all these reasons, disruptions due to in-street construction of interconnections will be minimized.

#### *4.4.1.6 Visual and Urban Design Impacts*

The Project will improve aesthetically upon its industrial setting. Whereas adjacent buildings were constructed using standard methods to achieve cost-efficiency and maximum industrial functionality, the Project design achieves functionality through an integral architectural design that is not only visually pleasing, but combines engineering needs, air and water pollution control systems, extensive noise abatement, public waterfront access, and a respect for the hierarchy of the local urban design. The design anticipates the potential for a much improved aesthetic setting, with which the Project would then be compatible. Indeed, by investing in the waterfront, cleaning a contaminated site and building a clean, well-maintained, landmark in this location, the Project can serve to anchor new aesthetic improvements in the adjacent industrial parcels.

In most inland portions of the study area, existing buildings in the foreground will eliminate views of the TGE Facility. Along the waterfront and in the immediate vicinity of the site, the Project’s innovative and attractive design will be prominently visible. The Project’s exhaust building and other facility components will also be visible from parts of McCarren Park. The

most prominent views of the facility occur from locations in and above the East River, as well as along the East River Park and esplanade in Manhattan. Visibility of the Project will not constitute an adverse impact but rather a visual improvement.

#### *4.4.1.7 Changes in Waterfront Access*

The Project would improve, on net, the waterfront access that presently exists within the study area. As detailed in Table 4-4 above, there are only 4 streets in the study area that terminate with public waterfront access areas. The Project would increase this number to 6, a 50% increase, by opening or committing to funding the opening of the North 14<sup>th</sup> Street and North 12<sup>th</sup> Street physical waterfront access. These are the streets at the northeast and the south boundary of the Project site. The Project would also preserve all 22 existing views of water, as listed in Table 4-4. It would eliminate 2 of the 37 partial views toward Manhattan, at North 13<sup>th</sup> Street and Meserole Avenue. Views across water will remain plentiful in the study area. This impact will be mitigated through the Project's own architectural design, which will be a significant improvement over the exposed industrial appearance of the Bayside Oil tanks, parked trucks and refueling facilities.

#### *4.4.1.8 Displacement and Socioeconomic Effects*

The Project will have no adverse impact on land uses in the study area. It will only displace the oil distribution/maintenance operations at the Project site (see Section 4.4.2 for further details). However, nearby industries will benefit significantly from the construction effort, through local purchases of materials or services. Using the CEQR Technical Manual guidance for determining a significant land use impact, it is clear that the Project would not cause any negative impact, as outlined below.

- The land use that the Project will displace will be consolidated to other terminals in Brooklyn, (and is considered a net benefit by the Bayside Oil Company. Jobs associated with the present terminal operations will likewise be transferred to other terminal locations.
- The Project constitutes an industrial use in an industrial setting, but through high performance (covering noise, air quality, odors, vibrations, etc., as further detailed in Section 4.6) it is compatible with a variety of land uses.
- Cumulative neighborhood character impacts, as described in Section 4.4.8 below, will not be adversely affected. Development trends that may change neighborhood character over time (Section 4.4.5) also would not be adversely affected. To the degree that the development

trend is itself adverse, leading to displacement of residents from the study area, the Project would not accelerate that trend.

- The Project brings no significant increase, or a decrease, in density, traffic, or physical and social infrastructure demands.
- The Project is consistent with public policy for reasons described in Section 1 and Sections 4.5 and 4.6 below.

#### *4.4.1.9 Conclusion*

It is concluded that the Project, including its interconnections, is compatible with not only adjacent industrial land uses but also the mixed use and residential portions of the study area. First, the Project will not create an adverse effect on local air quality, water use and water quality, or odors. It will fall within noise-related guidelines not only to protect human health, but as judged by the yardstick of community complaint potential. It will reduce truck traffic on local streets on a permanent basis. The Project will be prominently visible along the waterfront, and its architectural design will be a marked aesthetic improvement over existing conditions, while preserving view corridors. The Project will not increase the land dedicated to industrial uses in the study area, but will provide a significant economic benefit from construction as well as operation. By taking these significant steps in terms of design, aesthetics, noise abatement and traffic reduction, the Project achieves an essential goal: it will be compatible and can coexist with a variety of land uses.

The following sections focus in detail on particular locations within the study area and refer to the foregoing impact analysis.

#### **4.4.2 Direct Impacts at Project Site**

The Project would create a permanent change of land use on the 8-acre Bayside Oil site to the extent that Bayside Oil operations would be consolidated among Bayside's other terminals in Brooklyn. It is expected that on-site employment loss will be avoided or minimized because Bayside's overall throughput of oil is not expected to decrease. Workers could potentially also be rehired by TGE. There would be no net increase in land dedicated to industrial uses, but the nature of the industrial use will change from oil storage and distribution to the generation of electric and thermal energy.

As part of these changes, the site will undergo substantial environmental cleanup, yielding environmental improvements. Noise, traffic and air pollution generated by trucks entering and

leaving the Project site will decrease. The existing utilitarian arrangement of small buildings, plain, somewhat poorly maintained street furniture (e.g., chain link fence), as well as openly visible parking will be eliminated in favor a new, well maintained aesthetically pleasing facility.

In terms of scale, the nearest building to Kent Avenue and North 12<sup>th</sup> Street will be 60 feet, with larger scale construction (up to 130 feet) at appropriate setbacks from the street. The exhaust building will stand at 325 feet, but has been designed to group four separate industrial-looking stacks into one building with a crisp looking shape and treated with solar panels pleasing to the eye. Because TGE has committed itself to funding public waterfront access at the tip of North 12<sup>th</sup> Street, it is expected that an overall enhancement of public waterfront access will take place as a result of the Project.

In addition to the displacement of Bayside Oil, mechanical repair operations (currently leased out to the Petro company) would be displaced. Occupied space on the second and third floor, presently leased out to commercial tenants, would remain. New space for a visitor center as well as community-oriented uses is also proposed. The architectural design, described in Section 10.3, describes the concept in greater detail.

#### ***4.4.3 Nearest Land Uses and Open Space Impacts***

##### *4.4.3.1 Impacts at Nearest Land Uses*

As described in Section 4.2.1 above, the nearest land uses are predominantly industrial. However, Project design anticipates a variety of potential land uses even within the nearest land use areas. Thus, architectural design pays attention to both distant and near-field views of the facility, enhancing many views as a landmark attraction, as described in Section 4.4.1 above and detailed in Section 10. The most prominent visibility of the Project within the Brooklyn portion of the study area will occur at these nearest locations, including potential open spaces, which are considered below. State-of-the-art noise attenuation will be installed, achieving overall performance that enables the Project to be consistent with residential and open space uses, as described in Section 4.4.1 above and detailed in Section 11. The Project will enhance the viability of existing businesses in the area because it will provide a customer base, both for plant operations and because Project employees will spend time in the area and are likely to make local purchases. Positive socioeconomic benefits, described in Section 12, are expected to be realized in the nearest parcels as well as regionally.

Specific attention is paid to the potential for adverse or beneficial impacts to adjacent existing and potential future open space uses such as land north of the Bushwick Inlet. In addition to the principal characteristics that make the Project compatible with sensitive land uses – memorable

architecture, respect for urban design patterns, high environmental performance – open spaces pose two specific issues that need to be considered: their utilization by new residential or non-residential populations and the effect of shadows. Both are considered below.

#### 4.4.3.2 *Open Space Availability*

Chapter 3D of the CEQR Manual describes the analysis to be undertaken with respect to the utilization of open space. A potential indirect effect is the decrease in open space availability for existing populations through the introduction of a new residential or commercial population. In the case of the Project, an increase of approximately 40 people over a 24-hour day is expected, with half working the day shift. The CEQR Manual recommends an open space study for purposes of assessing indirect effects only if a population of 200 residents or 500 employees is introduced. Hence, the Project would not normally require such an assessment. However, the comprehensive study stipulations (Stipulation 5, Clause 3) require an analysis of open space use by Project construction and operation personnel.

Per the CEQR analysis, the study area for workers is a ¼-mile radius, based on the fact that workers are generally willing to walk that distance for open space enjoyment. A ¼-mile, or about 1,300-foot radius is drawn around the Project site, as shown in [Figure 4-15](#). Census tract boundaries were overlaid with this study area. Census tracts with at least 50 percent of their area within the ¼-mile radius were included in their entirety, and other census tracts were excluded. As a result, two census tracts constitute the study area – Tract 557 and 559. Tract 557 includes primarily residential blocks in its southern half and industrial blocks in its northern half (nearest the Project site). Its total population in the 2000 Census is 1,151 persons. Tract 559 includes residential areas around Calyer Street in its northern half and industrial blocks in its southern half (nearest the Project site). Its total population in the 2000 Census is 160 persons. Non-residential population during the daytime is estimated to be approximately 200 persons, based on the employment data provided by the NYS Department of Labor in [Section 4.2.4.2](#) above, which closely overlaps the study area. Based on the detailed field survey of near-field areas, there are approximately 2.3 acres of open space in the ¼-mile radius area (a part of the western section of McCarren Park). Of this area, about a quarter-acre are amenable to use as passive recreation space, to which non-residential users gravitate. Thus, the study area contains approximately 1.75 acres per 1,000 residential users (applicable to weekends or evenings) and approximately 1.2 acres per 1,000 non-residential users (weekday usage). Both are considered adequate because they are above the CEQR thresholds for underserved areas: 1.5 acres per 1,000 residential users and 0.15 acres per 1,000 non-residential users.

The CEQR Manual then describes a methodology for examining the change in total population relative to total open space in the study area. For non-residential usage during Project

construction, the Project would introduce up to approximately 310 day shift workers at the site, resulting in a temporary increase from approximately 200 to 510 non-residential users, and a corresponding decrease from 1.2 acres to 0.5 acres per 1,000 users. This is greater than the CEQR threshold of 0.15 acres of passive recreation space per 1,000 non-residential users. During plant operations, with only 20 daytime workers, the ratio would be approximately 1.1 per 1,000, not counting new open space created by the Project. Counting approximately a quarter acre of passive recreation space created by the Project, the open space ratio for non-residential users would approximately double, from 1.2 to 2.4 acres per 1,000 users. For residential users, the open space ratio would not change (if ignoring the Project's new open space creation), or would increase by about 10% to 1.95 acres per 1,000 residential population.

It should be noted that the above analysis ignores the potential future creation of public open space within the study area, an analytical measure that is conservative for the availability analysis. Consistent with the CEQR methodology, this analysis suggests that the Project will not have adverse open space impacts during either construction or operation. No further analysis is necessary.

#### 4.4.3.3 *Shadows*

The CEQR Manual lists shadows as a potential direct effect on open space resources. Therefore, the open space study includes an assessment of the Project's potential to cast shadows during daytime hours (except within approximately 90 minutes of sunset and sunrise, per the CEQR methodology). The analyses for shadow impacts are provided below.

The first screen for a shadow study is to determine the longest possible shadow cast by the new structure. Based on New York City's geographical position, a factor of 4.3 is used. In the case of Project's 325-foot exhaust building, the longest possible shadow is therefore approximately 1,400 feet, assuming a constant elevation. For the next tallest structures, which stand at 130 feet tall, the longest shadow is about 560 feet. [Figure 4-16](#) shows these screening radii, overlaid with nearby open spaces and eliminating areas south of the Project that fall more than 108 degrees from true north – i.e., excluding locations on which no Project structure (irrespective of height) would cast a shadow on the basis of New York City's latitude. The resulting figure shows that three potential future open space areas are within the screening-level shadow zone: the land north of the Bushwick inlet, the proposed public waterfront access at the western tip of the Project site and the northwest portion of the 2012 Olympic venue site (presently the CitiStorage site). None of these areas is currently open or accessible to the public. The American Playground, which is an active recreational area, is beyond the screening radius, as is the Brooklyn Eastern District Terminal proposed park site.

The Bushwick Inlet itself is a water body that could in the future be used for recreation purposes, and has also been included in the analysis. Since the water body is surrounded by the potential open land spaces and the Project site itself, the shadow analysis adequately covers the entire Bushwick Inlet area, both land and water. The second screening step in the shadow study is to determine the angle of the earliest and latest possible shadow on the resources. Because the resources are adjacent to the Project site, the maximum entering and exiting angle of 108 degrees from true north was used.

A shadow study using the same CEQR methodology was also conducted for the nearest historic sites – Greenpoint Historic District and the Transfiguration Cathedral, which are also noted in [Figure 4-16](#). Both are outside the longest possible shadow radii. This analysis is relied upon in the historic resources study ([Section 10](#)). (It should be noted that, in general, only certain historic sites can be adversely affected by shadows – for example, a church with stained-glass windows designed to let in sunlight.)

The next step in the open space shadow study is to consider the earliest and latest shadows for a winter, equinox, spring-summer and mid-summer condition. [Table 4-10](#) lists these times for four specified conditions, per the CEQR guidance. Shadows are assessed within these time periods, for each of the days specified. [Figures 4-16](#) through [4-19](#) present the results of the shadow study pictorially. The plan view in each of these figures represents shadows cast during the times specified in [Table 4-10](#). The axonometric views are added to assist in visualizing the shadow effect. Axonometric views are produced for some of the times noted below.

<b>Table 4-10: Shadow Factors for Four Shadow Angles</b>							
<b>Date</b>	<b>One and one-half hour from sunrise/sunset</b>				<b>Entry and exit angle</b>	<b>Min. and Max. Shadow Factor</b>	
December 21	8:51 am	10:52 am	12:52 pm	2:53 pm	42 degrees	2.07	4.27
September 21	8:36 am	11:33 am	2:31 pm	5:29 pm	74 degrees	0.87	3.24
May & Aug 6	7:27 am	11:04 am	2:41 pm	6:18 pm	97 degrees	0.46	3.31
June 21	6:57 am	10:56 am	2:55 pm	6:54 pm	108 degrees	0.31	3.66

Source: CEQR Technical Manual, Table 3E-2. March and September 21 row based on daylight savings time. Entry and exit angles on the basis of true north. Assessment times include approximately 90 minutes after sunrise and before sunset, and two equally spaced intermediate times.

The shadow study shows that there will be essentially no shadow impacts to the proposed Olympic site because of the relative locations of the Project and this space. When shadows are longest, on December 21, they are cast in a northwesterly direction. Only when shadows are shorter, in spring and summer, will some shadow be cast in the morning, and then only over on

the northern block of the site. A shadow duration analysis for the Olympics site is presented in [Table 4-11](#).

<b>Table 4-11: Shadow Duration for 2012 Olympic Site</b>						
	<b>Begin Shadow*</b>		<b>End Shadow</b>		<b>Duration</b>	<b>Affected features</b>
	<b>Time</b>	<b>Deg.</b>	<b>Time</b>	<b>Deg.</b>		
December 21	N/A	N/A	N/A	N/A	0 h 0 m	no shadow on Dec. 21
Mar & Sept 21	9:38 am	-62	10:14 am	-54	0 h 36 m	only shadow from stack
May & Aug 6	8:29 am	-87	10:57 am	-54	2 h 28 m	stack shadow in AM
June 21	7:58 am	-99	11:27 am	-54	3 h 29 m	stack shadow in AM

These times, adjusted for daylight savings time, reflect the first time listed in Table 3E-2 following 90 minutes after sunrise or 90 minutes before sunset. Enter and exit angles for this resource are -108 and -54 degrees, respectively.

For the pier at the western tip of the Project site, there will generally be morning shadows, which will mostly pass the site by noon. A shadow duration analysis for the pier is presented in [Table 4-12](#).

<b>Table 4-12: Shadow Duration for North 12<sup>th</sup> Street Pier</b>						
	<b>Begin Shadow</b>		<b>End Shadow</b>		<b>Duration</b>	<b>Affected features</b>
	<b>Time</b>	<b>Deg.</b>	<b>Time</b>	<b>Deg.</b>		
December 21	8:51 am	-42	12:56 pm	16	4 h 05 m	AM shade
Mar & Sept 21	9:38 am	-62	1:45 pm	16	4 h 07 m	AM shade
May & Aug 6	9:24 am	-77	1:21 pm	16	3 h 57 m	AM shade
June 21	10:07 am	-77	1:17 pm	16	3 h 10 m	AM shade

These times, adjusted for daylight savings time, reflect the first time listed in Table 3E-2 following 90 minutes after sunrise or 90 minutes before sunset. Enter and exit angles for this resource are -77 and 16 degrees, respectively.

Because it lies to the north of the proposed Project structures, the potential future open space at the northern shore of the Bushwick Inlet will be affected by shadow. In summertime, the shadows will be limited primarily to the upland area immediately adjacent to the Project itself, and would not affect the Bushwick Inlet to land north of the Bushwick Inlet. In the winter, the north side of the Bushwick Inlet would see approximately 6 hours of shadow per day. A reduction in the extent of shadow generated is achieved through the gently northward-sloping roof of the combustion turbine building. A shadow duration curve and analysis for the Bushwick Inlet and adjacent land is presented in [Table 4-13](#).

	Begin Shadow		End Shadow		Duration	Affected features
	Time	Deg.	Time	Deg.		
December 21	8:51 am	-42	2:53 pm	42	6 h 02 m	inlet and northern land
Mar & Sep 21	9:38 am	-62	5:29 pm	74	7 h 51 m	eastern inlet only
May & Aug 6	9:29 am	-76	6:18 pm	97	8 h 49 m	southeast inlet only
June 21	10:12 am	-76	6:54 pm	108	8 h 42 m	only south riprap shore

These times, adjusted for daylight savings time, reflect the first time listed in Table 3E-2 following 90 minutes after sunrise or 90 minutes before sunset. Enter and exit angles are -76 and 108 degrees, respectively.

In the impact evaluation phase of the shadow study, the sensitivity of each resource to shadow is examined. For all of the nearby sites, shadow sensitivity is not presently an issue because they are closed to the public. Thus, by analyzing the Project’s shadow impacts before any open space development at these locations occurs, it is possible to recommend best practices for future potential open space layouts.

The shadow study show that the Project will cast no significant shadows on the proposed Olympic site. Because of the sky exposure plane in the Zoning Resolution, the only shadows will be those cast by the unusually shaped exhaust building. Because of its shape, the exhaust building will cast a narrow shadow on this space. Shadows will not occur after approximately 10:15 AM in September, and 11:30 AM in June.

For the North 12<sup>th</sup> Street pier, sun-sensitive uses are best situated in the far western tip, thus minimizing the shadow duration. For example, the architectural design contemplates a structure that supports competing, rotating solar panel alignments. Placing this structure toward the west of the pier area will maximize its effectiveness.

For the Bushwick Inlet area, sun-sensitive use considerations relate to possible wintertime outdoor seating. Other than in the late autumn and early winter, the north side of the Bushwick Inlet will be unaffected. With respect to wintertime outdoor seating, it is best sited in the northeastern portion of the area, the portion that will be least affected by, and most distant from, Project shadows. In terms of vegetation, growing season shadows on the northern side of the Bushwick Inlet will generally not occur. Plentiful sunlight will be available for new plants.

#### *4.4.3.4 Conclusion Regarding Adjacent Open Space Impacts*

The open space and shadow studies, combined with the land use compatibility assessment provided above, support a conclusion that the Project will not adversely affect the viability of the

nearest land uses, and that it will be compatible with a variety of existing or alternate land uses in the near field, including the development of new public waterfront access and open space. To be compatible in this manner, an industrial development needs to be highly land-efficient, with high performance and a design based on state-of-art technological and architectural mitigation – all goals that the Project achieves.

#### ***4.4.4 Key Neighborhoods and Community Resources***

The following section addresses Stipulation 5, Clause 2(e-iii), which states that for each key neighborhood or community resource identified, the application will include a summary, based on studies conducted subject to other stipulations, of all localized project impacts affecting that neighborhood or community resource. Based on this summary, a qualitative assessment of the compatibility of the Project with each specified neighborhood or community resource will be provided. The following sections assess land use compatibility for each key neighborhood, as defined in Section 4.2.8 above. In so doing, the analysis focuses on land, traffic, noise and visual impacts.

##### ***4.4.4.1 McCarren Park***

***Land.*** The Project will not use any land within McCarren Park and thus will not interfere with any of the numerous active and passive recreational opportunities that the park provides. Project workers may occasionally walk in or around the park as a passive recreational activity. The Project will cast no shadows on the park. The electric interconnection route will include the laying of a cable in public streets adjacent to the park. This temporary construction effort will not have any permanent impacts to the park.

***Noise.*** The Project’s noise mitigation strategies will translate to low sound levels, with average construction noise expected to contribute only approximately 36 dBA at McCarren Park and the nearby Holy Family Church, while the existing daytime average ambient level is 63 dBA (and 54 dBA at night). During operation, the noise contribution is only 34 dBA. Noise resulting from temporary work on the electrical interconnection near the park would be limited to the daytime. In summary, the Project’s noise impacts at this area are minimal and acceptable.

***Traffic.*** Some of the Project’s traffic is expected to use Driggs Avenue when traveling to the Project site, but this would constitute only an approximately 1% increase in traffic during peak construction conditions, and a 0.2% increase during operation. Such levels will have no noticeable effect on the enjoyment of McCarren Park.

***Aesthetics and Urban Design.*** McCarren Park includes one of the two view corridors from upland locations in Brooklyn which presently are blocked by the Bayside Oil facility – North 13<sup>th</sup> Street. From this location, the present view includes the Bayside Oil tanks, standing approximately 50 feet high, beyond which some Manhattan buildings are visible. The Project will replace this view corridor with one that changes these features to a view that includes the Kent Avenue aesthetically attractive architectural façade. From selected locations in the park, it will be possible to see the exhaust building as well as the Kent Avenue façade and other features. The most open views in the park are furthest east and south, because only vegetation and a few structures within the park obstruct views at these locations. The Project will replace oil tanks, trucks and loading facilities and will provide a new, tall, aesthetically memorable architectural landmark situated 1,000 to 3,000 feet from viewers within the park.

In summary, land use, noise, and traffic impacts will be very minor at this location. Visual impacts will be positive. There will be no detriment to the continued use and enjoyment of McCarren Park by neighborhood residents and other park users.

#### *4.4.4.2 Greenpoint Core and Historic District*

***Land.*** The Project will not use any land within the Greenpoint core/Greenpoint Historic District. The gas interconnection route will include the laying of a pipe in a very small segment of the area, outside the historic district. This temporary construction effort will not have any permanent impacts on the neighborhood.

***Noise.*** The Project's noise mitigation will keep sounds from the Project to a level only approximately 36 dBA at Franklin and Oak Streets, one block south of the American Playground and the boundary of the Greenpoint Historic District, while the existing daytime average ambient level is 62 dBA (and 54 dBA at night). During operation, the noise contribution is only 38 dBA. Noise resulting from temporary work on the gas interconnection near the neighborhood would be limited to the daytime. In summary, the Project's noise impacts at this area are minimal and acceptable.

***Traffic.*** Some of the Project's traffic is expected to use Franklin Street and Greenpoint Avenue when traveling to and from the Project site, but the removal of truck traffic from these streets would immediately reduce traffic, which is expected to offset temporary construction traffic increases, and bring about a larger net reduction on a permanent basis.

***Aesthetics and Urban Design.*** The Project will not be prominently visible from the historic district. Views along Greenpoint, Milton, Noble, Oak and Calyer Streets will all be unaffected. Given the distance of the Project site from the Greenpoint core and the ubiquitous obstructing

buildings, no adverse or beneficial visual impacts are expected here. This neighborhood also includes one of the two view corridors from upland locations in Brooklyn which presently are blocked by the Bayside Oil facility – Meserole Avenue. Along Meserole Avenue, the present view includes the Bayside Oil tanks, standing approximately 50 feet high, beyond which Manhattan buildings are visible. The Project will replace this view corridor with a view of its northern architectural façade. Views toward Manhattan will continue to be available along the vast majority of streets connecting the waterfront and upland lots, including parallel views along Norman Avenue.

In summary, adverse land use and noise impacts are avoided, and the traffic effect will be positive. Visual impacts will be very limited due to orientation of streets, and mixed where views do exist, such as along Meserole Avenue. There will be no detriment to the fabric of the Greenpoint residential and historic neighborhood from Project construction and operation.

#### 4.4.4.3 *Greenpoint Waterfront*

**Land.** The Project will not use any land within the Greenpoint waterfront area. The Project is in the Williamsburg Waterfront area. The gas interconnection route will include the laying of a pipe in a very small segment adjacent to the area. This temporary construction effort will not have any permanent impacts to the Greenpoint waterfront.

**Noise.** Project sound levels would be only approximately 36 dBA at Franklin and Oak Streets, a location representative of this area, while the existing daytime average ambient level is 62 dBA (and 54 dBA at night). During operation, the noise contribution is only 38 dBA. Noise resulting from temporary work on the gas interconnection near the neighborhood would be limited to the daytime. In summary, the Project’s noise impacts at this area are minimal and acceptable.

**Traffic.** Some of the Project’s traffic is expected to use Franklin Street when traveling to and from the Project site, but the removal of truck traffic from this street would immediately reduce traffic, which is expected to offset temporary construction traffic increases, and bring about a larger net reduction on a permanent basis. Traffic along West Street is not expected.

**Aesthetics and Urban Design.** West Street and the East River waterfront, including piers, provide an open view corridor toward the Project site from the north. Currently, there are views of the Bayside Oil Tanks, as well as portions of the Citi Storage buildings in the background. The Project’s overall form will be noticeable, as will its color and texture under clear atmospheric conditions. The Project’s architectural design will be a visual improvement over the existing on-site structures. At the same time, buildings in the area will continue to obstruct many views of the Project. Generally, the Project’s western structures, including the air-cooled

condenser, will be more prominently visible from the Greenpoint waterfront than the eastern structures, including the combustion turbine building. However, the Project's design incorporates architectural treatments for western structures including the air-cooled condenser and a viewing platform atop the substation building. In terms of scale, the Project will introduce an element that is typical of waterfront development along both sides of the East River, but larger than the low-rise Greenpoint and Williamsburg neighborhoods.

In summary, land use, noise and visual impacts will be very minor at this neighborhood. Traffic and visual effects will be positive. There will be no detriment to the fabric of the Greenpoint residential and historic neighborhood from Project construction and operation.

#### *4.4.4.4 Bushwick Inlet Area*

**Land.** The Project will not interfere with the industrial uses that occur today on the northern side of the Inlet, or with possible active and passive recreational uses in the future. Rather, the Project will foster recreational uses by creating or funding adjacent waterfront access. The Project will cast shadows toward the north, but in the daylight hours of concern (more than 90 minutes from sunrise or sunset), shadows will not reach the northern side of the Bushwick Inlet, except at the shore and in wintertime. The gas, electric and water supply interconnection routes will include the laying of utilities in public streets adjacent to this area. This temporary construction effort will not have any permanent impacts, and will be coordinated with previously planned street reconstruction efforts to the extent practicable.

**Noise.** Here, noise levels would be highest due to the proximity. Still, the Project's construction sound levels would be only approximately 41 dBA at the Quay Street location between Franklin and West Streets, representative of this area. The existing daytime average ambient level is 64 dBA (and 59 dBA at night). During operation, when the north side of the Bushwick Inlet could become an open space area, the noise contribution will also be approximately 40 dBA – significantly quieter than the 55 dBA standard for residences at night and open spaces requiring serenity and quiet. Noise resulting from temporary work on the interconnections would be limited to the daytime. In summary, there are no adverse noise impacts from the in this area.

**Traffic.** Project-generated traffic is expected to come together at this location, but intersection levels of service will remain favorable, as described in [Section 13](#). Overall traffic in the area will be reduced along Kent Avenue and Franklin Street due the displacement of trucks, and will increase very slightly along North 12<sup>th</sup> Street, from use by workers accessing the Project site.

**Aesthetics and Urban Design.** This is the area where the Project's street-level architectural treatments, landscaping, street furniture and lighting will be visible in most detail. The Project's

scale will also be most prominent given the immediate proximity of the Bushwick Inlet area to the Project site. From street level, the setback of taller buildings will minimize the Project's streetfront bulk and maximize the sky exposure. The Project will alter the North 13<sup>th</sup> Street view, which today features the oil terminal truck parking and truck loading area, with views of oil tanks and Manhattan buildings beyond it, to a view of the Project façade. The Project will not block views along North 12<sup>th</sup> or North 14<sup>th</sup> Street. The latter is especially important because it is the primary proposed access between the Bushwick Inlet and McCarren Park. The Project's northeast gateway – a visitor center at North 14<sup>th</sup> Street and Kent Avenue – will provide a welcoming gesture toward this area of proposed community focus. The Project's north façade will be prominently visible along the north shore of the Bushwick Inlet. Therefore, functional and formal elements have been combined for visual interest, such as the alternating vertical and horizontal orientation and color scheme of the ACC noise louver installation.

In summary, land use, noise, traffic and visual impacts will be at their greatest at this location, and all of these will either be insignificant or positive on net. Given the extensive mitigation that the Project will employ, there will be no detriment to the existing industries or to the possible future enjoyment of the Bushwick Inlet by the public.

#### *4.4.4.5 Northside Waterfront and Kent Avenue*

**Land.** The Project will not interfere with present industrial uses or any of the numerous discussed recreational uses that could be introduced as part of a potential waterfront greenway, a park at the BEDT site, or a 2012 Olympics facility. Project workers may occasionally walk in or around a potential future park as a passive recreational activity. The Project will cast no shadows in this area except for brief, slender summer morning shadows from the exhaust building, which would only fall on the far the northwestern tip, immediately south of the Project site, and only during early summer mornings. The water supply line will include the laying of a pipe in public streets (e.g., Kent Avenue) adjacent to this area. This temporary construction effort will be brief and will not carry any permanent impacts to the area.

**Noise.** The Project's average construction sound levels are expected to be at approximately 38 dBA at North 8<sup>th</sup> Street and the East River. The existing average ambient level is 52 dBA. During operation, the noise contribution will be 34 dBA at this location. In summary, the Project's noise impacts at this area are minimal and acceptable.

**Traffic.** Project traffic is expected to use Kent Avenue when traveling to and from the Project site. Kent Avenue is the principal vehicular thoroughfare of the Northside waterfront. Intersection levels of service will remain favorable, as described in [Section 13](#). Furthermore, the removal of truck traffic from Kent Avenue would immediately reduce traffic, which is expected

to offset temporary construction traffic increases, and bring about a larger net reduction on a permanent basis.

***Aesthetics and Urban Design.*** This area is punctuated by prominent buildings that are situated so as to take advantage of the approximately 1,000-foot lot depth between Kent Avenue and the East River. These linear elements are further extended by parallel piers. Altogether, many open view corridors exist in all directions, including toward the Project site. With its 1,000-foot façade along North 12<sup>th</sup> Street, the Project's scale will be consistent with 184 Kent Avenue and the CitiStorage warehouses. However, the Project's line, color and texture will be a market departure from the drab appearance of the Kent Avenue waterfront. In addition, some viewpoints within this area will permit views of the lower portions of the Project. Thus, the Project's street-level architectural treatments, landscaping, street furniture and lighting will be visible in some detail.

In summary, land use and noise impacts will be very minor at this location. Traffic and visual changes will be positive. There will be no detriment to the fabric of the Northside mixed use neighborhood from Project construction and operation.

#### 4.4.4.6 Northside Mixed Use Core

***Land.*** The Project will not use any land within the Northside Mixed Use core. No Project interconnections are planned in this area.

***Noise.*** Project sound levels would be approximately 34 dBA at Wythe Avenue and North 10<sup>th</sup> Street, with similar impacts at Berry Street, which is within the Northside core. The existing daytime average ambient level is 61 dBA (and 55 dBA at night). During operation, the noise contribution will be 35 dBA or less. In summary, the Project's noise impacts at this area are minimal and acceptable.

***Traffic.*** Project traffic will use Metropolitan Avenue when traveling to and from the Project site. Metropolitan Avenue is the least residential of the vehicular traffic routes connecting the residential and commercial cores of Greenpoint and the Northside with the industrial waterfront along the East River. Intersection levels of service will remain favorable, as described in [Section 13](#). Furthermore, the removal of truck traffic from Metropolitan Avenue would immediately reduce traffic, which is expected to offset temporary construction traffic increases, and bring about a larger net reduction on a permanent basis.

***Aesthetics and Urban Design.*** The Project will not be a visible presence from this neighborhood. After viewshed mapping and field surveys, no views affording Project visibility

could be identified. Given the distance of the Project site from the Northside core and the ubiquitous obstructing buildings, no adverse or beneficial visual impacts are expected here.

In summary, land use, noise and visual impacts will be very minor at this location. Traffic impacts will be positive. There will be no detriment to the fabric of the Northside mixed use neighborhood from Project construction and operation.

#### *4.4.4.7 Manhattan East River Waterfront Below 23<sup>rd</sup> Street*

**Land.** The Project will not use any land within the Manhattan waterfront area, except a deep subsurface tunnel that will not affect land uses at the surface.

**Noise.** At a distance of more than a half-mile, this neighborhood is well beyond the Project's noise study area, and any impacts to the sound environment will be negligible or absent.

**Traffic.** Project traffic will not use routes through this area. Any traffic from New Jersey or Manhattan would approach on expressways and would bring no impact to the neighborhood.

**Aesthetics and Urban Design.** Despite the distance, the most prominent views of the Project occur from East River locations and along the East River Park and esplanade in Manhattan. From these locations, the full height of the relatively narrow western side of the Facility can be viewed unobstructed across open water. The Project's overall form will be clearly visible, as will its color and texture under clear atmospheric conditions, thus highlighting the architectural details of the Project. In particular, this area will permit views of the lower portions of the Project, and specifically the architectural treatment of its western buildings and North 12<sup>th</sup> Street pier tip. Thus, the Project's street-level architectural treatments, landscaping, street furniture and lighting will be visible in some detail. In terms of scale, the Project will introduce an element that is typical of waterfront development along both sides of the East River, but larger than the low-rise Greenpoint and Williamsburg neighborhoods. Because the area is used as a linear corridor – Manhattan residents either travel through it on foot or bicycle, or are free to do so even when using it passively – views of Greenpoint and Williamsburg are readily available. Therefore, to the degree the Project blocks any particular architectural feature at a given location, such a feature would be visible from other nearby locations along the East River Park and esplanade.

In summary, there will be no discernible land use, noise or traffic impacts at this location. The view will be prominent and positive. There will be no detriment to the fabric of the Northside mixed use neighborhood from Project construction and operation.

#### ***4.4.5 Development Patterns and Trends***

The study of existing development patterns and trends (Section 4.2.5) leads to the conclusion that the Project will be compatible with a variety of land uses. To have an adverse effect on any of these potential trends discussed above, (much less to reverse a trend), the Project would need to have the type of impact that displaces a critical community resource, reduces the affordability of housing, interferes with the proper functioning of adjacent land uses, or has significant adverse impacts in technical areas such as air or noise. The overall synthesis of impacts presented in Sections 4.4.1, 4.4.2, 4.4.3 and 4.4.4 above, shows that the Project will have no such adverse effects, but rather will reduce air pollution, reduce traffic on local streets, preserve water and wastewater infrastructure, remediate a contaminated site, open up public waterfront access, provide a community-friendly aesthetic and architectural landmark, invest significant funds into the Greenpoint-Williamsburg waterfront, and use state-of-the-art noise abatement to ensure high environmental performance. The Project will do all this without increasing the land area dedicated to industry within Greenpoint-Williamsburg. Hence, it also promotes balanced, efficient land use. It will also allow other land uses to develop in the ordinary course of events, depending of course on market, governmental and other factors. The Project's design, and, in some important respects, positive impacts, can serve to anchor new investments in the area.

#### ***4.4.6 Community Interviews***

Stipulation 5, Clause 2(e-i) calls for interviews with providers of local community services such as fire, police, health care, education, waste removal, and utilities to determine the potential impacts of the proposed Project on the local community.

TGE coordinated and held interviews on many occasions with a variety of community service providers: the New York City Fire Department (FDNY), the New York City Police Department (NYPD), Woodhull Hospital, the New York City Department of Education (DoE), the New York City Department of Sanitation (NYCDOS), Con Edison, KeySpan and the New York City Department of Environmental Protection (NYCDEP) water supply and wastewater divisions. These consultations overlapped to some degree with the consultations relative to incremental infrastructure costs in Section 12.

Without exception, local service providers preferred to comment only upon the narrow effects, if any, that the Project could have on the specific community service being discussed, and not to

comment on overall potential community impacts, not having seen the results of studies being published in this land use study and overall Article X Application.

- FDNY personnel stressed the need for continued coordination of the Project's fire protection plan with the Bureau of Fire Prevention. TGE staff discussed conceptual fire prevention design with FDNY personnel and adjusted aspects of the design per FDNY recommendation. TGE met with NY City Fire Department with respect to code compliance issues and operational planning concerns arising from the construction and operation of the planned TGE plant at North 12th Street and Kent Avenue in Brooklyn.
- NYPD personnel discussed security issues and their interrelationship with Project design and waterfront access. TGE and NYPD staff knowledgeable with energy facility construction also discussed optimal design and operational measures. OEM and NYPD staff have a periodic continuing dialogue with TGE.
- NYCDOS personnel noted that the Project would have no effect on solid waste collection services because the Project is responsible for private solid waste haulage. TGE interviewed NYCDOS personnel with respect to refuse disposal and sanitation issues, and potential impacts of the Project on the local community. TGE staff have also interacted on the community level with the Department of Sanitation garage adjacent to the Project site, at 50 Kent Avenue.
- Con Edison personnel and TGE staff held meetings regarding steam system and electrical interconnection issues. TGE interviewed system planning staff with respect to incremental costs to electric services, and about the potential impacts of the Project on the local community. The discussions covered several meetings and were wide-ranging. Among the topics discussed were infrastructure and operating cost impacts. The discussions covered TGE's intent to reimburse Con Edison for incremental costs associated with an electrical interconnection. Further discussions on this topic are ongoing in parallel with the Article X process. Con Edison comments regarding the provision of electric service were limited to those made within the context of the Project's system reliability studies described in Section 14. A future interconnection agreement with Con Edison would address further physical interconnection details.
- TGE interviewed system planning staff of KeySpan. The discussions covered several meetings and were wide-ranging. Among the topics discussed were infrastructure and operating cost impacts. The discussions covered TGE's intent to reimburse KeySpan for incremental costs associated with a natural gas interconnection. Further discussions on this topic are ongoing in parallel with the Article X process. KeySpan comments regarding

the provision of natural gas service are summarized in Section 15 and contained in Attachment G. A future agreement with KeySpan would address further physical interconnection details.

- NYCDEP personnel and NYCDEP staff held meetings regarding approaches to the Project’s water supply and wastewater service. TGE interviewed staff in the water and wastewater divisions. NYCDEP staff conducted a pump test to establish the pressure of water, discussed wastewater services and helped to foster TGE’s discussion with MTA New York City Transit staff regarding water supply. TGE staff have also interacted on the community level with the Department of Environmental Protection garage adjacent to the Project site, between North 14<sup>th</sup> and North 15<sup>th</sup> Streets.

#### **4.4.7 Mitigation**

Stipulation 5, Clause 7 requires that mitigations measures be addressed, if necessary, to minimize any adverse impacts on land uses, including recreational land uses, identified in the course of performing the analysis described in land use studies described in this stipulation.

To address this requirement, a compact summary of mitigation measures is presented in Table 4-14 below (They are explained in greater detail in the specific sections of this application). The mitigation measures were developed as part of integral Facility design, in order to avoid the potential land use impacts that an unmitigated, traditional power facility could have. Integrating comprehensive mitigation measures into the design avoids adverse impacts to land uses and obviates the need to develop mitigation in order to offset such effects.

<b>Table 4-14: Summary of Mitigation Measures Inherent in TGE Design</b>	
<b>Purpose</b>	<b>Mitigation Measure</b>
Air pollution, smoke, dust	State-of-the-art air pollution controls and environmental practices; best abatement practices during construction period.
Socioeconomics	Low demand on physical and social infrastructure; no direct displacement of jobs because existing site use reallocates operations.
Traffic	Transit program and barging operations, both included in construction management plan, minimizes traffic in local streets.
Odors	Use of clean natural gas and other substances not associated with odors; proper odor monitoring during remediation operations.
Noise abatement	State-of-the-art noise attenuation in Facility design; proper scheduling of discrete noisy construction operations.
Urban Design	Facility builds streetwall and streetscape elements, respects street patterns and hierarchy.

<b>Table 4-14: Summary of Mitigation Measures Inherent in TGE Design</b>	
<b>Purpose</b>	<b>Mitigation Measure</b>
Waterfront Access	TGE to build or fund waterfront access on adjacent pier, offering views to Manhattan
Aesthetics	Groundbreaking approach uses architectural elements to depart from an “industrial box” appearance and create a memorable landmark.
Sky exposure	Tallest buildings set back from street. Multiple exhaust flues grouped into a single tower.
Shadow reduction	Sloped northern roof of combustion turbine building.

#### **4.4.8 Neighborhood Character**

Stipulation 5, Clause 2(e-iv) calls for a summary of the effect of the Project on neighborhood character, and a determination of the significance of this impact, consistent with the CEQR Technical Manual, Section 3H. “Neighborhood character” is defined in the CEQR Manual to include considerations of land use, urban design, recreational/open space resources, visual resources, historic resources, socioeconomic conditions, traffic and noise.

The considerations that make up neighborhood character are addressed individually in preceding sections. Specifically, land use is discussed in Section 4.4.2, as well as 4.4.4 relative to interconnections. Urban design and visual resources are discussed in Section 4.4.1.6 in general and 4.4.4 for specific localized neighborhood impacts. Recreational and open space resources are addressed in Section 4.4.3, with waterfront access addressed in Section 4.4.1.7. Local historic resources are addressed in Section 4.4.4. Project impacts on socioeconomic conditions, as well as on land use development trends, are assessed in Section 4.4.1.8. Noise impacts are addressed in Section 4.4.1.4 in general and 4.4.4 for specific localized neighborhood impacts. Traffic and lane closure impacts are addressed in Section 4.4.1.5 in general and 4.4.4 for specific localized neighborhood impacts.

The remainder of the neighborhood character assessment relates to the incremental effects that are not significant and adverse, but that incrementally change the neighborhood character of the community. Similarly, the CEQR Manual notes that significant adverse impacts in a specific feature of neighborhood character does not necessarily bring about a significant adverse effect in neighborhood character. It adds: “The more uniform and consistent the existing neighborhood context is, the more sensitive it is to change. A neighborhood that has a more varied context can typically tolerate greater changes without experiencing significant impacts.” (CEQR Manual, 2001, 3H-4).

The overall study area is varied in terms of land use, with a mix of industrial, transportation, residential and other uses, with industries concentrated closest to the Project site, a residential neighborhood located beyond approximately 1,000 feet to the northeast, and mixed industrial/residential uses located beyond approximately 1,000 feet to the southeast. The study area is likewise varied in terms of urban design and visual resources, with solid streetwalls and uniform building heights in the Greenpoint Historic District, but disparate heights, gaps in the streetwall, and vacant lots outside the historic district. Architectural features are similarly varied, except in the Greenpoint Historic District.

Around the Project site, there is much less variety, with a relatively loud noise environment, active industrial facilities, substantial truck traffic, no historic buildings, many poorly maintained or unmaintained spaces, a low utilization of the waterfront access potential, all of which are generally negative characteristics of the neighborhood character. These are offset by the continued vibrancy of the industrial employment base that provides local jobs in the neighborhood surrounding the Project. The Project will provide across-the-board improvements relative to all these features. It will therefore improve the overall neighborhood character.

#### **4.5 Consistency with Coastal and Waterfront Plans**

##### ***4.5.1 New York City Local Waterfront Revitalization Program (LWRP)***

The primary objective of the *New Waterfront Revitalization Program* is “to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among these objectives.” Modern, environmentally sound technology and a community-friendly design will make the TransGas Energy Facility a citywide and statewide example of high-performance compatible industry sited within the Coastal Zone. The Project will help to achieve several goals that traditionally are thought to be in conflict. It will greatly benefit the environmental quality of the site, will preserve space so as to potentially increase public waterfront access, will enhance aesthetic and urban design values, and will provide investment into the local economy as a water-dependent industrial use. As described in Attachment M with respect to each policy and its relevant recommendations, the Project is consistent with the *New Waterfront Revitalization Program*, New York City’s official local waterfront revitalization plan.

##### ***4.5.2 New York State Coastal Policies and 1982 City LWRP***

All new development in a coastal zone in New York State must be determined consistent with the New York State Coastal Management Program (CMP) and any applicable state-approved local waterfront plan. The CMP is based on 44 policies, which are grouped into 10 categories.

These categories are: Development, Fish and Wildlife, Flooding and Erosion Hazards, General Policy, Public Access, Recreation, Historic and Scenic Resources, Agricultural Lands, Energy and Ice Management, and Water and Air Resources. The *NYC Local Waterfront Revitalization Program* was originally adopted in 1982 to establish a set of guidelines to direct development specifically along the New York City waterfront and added 12 policies. These 12 policies were superseded when a new LWRP was adopted in May 2002. Nevertheless, the analysis of the 1982 LWRP is being conducted because the Project's Article X study stipulations include them. The former 1982 LWRP includes 56 policies, which are the 44 currently applicable statewide CMP policies and the 12 former policies specific to the New York City waterfront. As described in Attachment M with respect to each policy and its relevant recommendations, the Project is consistent with the *New York State Coastal Policies*, as well as with the principles of the 1982 LWRP.

#### **4.5.3 Plans for New York City and Borough Waterfronts**

Apart from plans that derive authority from federal coastal zone legislation, other plans have been drafted at the City as well as Borough levels. An assessment of consistency with these is required in the stipulations.

##### *4.5.3.1 New York City Comprehensive Waterfront Plan*

This section addresses Stipulation 5, Clause 4(a), which states that the Application will include an analysis of the consistency of the proposed Project with the *New York City Comprehensive Waterfront Plan*.

The *New York City Comprehensive Waterfront Plan: Reclaiming the City's Edge* was published in 1992 as the Department of City Planning's proposed framework for land use and development along New York City's 578-mile waterfront. The plan includes both general and specific recommendations for revitalizing and conserving the waterfront resources of New York City. It emphasizes four principal uses of the waterfront: the Natural Waterfront, the Public Waterfront, the Working Waterfront, and the Redeveloping Waterfront. These are described in more detail below. The *Comprehensive Waterfront Plan* also includes several sub-reports for each of the boroughs. The *Plan for the Brooklyn Waterfront* is discussed in Section 4.5.3.2 below.

The plan defines the "Natural Waterfront" as the physical features of the waterfront that predate humans – such as beaches, ecosystems, wetlands, wildlife, and the water itself. The plan maps and describes those areas in which preserving the existing natural features should take precedence over the social or economic value the land might have. As recognized in this document, the Project site is not located along a wetland, an erosion hazard area, or a significant

fish and wildlife habitat. The East River is not designated as an area that should provide fishing, shellfish harvesting, or bathing resources. Relative to water quality, the plan aims to reduce the amount of pathogens and floatable material in Newtown Creek by implementing a Combined Sewer Outflow Abatement Program to reduce sewer and storm water discharge in the area. As detailed in Section 7, the Project's introduction of wastewater to the sewer system feeding the Newtown Creek is small, and will be discharged directly to an interceptor line, avoiding the sewer system. All storm water from the Project will be discharged under a SPDES permit, and will not affect New York City's sewer treatment systems.

The "Public Waterfront" includes those areas with public open spaces and waterfront views. One of the primary goals of the plan is to strengthen the public's connection with the waterfront. The plan calls for improved public access in all five boroughs by protecting visual corridors to the waterfront, creating continuous access along the shore, creating additional publicly accessible open space as a part of large development, and enforcing minimum design standards (relating to paving, landscaping, street furniture on esplanades, etc.). While the plan emphasizes the importance of creating waterfront parkland and recreational uses, it also recognizes that in some areas waterfront public access will not be possible. In Brooklyn, the plan calls for increased waterfront access along the East River and Upper Bay in conjunction with new waterfront development. The Project is consistent with these provisions of the *Comprehensive Plan* because it will remediate the environmentally distressed Bayside Fuel Oil site and will provide or fund public access where none presently exists, at the western tip of the site. The views at the tip of the North 12<sup>th</sup> Street pier, combined with the architectural attractiveness of the Project itself, would further enhance this public access. As shown in Section 4.4.3 above, the Project will not interfere with creating more parkland or open space along the East River.

The "Working Waterfront" consists of those areas in which the waterfront is used for maritime, industrial, marina, transportation, municipal, utility, and shipping purposes. Because of the historical and economic significance of industry along the waterfront, encouraging these uses, maintaining sufficient manufacturing-zoned land along the waterfront, and improving the infrastructure investments necessary to allow for such uses are among the major objectives of this plan. According to the plan, the "Working Waterfront" should be developed in an environmentally sound manner and provide as much public access as possible. The Project will be consistent with these provisions because the proposed site is in a manufacturing zoning district that is currently "working waterfront" and is not a part of the "Redeveloping Waterfront" (described below). The Project is in the only zoning district that NYC has designated for power plants. The Project is also a state-of-the-art facility in both technological and environmental terms, with numerous economic and environmental benefits. It will also provide public waterfront access where, under the Zoning Resolution none is required, and where none presently exists.

The “Redeveloping Waterfront” describes areas in which waterfront land uses have recently changed, or in which change would be beneficial given the underutilization of these waterfront properties. This part of the plan attempts to address the new opportunities along the waterfront that arose from a decline in industrial and maritime uses. Fostering economic growth, increasing the housing supply, and improving quality of life are the fundamental goals of this redevelopment process. In deciding which regions would be most suitable for reuse, the planners considered a set of land use criteria. These criteria include whether there were significant natural features present, whether the land was currently vacant, the proximity of residential or commercial land uses and significant upland connections to the region, whether neighborhood services such as open space and community facilities were available on or off-site, and whether the number of jobs that would be displaced would outweigh the new opportunities that would be created in the process of redevelopment. Based on these criteria, the plan recommends the retention of industrial zoning along almost the entire Brooklyn waterfront from Newtown Creek south to Owl’s Head, and thus including the Project site. The exceptions proposed in the Project vicinity are the rezoning of three sites to permit medium-density residential and light manufacturing uses: the former Brooklyn Eastern District Terminal, Greenpoint Terminal Market and the Greenpoint Lumber Exchange (conditional upon the Exchange ceasing operations, which has since occurred). As shown in Section 4.4 above, the Project will not adversely affect either existing or proposed land uses. While not required by the Plan, the Project design is sensitive to the possibilities of a redeveloping waterfront. Consistent with the goals of the plan, Project construction will enhance the employment base along the waterfront by reusing a previously disturbed industrial site in an industrial area.

In addition to the areas that are recommended for rezoning, the plan includes several proposed regulations for all waterfront properties, including mandatory public access for residential and retail developments and specific height and setback requirements. Industrial developments (Use Groups 16, 17 and 18) are not included in the categories for mandatory public access between waterfront and upland areas. The plan also recommends a registry of designated visual corridors, including streets with an unobstructed view to the water as well as certain points with a broad, continuous, unobstructed view of the water. Such visual corridors should be maintained. Under circumstances where nearby visual corridors exist, the latter provision is loosened. The Project satisfies and exceeds the recommendations of the plan by providing or funding public waterfront access and by using the geometry of the parcel, without blocking its adjacent North 12<sup>th</sup> Street visual corridor. The visual impacts of the Project are detailed in Section 10.

The driving force behind the *New York City Comprehensive Waterfront Plan* is the vision of an economically profitable, environmentally friendly, and publicly accessible New York City waterfront. As the authors of the plan recognized, achieving this requires careful planning and

intelligent decision-making. Because the Project constitutes a modern industrial facility, one whose design allows it to be compatible with both industrial and redeveloping surroundings while remediating a contaminated site, it will help to maintain or enhance the economic foundation of the waterfront without sacrificing land that is better suited for open space or housing. The Project fits within a balanced use of the various waterfront properties. Significant investment in the waterfront must occur if the vision of a revitalized waterfront is to become a reality, and the Project advances this goal.

#### 4.5.3.2 *Plan for the Brooklyn Waterfront*

Stipulation 5, Clause 4(c) requires an analysis of the Project's consistency with the *Plan for the Brooklyn Waterfront*.

The Department of City Planning's *Plan for the Brooklyn Waterfront* is a more detailed sub-report of the *New York City Comprehensive Waterfront Plan* specifically aimed at the Borough of Brooklyn. In the *Comprehensive Waterfront Plan*, the Department of City Planning divides the New York City coastline into 22 reaches. The Project site is located in Reach 14 – Brooklyn Upper Bay.

Reach 14 extends along the East River and New York's Inner Harbor from Newtown Creek to Owl's Head Park near the Verrazzano Narrows Bridge. According to the Plan, this section of the waterfront has traditionally been an industrial area, and it continues to be an important economic asset to the city. Most of the reach is currently zoned for heavy industrial uses, and a buffer strip of light industrial uses separates these areas from the upland residential neighborhoods. The waterfront industrial neighborhoods along the East River and Newtown Creek in Williamsburg and Greenpoint make up the largest concentration of industrial employment in Brooklyn. As described in Section 4.2.4 above, they continue to do so nearly a decade after the *Plan for the Brooklyn Waterfront* was originally published. The plan indicates that this portion of Brooklyn should retain its industrial status, but several underutilized portions of this reach are mentioned as suitable for rezoning. The plan generally supports increasing public access along the waterfront and to creating properties that can be used for residential, commercial, and recreational land uses. Although none of the plans recommendations directly concern the Project site, some nearby sites are affected. Consistency of the Project with each of the Plan's recommendations is summarized below.

- ***Developing the former WNYC transmitter site for public open space.*** The Project is separated from this site by several blocks, and will not interfere with its redevelopment. Impacts are detailed in Section 4.4.4 above.

- **Rehabilitate the Noble Street Pier for public access.** The Noble Street Pier is the only city-owned pier in Greenpoint, and it is currently inaccessible. Since the publication of the *Plan for the Brooklyn Waterfront*, the pier has been dismantled, and any future access at Noble Street would depend upon a redevelopment of the site. The Project would not interfere with plans to rebuild the pier or to open visual or physical access along Noble Street between West Street and the East River. The Project’s visibility from Greenpoint pier areas is addressed in Section 10.
- **Improve truck movement and access in industrial areas.** The Project will reduce the amount of truck-related traffic along the waterfront by displacing the Bayside Fuel facility. Construction deliveries to the Project site will be reduced through the use of waterborne transport. Traffic impacts are detailed in Section 13.
- **Rezone the former Greenpoint Terminal Market to permit residential development.** The plan proposes to rezone the waterfront portion of this site to permit residential development, and establish the adjacent land as a mixed-use/light industrial zone. The Project is separated from the site by several blocks and neither it nor any adjacent properties would be affected by this rezoning. Impacts are detailed in Section 4.4.4 above.
- **Rezone the Brooklyn Eastern District Terminal (BEDT) site in Williamsburg for residential and light industrial uses.** The Eastern District Terminal site extends from North 5<sup>th</sup> to north 11<sup>th</sup> streets along the East River. The plan proposes to rezone the portion of the site between North 6<sup>th</sup> and 8<sup>th</sup> streets to allow medium-density residential development, and to rezone the portions of the site to the north and south to light industrial zones to buffer the residential land uses from heavy industry. Part of this site has been purchased by New York State as part of its program to increase waterfront open spaces in urban areas. The park currently extends from North 7<sup>th</sup> to 9<sup>th</sup> Streets along the waterfront. A possible 2012 Olympics venue would cover the entire BEDT site. The Project’s compatibility with the Northside waterfront, including this site, is detailed in Section 4.4.4 above.

#### 4.5.3.3 *Plan for the Manhattan Waterfront*

The *Plan for the Manhattan Waterfront* is another subsection of the *New York City Comprehensive Waterfront Plan*. While the Project is not located in Manhattan, it will be visible from waterfront areas and high-rise buildings on the East Side. For the portion of Manhattan closest to the Project site (Reach 1 between East 23<sup>rd</sup> Street and the Williamsburg Bridge), the primary goal of the plan is to enhance the linear waterfront connection – a goal recently completed by bridging gaps in linear waterfront access near East 14<sup>th</sup> Street and through the creation of Stuyvesant Cove Park. The Project does not interfere with the goal of enhanced

waterfront access in Manhattan. The Project's design will create an additional architectural landmark that will distinguish the Brooklyn waterfront as viewed from Manhattan. Visual impacts from Manhattan are addressed in Section 10. In addition to these considerations, the Project includes a steam interconnection to Manhattan, with land use impacts nearly or completely eliminated through the selected tunneling technology, as detailed in Section 6 and in Section 4.4.4.

#### **4.5.4 Community Plans**

This section addresses Stipulation 5, Clauses 4(h) and 4(i), which require an analysis of the proposed Project's compatibility with the *Williamsburg Waterfront 197-a Plan* and the *Greenpoint Waterfront 197-a Plan*, as amended by the City Planning Commission and approved by New York City Council in 2002.

Section 197-a of the New York City Charter allows community boards to sponsor plans for the development and improvement of their neighborhood, and upon approval by the City Planning Commission and City Council, these plans help guide future actions of city agencies in the subject community. The recommendations are not binding on decision makers and do not have the force and effect of law. In 1989, the Waterfront Committee of Brooklyn Community Board 1 began soliciting the input of planners, architects, and community members to draft such a plan in accordance with Section 197-a of the New York City Charter. The *Williamsburg Waterfront 197-a Plan* and the *Greenpoint 197-a Plan* were developed as a result. Due to differences in approach (for example, the concentration on the East River waterfront in Williamsburg, as opposed to a study area covering the entirety of Greenpoint), the community planning effort was split in two, and both plans were brought to completion and published in 1998. Both plans underwent City Environmental Quality Review, and negative declarations were issued in January-February 2000. Further modifications in the plans were then made, some of which were in response to preliminary City Planning Commission (CPC) and other City agency review. Final versions were submitted to the CPC in September 2001, approved by CPC in December 2001, and approved by the City Council (or not acted upon, constituting approval) in January 2002. The Project site is located within the planning area of both of these documents.

##### **4.5.4.1 Williamsburg Waterfront 197-a Plan**

The *Williamsburg Waterfront 197-a Plan* addresses the area along the East River, from the Bushwick Inlet (North 14<sup>th</sup> Street) south to the former Brooklyn Navy Yard. The area expands inland at two points to adjoin McCarren Park in the center of Community District 1 and to include Continental Army Plaza next to the Williamsburg Bridge. The study area is shown in

Figure 4-21. Statistical analyses in the plan cover a larger study area, also shown in the same figure.

The plan is subtitled “A Matter of Balance: Housing, Industry, Open Space.” Consistent with this name, the plan advances as its major goals the increase of waterfront access and public open space along the East River, economic development, amelioration of existing environmental conditions and health hazards in the area, supporting an ethnic and socioeconomic diversity in the region, and to guide future waterfront development so that it is compatible with mixed use and residential areas.

Specifically with respect to industries, the Williamsburg Waterfront 197-a plan advances the concept of industrial sanctuaries – locations where viable industrial areas should be protected from residential development by establishing industrial sanctuaries:

*“A balance must somehow be found between the pressures of the residential market and the need to maintain industry and jobs in Williamsburg. The current laissez-faire policy does not do a good job of preserving industrial jobs or hastening badly needed residential development. A more formal, well planned response, akin to Chicago’s Planned Manufacturing Districts (PMD), is necessary. The PMD ordinance presumes against allowing nonmanufacturing uses in designated districts and has been fairly successful in discouraging residential conversions” (p. 98).*

On that basis, the plan recommends that the Department of City Planning

*“conduct a detailed survey of industrial buildings and businesses in all manufacturing districts in the 197-a study area, not only those that coincide with its own rezoning study areas, to determine the strength of industrial activity in these districts and their potential for designation as industrial sanctuaries. A clear policy should be developed for these areas that includes strict enforcement of the Zoning Resolution, stepped-up inspections by the Department of Buildings, denials of variances and Certificates of Occupancy for residential use. If protected from the pressures of residential conversion, industrial sanctuaries may continue to support a thriving industrial sector and generate significant employment for the local population. They may also provide affordable opportunities for expansion of existing businesses and the location of new businesses in Williamsburg” (ibid.).*

This concept of industrial sanctuaries in the Williamsburg 197-a Plan received the strong support of the Borough President as a way to preserve and strengthen the borough's industrial sector. The Borough President commented: “Although no property or community has a guarantee of preservation in perpetuity, the creation of a special zoning district designed to retain industry is a step in the right direction.” In addition, the Borough President supports the board's recommendation to conduct a detailed survey of the waterfront's industrial areas. “A comprehensive survey will not only identify the areas appropriate for designation as industrial sanctuaries, but will also identify all other uses in and around the industrial centers. Such a survey will serve as an important tool for future rezoning and planning efforts.”<sup>4</sup>

Recommendation 4 of the *Williamsburg Waterfront 197-a Plan* embodies the concept of concentrating and protecting industries in specified areas that already have high levels of manufacturing / light industrial activity, a significant number of jobs, a solid industrial infrastructure, and few non-conforming residential conversions. The Project site clearly falls into such an area. Together with surrounding blocks, it was included in the originally proposed industrial sanctuary study area map (see [Figure 4-22](#)). Furthermore, the land use study conducted specifically for the Project ([Section 4.2](#) above) characterizes the area as having a strong industrial presence and infrastructure. Residential conversions ([Figure 4-10](#)) have occurred outside the industrial sanctuary study area. Thus, the Project site is appropriate for the location of an industrial use that needs protection from residential conversions. The Project's siting at the proposed site is made only the more appropriate because its high environmental performance, architectural features, and waterfront access improvements make it compatible with a variety of land uses.

The *Williamsburg Waterfront 197-a Plan* presents 61 specific recommendations, including those related to zoning and land use, environmental protection, open space and waterfront access, housing, economic development, transportation, historic preservation, community facilities and plan implementation. Each recommendation is set forth in [Table 4-17](#) below. For each, the Project's consistency is assessed.

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<sup>4</sup> Agency Comments on Williamsburg Waterfront 197-a Plan Recommendations. Comment of Borough President relative to Recommendation 4.

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
<b>ZONING AND LANDUSE (pages 93-102 of 197-a Plan)</b>		
1	<p>Capitalize on development opportunities along the Williamsburg waterfront to create a vibrant mixed-use community. Examine the entire M3 district between North 14th Street and Broadway to determine the nature and level of industrial activity in the area. Rezone, where appropriate, to permit high performance light manufacturing, contextual medium density residential, medium density commercial, and mixed use. Maximize opportunities for waterfront access and public open space.</p> <p>Note: Community Board 1 recognizes that there are still a few viable heavy industrial uses on the waterfront, notably the fuel oil depot south of Bushwick Inlet and the sugar refinery north of the Williamsburg Bridge. These facilities provide a significant number of jobs and should be supported. However, if land uses change and development opportunities arise on any of these sites, they should be rezoned to permit the same level of uses listed above, with ample provision for waterfront access and public open space.</p> <p>Particular attention should be paid in rezoning to encourage high performance light manufacturing and job retention in parts of the district that have a solid manufacturing base. Other than the fuel oil facility on Bushwick Inlet there are few heavy industrial uses in the M3 district north of North 9th Street. The industrial retention principle central to this plan favors high performance light manufacturing uses in this area. Unlike the burdensome uses allowed under M3 zoning, M1 is generally compatible with the growing upland communities and their desire for waterfront access.</p> <p>See #4(a).</p>	<p>Project does not preclude redevelopment opportunities at other sites along the Williamsburg waterfront and would not preclude rezoning that would be necessary to accommodate any land use changes and development opportunities should they arise. Indeed, this recommendation supports continued industrial-type jobs at the proposed site, and the Project is consistent with that new recommendation. There are no restricting moratoriums or new permitted M-3 uses, such as Use Group 18, power plants. There are no such changes or opportunities arising at the site. The Project also creates new opportunities for waterfront access and public open space. With respect to the plan’s preference for high performance light manufacturing as compared to the uses allowed under M3 zoning, the Project is consistent with this recommendation because it has high environmental performance, a level of environmental impact attenuation that facilities such as power plants were unable to achieve historically but can achieve today when so designed. Indeed, the Project will reduce, not increase, the environmental burden in the area. The Project’s compatibility with a variety of land uses is established in <u>Section 4.4</u> above.</p>

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
2 (a)	<p>Either expand park use onto the entire site between North 4th and North 10th streets or rezone these blocks to permit contextual, medium-density residential, high performance light industrial, and neighborhood-scale retail uses similar to those in the adjacent Special Northside Mixed Use District. Every effort should be made to provide affordable housing on the site. In accordance with public access requirements of waterfront zoning, a sizable portion of the site should be set aside for public open space.</p> <p>Note: In August 2000, New York State purchased a six to seven acre portion of the site with \$9.3 million in Environmental Bond Act money to create a new state park. Two full blocks from N7th Street to N9th Street between Kent Avenue and the East River will be developed as sports fields and a waterfront park through an arrangement between New York State, the Trust for Public Land, New York University and the local community. Negotiations are underway to acquire a stretch of land adjacent to the waterfront between N9th Street and N11th Street for the extension of a proposed waterfront promenade.</p> <p>Waste Management is actively marketing its property south of North 7th Street. Discussions are taking place between the State and Four G's Truck Renting Company, Inc., which owns the block between N9th Street and N10th Street, about expanding the park to N10th Street. CitiStorage has recently expanded its facility between N10th Street and N11th Street to consolidate its document storage operations.</p>	<p>The Project land use study takes into account the developments at the BEDT site. Impacts have been assessed throughout this area as described in Sections 4.4.3 and 4.4.4.5. Project is compatible with existing and approved uses as well as affording flexibility for a variety of land use outcomes in this area, including open space.</p>
2 (b)	<p>Determine potential of Schaefer Brewery site for reuse as residential or mixed use. every effort should be made to provide affordable housing on this site. See #30(a). Development should include a waterfront promenade in compliance with New York City waterfront access requirements. (See #23)</p> <p>Note: The City Planning Commission has approved HPD applications to permit development of approximately 350 housing units with ground floor retail space</p>	<p>Project has no effect on this recommendation.</p>

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
3	Explore the principle of high performance zoning on a citywide basis (see Greenpoint 197-a plan). In the interim, consider rezoning M1 districts with a high concentration of non-conforming residential uses and substantial residential conversion activity to MX, which provides a higher level of protection against noxious or hazardous uses.	Rezoning of M1 to MX does not affect the Project site, which is an active oil terminal in the M3 zoning district. However, the Project will be high performing, with air emissions, noise, vibration, etc. that take advantage of technological advances.
4	Study all of the M1 districts in the Williamsburg 197-a study area, as well as the waterfront M3 district, to determine land use, density of manufacturing businesses and jobs, and degree of residential conversion activity.	The land use study in <u>Section 4.2</u> conducts such a study for the portions of the 197-a planning area closest to the Project site.
(a)	Protect areas with high levels of manufacturing / light industrial activity, a significant number of jobs, a solid industrial infrastructure, and few non-conforming residential uses from residential conversion. Parts of the M1 districts close to the Bushwick Inlet, McCarren Park and the BQE, in the northern sector of the 197-a study area, appear to have a strong manufacturing base and warrant increased protection. A higher level of protection than mere enforcement of the zoning resolution may be achieved in these areas by implementing a pilot industrial retention program in Williamsburg, in collaboration with the New York Industrial Retention Network (NYIRN). Such a program would serve to inform a citywide study on industrial activity and performance standards and provide a model for development of a citywide industrial retention and enhancement policy (See #3).	The Project site clearly falls into an area with a strong industrial presence and infrastructure. Residential conversions have occurred outside the blocks that are nearest to the Project site. Thus, the Project site is appropriate for the location of an industrial use that needs protection from residential conversions. The Project’s siting at the proposed site is made only the more appropriate because its high environmental performance, architectural features, and waterfront access improvements make it compatible with a variety of land uses.
(b)	Rezone areas with a high concentration of non-conforming residential uses and substantial residential conversion activity to medium density contextual residential and/or mixed use to create opportunities for residential conversion and new residential development as-of-right. (See #1.) The M1 districts roughly corresponding to Rezoning Subareas 8, 10 and 11 appear to have undergone substantial conversion activity. DCP should move swiftly to assess these areas to determine whether they are appropriate for rezoning to permit residential and mixed use.	The site is not in any of the rezoning subareas. Of the three referenced rezoning study subareas, Area 8 is the closest, and is not as expansive as the proposed <i>Brooklyn Loft Conversion Text Amendment</i> zones. Impacts have been assessed throughout this area as described in Sections <u>4.4.4.5</u> and <u>4.4.4.6</u> . Project is compatible with a variety of possible uses in this area.

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
5	Maintain the physical character, scale and density of existing surrounding buildings in new residential development; study the Northside Special Mixed Use District and two R6 districts for contextual rezoning potential.	Project is not a residential development and has no direct effect on this recommendation. However, great attention has been paid to architectural compatibility, addressing issues of scale, form, texture and overall character.
6	Strongly enforce adult entertainment regulations in manufacturing and commercial districts.	Project has no effect on this recommendation.
7	Promote neighborhood scale retail development, such as mid-sized supermarkets, that serve the needs of the local community	Project is outside neighborhood areas and has no effect on this recommendation. The Project is outside these areas.
8	Rezone three blocks from North 6th to North 9th Streets between Wythe and Kent Avenues from M3-1 to permit a mix of residential, commercial and light industrial uses. Additionally, rezone the block from North 6th to North 7th Streets, between Wythe and Bedford Avenues from M1-2 to mixed use. These blocks lie within DCP Rezoning Subarea 8.	The Project will be compatible with a variety of possible uses in Subarea 8. Impacts have been assessed as described in Sections <a href="#">4.4.4.5</a> and <a href="#">4.4.4.6</a> . The Project is outside these areas.
9	Study both sides of Grand Street, between Wythe and Kent Avenues, and both sides of Kent Avenue, between Grand and N1st Streets, for potential rezoning that would permit a mix of residential, commercial and light manufacturing uses.  Note: Community Board 1 has indicated that it plans to request DEC reports on the Radiac facility's safety practices and regulatory compliance.	The Project will be compatible with a variety of possible uses in this vicinity. Impacts have been assessed as described in Section <a href="#">4.4.4.5</a> .

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
<b>ENVIRONMENTAL PROTECTION (pages 103-106)</b>		
10	<p>Place a moratorium on new and expanding [waste transfer] facilities until comprehensive and equitable transfer station siting regulations have been developed.</p> <p>Note: City Council approval of the Solid Waste Management Plan Modification for New York City on November 29, 2000 contained companion legislation requiring the Department of Sanitation (DOS) to do a comprehensive study of the city's commercial waste stream. As part of the study, DOS must consider what would constitute good siting regulations – including the clustering and saturation of transfer stations - and other provisions to protect public health and safety. In a separate agreement, the administration has agreed to a moratorium on the permitting of any new putrescible or non-putrescible waste transfer facilities in Community District 1. It is unclear how long the moratorium will remain in effect, however. We strongly recommend that it be contingent on the study's completion and the implementation of its recommendation.</p>	Project has no effect on this recommendation.
11	<p>Comply with Local Law 40 in the full spirit of the law.</p> <p>Note: Community Board 1 recognizes that this is a citywide issue. However, Community District 1 bears a considerable share of the city's waste transfer facilities and would gain protection, once the current moratorium is lifted, from clear and equitable siting regulations.</p>	Project has no effect on this recommendation.
12	Institutionalize the Watchperson's Office as a self-sustaining, community-based resource.	Project has no effect on this recommendation.
13	Complete the Baseline Aggregate Environmental Loads (BAEL) Study expeditiously and develop policy and plans to respond to cumulative environmental impact.	Project has no direct effect on this recommendation, but works toward study goals by reducing air pollutant deposition in Williamsburg, compared to the no-build scenario; and by remediating a heavily contaminated site.
14	Tailor the Good Neighbor / Clean Industries pollution prevention program specifically to Williamsburg's mixed use environment.	Project has no direct effect on this recommendation, but could be a program participant.

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
15	Create a multimedia (land, water, air), or comprehensive, inspection program.	Project will include continuous environmental monitoring at specified points and locations. This will include the exhaust building, for air emissions; discharge pipe outlets, for wastewater and storm water; and specified community receptors, for noise compliance. The Facility will report its data publicly.
16	Invigorate the DEP / NYPD collaboration for enforcement of environmental regulations in the 90 <sup>th</sup> and 94 <sup>th</sup> Precincts.	Project will comply with a strict regulatory regime pursuant to Article X of the NYS Public Service Law, and will not interfere with the proposed enforcement efforts.
17	Adopt a long-term plan for tree planting throughout the study area.	Project landscaping plan features trees as a prominent sidewalk feature along Kent Avenue and North 12 <sup>th</sup> Street.
<b>WATERFRONT ACCESS/OPEN SPACE (pages 106-109)</b>		
18	See #2(a) for proposed open space use of the former Brooklyn Eastern District Terminal site.	As stated relative to no. 2(a) above, Project is compatible with open space uses at BEDT site.
19	Continue to seek expansion of Grand Ferry Park onto the adjacent property now occupied by a New York Power Authority “temporary” 44-megawatt power plant. The Community Board strongly recommends that the site be retained for public open space once its temporary use has expired.	Project’s cumulative impacts with the 44 MW North 1 <sup>st</sup> Street NYPA facility are analyzed in <a href="#">Section 16</a> and throughout the application, as warranted by the study stipulations. By providing permanent, more efficient power generation, the Project can add system flexibility and make removal or relocation of the NYPA plant easier to achieve.
20	Eliminate inappropriate parking at the foot of Division Avenue and develop a sitting and viewing area. Install a traffic light at the Kent Avenue intersection. Seek funding and a maintenance entity for development and use of the Division Avenue street end as a permanent public open space.	Project has no effect on this recommendation.
21	Encourage the rehabilitation of parks and open spaces along highways and bridges	Project has no effect on this recommendation.

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
22	<p>In the context of a long-term vision for connected parks and public open spaces along the waterfront, consider creation of an estuarine wetland at Bushwick Inlet with provisions for public access and recreational use.</p> <p>Note: Both the Williamsburg and Greenpoint plans recommend enhancement of the Bushwick Inlet to provide public waterfront access, low-impact recreational use such as boating, and opportunities for sitting and viewing the Manhattan skyline. Although it is not part of the Williamsburg Study area, we support Greenpoint's recommendation to site the Greenpoint Monitor Museum on the north side of the inlet. All of these recommendations must be seen in the context of a long-term vision for the north Brooklyn waterfront of parks and recreation areas linked by a continuous waterfront promenade and should be factored into any development opportunity.</p>	<p>TGE has factored this recommendation into the Project design. Waterfront access is proposed for the North 12<sup>th</sup> Street pier, with an upgraded pedestrian corridor between the East River and Kent Avenue, where the Project's community-oriented façade connects to the focal point of Kent Avenue, North 14<sup>th</sup> Street and the Bushwick Inlet. Impacts have been considered on the potential open space, as described in <u>Section 4.4.3</u> above. The Project will be compatible with open space development along the Bushwick Inlet. The Project's community benefit plan could help fund improvements to the Bushwick Inlet to provide public waterfront access and the Monitor Museum.</p>
23	<p>Create a waterfront promenade that connects existing and new open spaces, waterfront parks and piers. To pursue incremental development of waterfront promenades in accordance with the goals of the Williamsburg and Greenpoint 197-a plans, consider creation of a North Brooklyn Waterfront Promenade/Park Coalition that includes community groups, relevant government agencies, citywide open space organizations, and Community Board 1.</p>	<p>Project provides a link in the proposed chain of promenades by creating new public waterfront access at the North 12<sup>th</sup> Street pier and enhancing architectural, landscaping and street furniture treatments along North 12<sup>th</sup> Street. The Project's community benefit plan could help fund the proposed promenade.</p>
24	<p>Provide physical access to the waterfront on all public streets. Open illegally closed streets immediately.</p>	<p>Project advances this by rehabilitating the North 12<sup>th</sup> Street pier and providing public access, with a street end vest pocket park.</p>

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
25	<p>Establish North 14th Street as an identifiable pedestrian and bicycle link between Bushwick Inlet and McCarren Park, contingent on the development of a waterfront promenade and public open space at Bushwick Inlet.</p> <p>N14th Street is an important component in the network of public open spaces and connections to the Brooklyn waterfront envisioned in the Williamsburg and Greenpoint plans. It currently provides a clear visual connection between McCarren Park and the East River and Manhattan skyline. Development of a waterfront promenade and enhancement of the Bushwick Inlet will strengthen this connection by providing a physical destination. While North 14<sup>th</sup> Street runs through an industrial area it carries only local truck traffic, serving local businesses. Use of creative signage, planting, and street markings and improved sidewalks would accommodate pedestrian, bicycle and truck traffic and minimize conflict with industrial uses.</p>	<p>Project design is oriented to show a welcoming face to the Bushwick Inlet/North 14<sup>th</sup> Street/Kent Avenue focal point. The Project blocks no views down North 14<sup>th</sup> Street and in no way obstructs the creation of a pedestrian or bicycle link. The importance of the North 14<sup>th</sup> Street connection in both the Greenpoint and Williamsburg 197-a Plans, even though the street is industrial in nature, has been noted by TGE since the inception of the Project.</p>
26 (a)	<p>Create a distinctive pedestrian / bicycle pathway on South 5<sup>th</sup> Street alongside the Williamsburg Bridge, connecting Continental Army Plaza to a waterfront promenade and linking with the pedestrian / bicycle pathway on the bridge.</p>	<p>Project has no effect on this recommendation.</p>
26 (b)	<p>Provide streetscape improvements along Broadway to facilitate pedestrian and bicycle traffic and connect the retail and transit node at Marcy Avenue to the proposed waterfront promenade and future development at Schaefer Brewery.</p>	<p>Project has no effect on this recommendation.</p>
26 (c)	<p>Explore the feasibility of creating public waterfront access behind the DOT facility on Kent Avenue under the Williamsburg Bridge.</p>	<p>Project has no effect on this recommendation.</p>
27	<p>Implement traffic calming measures on Kent Avenue, including traffic lights at key intersections. Construct safe, negotiable sidewalks along Kent Avenue, between Bushwick Creek and Division Avenue.</p>	<p>Project will reduce truck traffic overall and will make use of barging. Both along Kent Avenue and North 12<sup>th</sup> Street, it will greatly improve the convenience of the space for pedestrians.</p>
28	<p>Improve lighting, sidewalks, and streetscape on Kent Avenue and on major streets leading to the waterfront.</p>	<p>Project creates new public waterfront access at the North 12<sup>th</sup> Street pier and enhances lighting, architectural, landscaping and street furniture treatments along North 12<sup>th</sup> Street, which connects Kent Avenue to the waterfront.</p>

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
29	Maintain visual corridors to the waterfront in all new development, even if streets are closed.	Project maintains all view corridors to water, opens new visual corridors at the North 12 <sup>th</sup> Street pier, and blocks the partial Manhattan view corridor at Meserole Avenue, but adequately mitigates this impact. See discussion in Section 4.4.1.7.
<b>HOUSING (pages 109-112)</b>		
30	Maintain income diversity in Williamsburg by pursuing all opportunities to develop affordable housing.	There is no proposal to develop affordable housing at the site. The Project is compatible with efforts to develop affordable housing elsewhere, as described above.
(a)	Capitalize on the availability of sizeable vacant and underutilized waterfront sites to develop housing with affordable components.	Project is consistent with this goal because it avoids the conversion of vacant or underutilized land to another use, thus preserving such opportunities for other landowners, agencies, and the community, while allowing the area to capitalize on the economic benefits that the Project will provide.
(b)	Maintain an inventory of city-owned property in the 197-a study area.	Project site is not city-owned, and Project has no direct effect on this recommendation.
(c)	Explore ways of encouraging private developers of market rate housing on the Williamsburg waterfront to contribute to a housing development fund, or set aside a certain percentage of units for low- and moderate-income households.	Project has no effect on this recommendation.
(d)	Encourage tenant ownership of city-owned 6-family multiple dwellings.	Project has no effect on this recommendation.
(e)	Identify State, City, and Federal subsidy programs that can be applied to the development of affordable housing.	Project has no effect on this recommendation.
(f)	Continue to support existing housing development and community consultant groups, as well as new and emerging groups, to enable them to continue their housing, advocacy and community preservation efforts.	Project has no effect on this recommendation.
31	Develop housing to accommodate the needs of large and extended families, particularly in the Southside and South Williamsburg.	Project has no effect on this recommendation.

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
32	Encourage the inclusion of affordable senior housing in any residential development, in consultation with the community.	Project has no effect on this recommendation.
33	Study the extent of loft conversions in Williamsburg and determine where, and by what criteria, loft buildings should be legalized. The Department of City Planning is urged to expedite its rezoning studies and expand the scope to cover all manufacturing districts in the 197-a study area, in order to obtain an immediate and accurate assessment of illegal conversion activity.	Project is consistent with the recommended study. Indeed, the land use study conducted specifically for the Project (Section 4.2) shows that the area exhibits strong industrial activity and infrastructure, with residential uses, illegal or otherwise, concentrated in more distant blocks.
<b>ECONOMIC DEVELOPMENT (pages 113-114)</b>		
34	Preserve existing, high performance industry, and attract new business, light industry and services that are appropriate to mixed use development in the area.	Project is a clean high-performing industry that, even though compatible with a variety of land uses, is located within an industrial sanctuary study area.
35	Promote neighborhood-scale retail development and maintain diversity along existing retail corridors.	Project has no effect on this recommendation.
36	Encourage the establishment of a business improvement district or merchants association to boost image and strengthen businesses along Havemeyer Street in the Southside. Revitalize the lapsed Bedford Avenue BID.	Project has no effect on this recommendation.
37	Develop a locally run outreach program to recruit local businesses into the “Good Neighbors / Clean Industries” program, which provides technical assistance in pollution prevention.	Project has no direct effect on this recommendation, but could be a program participant.
38	Support initiatives, such as the Greater Williamsburg Collaborative and the New York Industrial Retention Network, that develop and implement strategies to: retain local businesses and jobs; provide entrepreneurial opportunities for local residents; and prepare the community for jobs in new and emerging industries and services that require a higher level of skills.	Project will maintain high performance and thereby further this recommendation. In addition, economic benefits accruing from Project investment and overall energy price reductions, as described in Section 12 , will create a multitude of jobs
39	Create a community-driven local development corporation (LDC) on the Williamsburg waterfront that will represent local businesses, provide technical support, and undertake economic development projects in the community.	Project has no effect on this recommendation.

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
40	Tap into major economic development initiatives such as the recently designated State Economic Development Zone and the proposed Round II Urban Empowerment Zone.	Project has no direct effect on this recommendation, but could be a participant in such a program.
<b>TRANSPORTATION / INFRASTRUCTURE (pages 114-116)</b>		
41	Develop a traffic congestion mitigation program for the Williamsburg waterfront study area.	Project will reduce truck traffic overall and will make use of barging. Such reductions will help advance the goal of this recommendation.
42	Undertake a comprehensive analysis of street conditions and implement an extensive street improvement program in the Williamsburg waterfront study area.	Project will improve streetscape along North 12 <sup>th</sup> Street as well as Kent Avenue. This action works toward the goal of this recommendation.
43	Improve truck movement through the area.	Project will remove one of the major generators of truck traffic through the area.
44	Work with DOT to make Kent Avenue more bicycle and pedestrian friendly. Specify marking or signage. In the longer term, consider the appropriateness of Kent Avenue as a truck route in the long term, given the transition from heavy manufacturing to residential, mixed use and open space development on the waterfront.	TGE is coordinating with the NYC Department of Design and Construction regarding Kent Avenue upgrades. Project's improvements along North 12 <sup>th</sup> Street can accommodate a bike path, provided a bike path is installed as part of Kent Avenue/ Franklin Street reconstruction. Removal of trucks works toward the 197-a plans goal of a transition away from truck-dependent uses.
45	Anticipate the expansion of bus service to and along the waterfront.	Project would not be inconsistent with this recommendation, and the TGE site would become more accessible if such service were extended. However, Project's own work force is insufficient to warrant bus service extension.
46	Increase subway service on the L line to accommodate increased population. Increase the frequency of service on the G line.	Project would not contribute to a population increase. As shown in Section <u>13.3.3</u> , it also will have no adverse effect on transit services.
47	Include the Northside in any water taxi service initiated on the East River.	Project would not be inconsistent with this recommendation, as it takes up only approximately 100 feet of East River shorefront, as measured parallel to the river.

**Table 4-17: Williamsburg Waterfront 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
<b>HISTORIC PRESERVATION (pages 116-118)</b>		
48	Create a living community that also respects and reuses its historic structures whenever possible.	Project does not propose the removal of any historic structures. It respects the surrounding urban design and street hierarchy.
49	Consider designation of the former bank at 33-35 Grand Street as a historic landmark	The Project is outside the historic district and in an area without uniform height of scale. Impact assessment for the Northside waterfront is summarized in <u>Section 4.4.4.5</u> , and the nearest open viewpoint to the proposed landmark is documented in <u>Section 10</u> (Viewpoint B34).
50	Create a historic corridor centered on Broadway, from the east River to Havemeyer Street, incorporating historically significant buildings and sites. (Includes 15 proposed sites.)	Project has no effect on this recommendation and will not be visible from this area.
51	Commemorate the 150 years of rail services at the Brooklyn Eastern District Terminal by restoring BEDT steam locomotive No. 16 and returning it to its location.	Impact assessment for the Northside waterfront is summarized in <u>Section 4.4.4.5</u> . The Project is compatible with open spaces, including those that celebrate industrial heritage.
<b>COMMUNITY FACILITIES (pages 119-121)</b>		
52	Create additional community facilities and services to accommodate Williamsburg’s rapidly expanding and changing population, including schools, libraries, literacy centers, daycare, health facilities, nursing homes, youth facilities, senior centers, and neighborhood retail services.	Project will not place significant demands on schools, libraries, literacy centers, daycare, health facilities, nursing homes, youth facilities, senior centers, and neighborhood retail services, and therefore will have no effect on this recommendation.
53	Develop community facilities and retail services in coordination with new housing development.	Project has no effect on this recommendation.
54	Develop additional neighborhood services in the Northside. This recommendation specifically addresses the need for banks, supermarkets, a library and a post office in the Northside.	Project will not place significant demands on banks, supermarkets, library or post office services in the Northside, and therefore will have no effect on this recommendation.
55	Encourage the development of additional recreational facilities for local youth, for example the facility being proposed by El Puente between Kent and Bedford Avenues under the Williamsburg Bridge.	Project has no effect on this recommendation.
56	Extend the hours of operation at Metropolitan Pool.	Project has no effect on this recommendation.

<b>Table 4-17: Williamsburg Waterfront 197-a Plan Consistency</b>		
<b>#</b>	<b>Recommendation</b>	<b>Project Consistency Summary</b>
57	Develop appropriate outdoor spaces for the display of community art and culture in the Southside.	Because it is not in the Southside, Project has no direct effect on this recommendation, but its architectural design calls for the provision of outdoor spaces for the display of community art and culture.
58	Secure a new home for the growth of El Puento Academy for Peace and Justice.	Project has no effect on this recommendation.
59	Assist the Williamsburg Learning Institute in its search for a new home.	Project has no effect on this recommendation.
<b>IMPLEMENTATION (page 121)</b>		
60	Establish a Waterfront plan Oversight Committee at the Community Board to ensure that the recommendations in the 197-a plan are executed. Includes 8 sub-recommendations.	Project has no effect on this recommendation.
61	Hire district office staff or ombudsman dedicated to managing the administrative steps necessary for monitoring and implementing the plan.	Project has no effect on this recommendation.

In summary, the Project is consistent with the recommendations of the *Williamsburg Waterfront 197-a Plan*. It either is neutral or, in some cases, will help to advance the goals of the plan. Indeed the Plan supports a continued industrial presence at the site by contemplating a sanctuary for industry there. A prominent theme of the plan is to strike a balance between housing, industry and open space, and to revitalize the waterfront overall. The Project is part of that balance. The Project is located on a site that has been used for heavy industry for over a century. With the Project, the site will improve environmentally and aesthetically, while at the same time decreasing site-associated traffic, providing jobs and also benefiting local businesses. In particular, the 197-a plan seeks to address the underutilization of the waterfront properties. Reusing the heavy industrial and contaminated Project site for an environmentally superior and aesthetically beautiful industrial purpose assists the community goal of turning vacant sites to uses such as open space, housing or neighborhood retail, where appropriate.

#### 4.5.4.2 *Greenpoint 197-a Plan*

The *Greenpoint 197-a Plan* study area encompasses the portion of Community District 1 bounded on the west by the East River, on the north and east by Newtown Creek, and on the south by North 12<sup>th</sup> Street, Bayard Street, the Brooklyn-Queens Expressway, and Lombardy Street. It was subsequently expanded to include an area south of the Brooklyn Queens Expressway (bounded by Metropolitan Avenue, Union Avenue, Meeker Avenue, Kingsland

Avenue, Morgan Avenue and Maspeth Avenue but excluding the East Williamsburg Industrial Park). The study area is shown in [Figure 4-21](#).

Among the main objectives of this plan are to revitalize Greenpoint’s waterfront and make it publicly accessible, develop a connection between the East River waterfront and the Manhattan Avenue shopping district, clean and renew the Greenpoint environment, build upon the historical mixed-use character of Greenpoint, foster a cultural renaissance through historic preservation and the creation of new community facilities, minimize automobile and truck traffic (especially in residential areas), and reestablish the historic connection to neighborhoods to the north, in Queens.

The *Greenpoint 197-a Plan* presents 71 specific recommendations, including those related to potential rezoning, environmental protection, housing and historic preservation, waterfront access and open space, economic development and quality of life, infrastructure and transportation, community facilities and implementation. Each recommendation is set forth in [Table 4-18](#) below. For each, the Project’s consistency is assessed.

<b>Table 4-18: Greenpoint 197-a Plan Consistency</b>		
<b>#</b>	<b>Recommendation</b>	<b>Project Consistency Summary</b>
<b>REZONING PRINCIPLES (page 43 of 197-a Plan)</b>		
1	<p>Establish zones that allow both market-rate and affordable housing and commercial redevelopment to take place.</p> <p>Note: While zoning cannot assure affordability it should be one of the criteria for obtaining community support for any proposed development.</p>	<p>The 197-a plan proposes studying rezoning more specifically in Recommendation 4. The Project is compatible with a variety of development trends, and would not affect housing affordability or the proposed rezoning study.</p>
2	<p>Require waterfront developers to comply with all public access requirements.</p> <p>Note: While public access is not mandated in manufacturing districts, it should nevertheless be strongly encouraged.</p>	<p>The Project is not required to provide waterfront access, but proposes to do so. TGE proposes to fund rehabilitation of the North 12<sup>th</sup> Street pier, maintain it, and open it for public access, creating new views of the Manhattan skyline.</p>
3	<p>Examine the entire East River waterfront district for potential rezoning from M3 to M1 or other districts that would create opportunities for new housing, commercial activities, and the retention of clean and compatible businesses. Consider the principle of high performance zoning on a citywide basis.</p> <p>Note: Parcels where active light industry exists should be rezoned from M3 to M1. The M3 district along Newtown Creek provides adequate</p>	<p>While the existing site use is an active oil terminal (appropriate for M3 zoning), the Project itself is high performing, with air emissions, noise, vibration, etc. that take advantage of environmental, engineering and technological advances to ensure compatibility</p>

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
	opportunity for heavy industry and municipal uses within CD 1.	
<b>SPECIFIC RECOMMENDATIONS FOR STUDY OF REZONING POTENTIAL (pages 43-46)</b>		
4	Area 1: expand to include 4 blocks on waterfront; study potential for rezoning from M1-1 to mixed use (e.g., R6/M1-1)	This area includes the Franklin Special Mixed Use District. Impacts from the Project are as described in Sections <a href="#">4.4.4.2</a> and <a href="#">4.4.4.3</a> . Project will be compatible with a variety of possible uses.
	Area 2: Study potential for rezoning from M3-1 to residential and mixed use (e.g. R6 and R6/M1-1); Study potential for rezoning GMDC site from M3-1 to M1-1.  We would like to see GMDC remain but in a less onerous manufacturing or mixed-use zone. We understand / believe that the owner of the Lumber Exchange desires to develop the site in accordance with the principles outlined in the 197a Plan.	This area includes the far northern Greenpoint waterfront. As with the closer Areas 1 and 5, Project will be compatible with a variety of possible uses.
	Area 3: Increase enforcement of performance standards in existing M1-1 district; rezone McGuinness Boulevard block fronts from M1-1 to mixed use (e.g. R6/M1-1) to accommodate existing non-conforming residential uses.	Subarea is generally east of McGuinness Boulevard. As with the closer Area 5, Project will be compatible with a variety of possible uses.
	Area 4 (GTM site): Study potential for rezoning to permit medium density contextual residential development, with a commercial overlay supporting neighborhood-scale retail development. Every effort should be made to provide affordable housing on this site. Encourage preservation of existing structures.	Impacts from the Project at and around the GTM site are as described in Section <a href="#">4.4.4.3</a> . As with the closer Area 5, Project will be compatible with a variety of possible uses.
	Area 5: Study potential for rezoning from M1-1 to mixed use (e.g., R6/M1-1).	Area 5 is the closest to the Project site, and is largely coterminous with the proposed <i>Brooklyn Loft Conversion Text Amendment</i> zones. Impacts have been assessed throughout this area as described in Sections <a href="#">4.4.4.2</a> and <a href="#">4.4.4.4</a> . Project is compatible with existing and approved uses as well as affording flexibility for a variety of land use outcomes in this area.
	Area 6: Examine 2 sites for rezoning from M1-2 to R6.	Area 6 is outside the land use study area, although the Community District has been considered as a whole. Visual impacts from near this area have been considered and are absent.

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
	Area 15: study further for potential mixed use rezoning.	Area 6 is outside the land use study area, although the Community District has been considered as a whole. Visual impacts from near this area have been considered and are absent.
5	<p>Establish a task force to examine the principle of high performance zoning on a citywide basis.</p> <p>Note: The urban landscape is changing. The decline of older heavy manufacturing districts and trend toward mixed use districts that include residential, light industrial, commercial and other uses in close proximity, warrants re-examination of industrial performance standards, based upon increased knowledge of environmental hazards associated with certain uses and technological advances that have improved the performance of other uses over time.</p> <p>The Community Board recognizes that this is a citywide issue and technically outside the scope of a community 197-a plan. Yet, Williamsburg and Greenpoint represent a number of neighborhoods in New York City that are undergoing transition from heavy manufacturing to light manufacturing, residential and mixed use. All of these neighborhoods would gain considerably from a clear understanding of current industrial uses and methods and a revised approach to performance standards.</p>	Project would advance this goal by providing an example of a high performance facility being recommended here. Project would not be inconsistent with such a citywide effort.
6	<p>Strongly enforce adult entertainment regulations in manufacturing and commercial districts.</p> <p>Note: The community welcomes DCP's proposed amendments to the adult entertainment zoning text that clarify restrictions and strengthen the city's ability to enforce the regulations.</p>	Project has no effect on this recommendation.
7	Where feasible, undertake 197-c zoning actions concurrent with 197-a review, in consultation with the community.	As discussed in <a href="#">Section 4.3.2</a> , a Section 197-c process is in its early stages. The rezoning process is ongoing independent of the Project's Article X review. TGE has consulted with the Community Board and the Department of City Planning, informing both about the Project.

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
<b>ENVIRONMENT (pages 46-49)</b>		
8	Continue the moratorium on new putrescible or non-putrescible waste transfer facilities in Brooklyn Community District 1 until the Department of Sanitation’s study of the commercial waste stream is completed, has undergone extensive public review and is adopted.	Project has no effect on this recommendation.
9	Implementation of the city’s Solid Waste Management Plan for municipal solid waste (MSW), particularly proposals for the use of the Greenpoint Marine Transfer Station, as well as regulations affecting facilities handling commercial waste, should take into account the extent to which waste management facilities are concentrated in Community District 1.	Project has no effect on this recommendation.
10	Establish environmental monitoring stations/ programs in parks, streets, etc. by involving local organizations.	Project will include continuous environmental monitoring at specified points and locations. This will include the exhaust building, for air emissions; discharge pipe outlets, for wastewater and storm water; and specified community receptors, for noise compliance.
11	Establish environmental training & remediation programs for youth.	Project has no direct effect on this recommendation. Project could provide a basis for an extensive environmental training program. <u>Attachment J</u> (design alternatives) includes ideas that have been explored as part of TGE’s design effort.
12	Encourage clean, environmentally friendly industry; reduce pollution levels; enforce regulations.	Project constitutes clean, environmentally friendly industry; reduces pollution levels; and will comply with a strict regulatory regime.
13	Increase 94th Precinct participation in environmental protection enforcement.	Project has no effect on this recommendation.
14	Offer tax credits and technical assistance to promote sustainable business practices	Project has no effect on this recommendation.
15	Develop strategy to improve water quality of East River & Newtown Creek.	Project discharges directly to a sewer interceptor, alleviating problems arising out of combined sewer overflows.
16	Dredge Newtown Creek after Mobil cleanup to restore natural ecological balance and allow for recreational uses that would not conflict with legal industrial uses.	Project has no effect on this recommendation.

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
17	The city should work with DEC and EPA to enforce accelerated cleanup of Mobil Oil spill and create a Mobil Oil Reclamation Fund from proceeds of reclaimed oil to finance open space amenities.	Project has no effect on this recommendation.
18	Develop greening program for alleyways, rooftops, squares, intersections, etc.	Project uses passive shading in the building design and incorporates significant solar energy coverage.
19	Plant trees every 25' on every block; encourage backyard tree planting.	Project landscaping plan is consistent with this recommendation, except trees are shown at every 32' in the landscaping plan.
20	Plant foliage wherever possible; green & narrow intersections where feasible to discourage truck traffic from entering residential districts.	Project landscaping plan is consistent with this recommendation to the extent practicable. Trees are a prominent sidewalk feature of the landscaping plan.
21	Require permeable paving where feasible.	In the case of the waterfront Bayside Oil site, tidal influences in the shallow groundwater table make quantity and recharge less important than storm water quality, which the Project will ensure.
22	Reduce permitted pollution levels in Greenpoint and bring into conformance with national average and EPA standards within 15 years.	While pollution reduction is a regional issue, Project will take steps in this direction by reducing air pollutant deposition in Greenpoint, compared to the no-build scenario; and by remediating a heavily contaminated site
23	Any dismantling or reuse of the Greenpoint incinerator should be performed in accordance with all city, state and federal regulations, and take into account the environmental concerns of the community.	Project has no effect on this recommendation.
24	<p>Explore feasibility of establishing a boat launch at Whale Creek or another acceptable site along Newtown Creek east of McGuinness Boulevard to accommodate small craft and provide public access for sitting and viewing.</p> <p>The community believes that public open space in industrial areas can be beneficial to workers as well as neighboring communities and can be compatible with industrial uses; we recognize the need to assemble the land for a private for-profit or not-for-profit operator.</p>	Project has no direct effect on this recommendation. As a parallel case, the Project exemplifies the community's belief by including waterfront access in its design.

<b>Table 4-18: Greenpoint 197-a Plan Consistency</b>		
<b>#</b>	<b>Recommendation</b>	<b>Project Consistency Summary</b>
25	The community is strongly opposed to any further expansion of the Greenpoint WPCP.	Project has no effect on this recommendation.
26	Design WPCP to reflect and enhance area architecture.	Project has no direct effect on this recommendation. As a parallel case, the Project will enhance area architecture.
27	Implement CSO abatement plan concurrent with WPCP upgrade.	Project discharges directly to a sewer interceptor, alleviating problems arising out of combined sewer overflows.
28	Develop green buffer area between WPCP and residential area.	Project has no effect on this recommendation.
29	Expand/upgrade sewer lines in Greenpoint.	Project discharges directly to a sewer interceptor, alleviating problems arising out of sewer line limitations.
<b>WATERFRONT ACCESS/OPEN SPACE (pages 50-54)</b>		
30	Develop waterfront access plans where necessary, as East River waterfront parcels are redeveloped for residential or mixed use, and to link publicly accessible waterfront sites. This supports recommendations to create waterfront promenades linking to Williamsburg at North 12th Street, up to and including Manhattan Avenue.  A Waterfront Access Plan may be necessary if the unique conditions of a rezoned site make it difficult to comply with generic waterfront zoning.	Even through the Project is not a residential use, it includes the provision of a link in the proposed chain of promenades by creating new public waterfront access at the North 12 <sup>th</sup> Street pier and enhancing architectural, landscaping and street furniture treatments along North 12 <sup>th</sup> Street.
31	Undertake streetscape capital improvements on <u>specified</u> public access routes.	The specified routes nearest the Project site are Noble Street, Oak Street and North 12 <sup>th</sup> Street. Project would advance this recommendation by improving North 12 <sup>th</sup> Street.
32	Remove illegal physical & visual barriers to waterfront.  Note: At this point, all relevant piers have been demolished. EDC submitted grant as of August 2001 to rebuild pier at Kent Street and create esplanade between Kent and Java Streets. We see these steps as part of the process of implementing the 197a Plan.	Project will be compatible with these processes, and advances them by rehabilitating the North 12 <sup>th</sup> Street pier.

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
33	Maintain specified visual corridors to waterfront.	Project maintains all view corridors to water, opens new visual corridors at the North 12 <sup>th</sup> Street pier, and blocks the partial Manhattan view corridor at Meserole Avenue, but adequately mitigates this impact. See discussion in <a href="#">Section 4.4.1.7</a> .
34	Create multi-use promenades linking to Williamsburg from N. 12 St up to and including Manhattan Avenue. Provide point access and selected street end improvements beyond Whale Creek.	Project provides a link in the proposed chain of promenades by creating new public waterfront access at the North 12 <sup>th</sup> Street pier and enhancing architectural, landscaping and street furniture treatments along North 12 <sup>th</sup> Street.
35	Create a promenade from Greenpoint Manufacturing and Design Center to the Pulaski Bridge as part of Manhattan Ave reconstruction.	Project has no effect on this recommendation.
36	Encourage the continued monitoring of sewage discharge at India Street outfall and other locations.	Majority of Project’s wastewater flow will be treated and discharged to the East River, relieving the strain on the sewage system.
37	Reclaim Newtown Creek from contamination and provide access to selected portions of the creek for water-dependent sports and recreation such as kayaking and canoeing.	Project is not on the Newtown Creek and therefore has no direct effect on this recommendation. Generally, the Project would not be inconsistent with efforts to enhance water-dependent sports and recreation opportunities.
38	Encourage creation of a citywide kayaking map by a kayaking association or other non-profit; study feasibility of route from Newtown Creek to Roosevelt Island and LIC.	Project would not be inconsistent with efforts to enhance kayaking opportunities.
39	Work with the owner of the Greenpoint Lumberyard to acquire property on the mouth of Newtown Creek for the expansion of Greenpoint Park.	Project has no effect on this recommendation.
40	Improve Newtown Barge Terminal Playground.	Project has no effect on this recommendation.
41	Explore adaptive reuse of DEP sludge storage tank on Dupont Street for a multi-use recreation facility. If it is decommissioned, its reuse would be subject to community acquisition and funding.	Project has no effect on this recommendation.
42	Develop WNYC Transmitter site for passive recreation; study feasibility of ferry slip.	Impacts from the Project at and around the WNYC site are as described in <a href="#">Section 4.4.4.3</a> .

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
43	<p>Create USS Monitor Park and Marina at Bushwick Inlet; include the Greenpoint Monitor Museum, chartered by New York State in 1996.</p> <p>Note: The community believes that with acquisition of adjacent city-owned property and the proposed development of the Greenpoint Terminal Market site, both the land and the resources can be found if the community has the will.</p>	<p>Project will be compatible with a proposed educational/ recreational/open space on the north side of the Bushwick Inlet. See <a href="#">Section 4.4.3</a> and <a href="#">4.4.4.4</a>.</p>
44	<p>Give serious consideration to the pending community proposal for redesign of McCarren Park and Pool.</p>	<p>Project has no effect on this recommendation. Project’s impacts at this area are addressed in <a href="#">Section 4.4.4.1</a> above.</p>
45	<p>Establish North 14<sup>th</sup> Street as an identifiable pedestrian and bicycle link between Bushwick Creek and McCarren Park, corresponding to the development of a waterfront promenade, the Greenpoint Monitor Museum, and public open space at Bushwick Inlet.</p> <p>Note: North 14<sup>th</sup> Street is an important component in the network of public open spaces and connections to the Brooklyn waterfront envisioned in both the Williamsburg and Greenpoint plans. It currently provides a clear visual connection between McCarren Park and the East River and Manhattan skyline. Development of a waterfront promenade, the Greenpoint Monitor Museum, and enhancement of the Bushwick Inlet will strengthen this connection by providing a physical destination. While N14<sup>th</sup> Street runs through an industrial area it carries only local truck traffic, serving local businesses. Use of creative signage, planting, and street markings and improved sidewalks would accommodate pedestrian, bicycle and truck traffic and minimize conflict with industrial uses. [See Williamsburg 197-a Plan]</p>	<p>Project design is oriented to show a welcoming face to the Bushwick Inlet/North 14<sup>th</sup> Street/Kent Avenue focal point. The Project blocks no views down North 14<sup>th</sup> Street and creates no obstructions. The importance of the North 14<sup>th</sup> Street connection in both the Greenpoint and Williamsburg 197-a Plans, even though the street is industrial in nature, has been noted by TGE since the inception of the Project.</p>

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
46	<p>Provide vest pocket parks along Newtown Creek up to &amp; beyond Kosciusko Bridge where and when feasible.</p> <p>Note: The community believes such park space is an integral part of the daily lives of workers, and that adjoining manufacturers and utilities in association with DPR can provide needed maintenance. The problem is that these street ends are now unsafe and hazardous garbage dumps that no one maintains.</p>	<p>Project has no direct effect on this recommendation. As a parallel case, the Project will enhance its own street end (North 12<sup>th</sup> Street) as a vest pocket park.</p>
47	<p>Survey area south of BQE for possible playground site.</p>	<p>Project has no effect on this recommendation.</p>
<b>HOUSING / HISTORIC PRESERVATION (page 55)</b>		
48	<p>Expand housing supply with new market-rate and affordable units.</p>	<p>Project occupies an existing active industrial and heavily contaminated site in an M-3 zone, thus not competing for sites that could be used to develop housing.</p>
49	<p>New development should be compatible with the existing landmark district, in terms of building height and scale, in order to retain the village quality of the community.</p>	<p>Project is outside the historic district and in an area without uniform height of scale. Impact assessment for the historic district is summarized in <a href="#">Section 4.4.4.2</a>.</p>
50	<p>Encourage the inclusion of affordable senior housing in any new or renovated residential development.</p>	<p>Project has no effect on this recommendation.</p>
51	<p>Ensure that existing and prospective homeowners have access to low-interest loans.</p>	<p>Project has no effect on this recommendation.</p>
52	<p>Consider preserving and landmarking existing noteworthy buildings on the Greenpoint Terminal Market site.</p>	<p>Project has no effect on this recommendation.</p>
53	<p>Explore merits &amp; feasibility of expanding Historic District towards East River including parts of GTM.</p>	<p>Project is outside of the GTM site and its waterfront. Impact assessment for the Greenpoint waterfront is summarized in <a href="#">Section 4.4.4.3</a>.</p>

**Table 4-18: Greenpoint 197-a Plan Consistency**

#	Recommendation	Project Consistency Summary
<b>ECONOMIC DEVELOPMENT (page 56)</b>		
54	Promote neighborhood-scale retail development that serves the needs of the local community, and maintain the rich variety of shops and services along the area’s retail corridors. While the community would support zoning changes permitting the development of restaurants, mid-sized supermarkets and other local retail services, it is strongly opposed to the development of shopping malls and superstores, which serve a much larger market. Greenpoint’s relatively narrow streets cannot support the high level of car and truck traffic associated with such large-scale facilities.	Project is outside neighborhood areas and has no effect on this recommendation.
55	Encourage non-polluting businesses; develop/enforce performance standards; pursue non-compliance w Good Neighbor Agreements.	Project will maintain high performance and thereby further this recommendation.
56	Provide job training, ESL classes, computer skills training for immigrants, youth.	Project has no effect on this recommendation.
57	Create Clean Industries/Good Neighbor Program; create economic development programs to retain non-polluting businesses.	Project has no direct effect on this recommendation, but could be a participant in such a program.
<b>COMMUNITY FACILITIES (page 57)</b>		
58	Develop community facilities including daycare centers for children and seniors, schools and other educational institutions to meet community needs. Consider using a vacant Catholic School as a new vision school and youth center.	Project has no effect on this recommendation.
59	Reconstruct and expand the Greenpoint branch library	Project has no effect on this recommendation.
60	Encourage development of an entertainment complex on Manhattan Avenue.	Project has no effect on this recommendation.
61	Support the continued existence of a farmers market in McCarren Park. Include a crafts fair on the site. Encourage an annual harvest festival.	Project has no effect on this recommendation.
<b>TRANSPORTATION / INFRASTRUCTURE (pages 58-60)</b>		
62	Restrict and regulate truck traffic on residential blocks through urban design improvements such as traffic calming, lane reduction, and the narrowing of selected corners. A “traffic calming” study and urban design study of techniques that would appropriately curtail truck traffic from residential streets should be undertaken as soon as possible.	Project will reduce truck traffic overall and will make use of barging.

<b>Table 4-18: Greenpoint 197-a Plan Consistency</b>		
<b>#</b>	<b>Recommendation</b>	<b>Project Consistency Summary</b>
63	Improve streetscape on Manhattan Ave (Commercial to Driggs), Franklin, West and all waterfront view corridors.	Project will improve streetscape along North 12 <sup>th</sup> Street and enhance the view of the East River along this corridor.
64	Explore feasibility of light rail/trolley along Manhattan Ave linking to Red Hook and Queens	Project has no effect on this recommendation.
65	Explore feasibility of restoring the Manhattan Avenue footbridge to Queens. Explore the possibility of extending the light rail to Queens. The proposed bridge would link the Queens West development to the Manhattan Av shopping corridor and would provide direct access from the Greenpoint community to the #7 subway line in Long Island City.	Project has no effect on this recommendation.
66	Expand mass transit service; retain manned G train operation; extend bus routes to Franklin and Kent.	Project would not be inconsistent with this recommendation, and the TGE site would become more accessible if such service were extended. However, Project's own work force is insufficient to warrant bus service extension.
67	Encourage the establishment of a ferry service and water taxi linking Greenpoint to the rest of the New York waterfront and connecting Greenpoint's historic sites to other historic sites in the harbor. This is a long-term proposal that has been set forth by the Metropolitan Waterfront Alliance as part of the Harbor Loop Study.	Project would not be inconsistent with this recommendation, as it takes up only approximately 100 feet of East River shorefront, as measured parallel to the river.
68	Establish bike paths on promenades & streets where feasible.	Project's improvements along North 12 <sup>th</sup> Street can accommodate a bike path, provided a bike path is installed as part of Kent Avenue/Franklin Street reconstruction as per the Bicycle Plan.
69	Encourage development of municipal or privately funded public parking facilities in the vicinity of the Greenpoint Manufacturing and Design Center to serve the local manufacturing and commercial community.	Project has no effect on this recommendation.
70	Work with Consolidated Freightways to relocate their parking. As a private initiative, this may be accomplished with the assistance of an organization such as the New York Industrial Retention Network.	Project has no effect on this recommendation.
<b>AGENCY SERVICE STATEMENTS (page 60)</b>		
71	Request annual Section 2707 review to monitor implementation of the 197-a plan.	Project has no effect on this recommendation.

In summary, the Project is consistent with the recommendations of the *Greenpoint 197-a Plan*. It either is neutral or, in some cases, will help to advance the various recommendations to strengthen and diversify Greenpoint's economic, social, historic, and cultural base and better integrate the neighborhood and its waterfront. It will do so principally through the following features.

- High environmental performance, including low air emissions, low noise, etc.
- Enhancement of area architecture, urban design sensitivity, including at North 14<sup>th</sup> Street
- Opening up North 12<sup>th</sup> Street waterfront access and creating streetscape and vegetation improvements leading to the North 12<sup>th</sup> Street pier.
- Land efficiency, high environmental performance and design compatibility ensure compatibility of Project with a variety of programs and land uses recommended in the 197-a plan.

#### **4.5.5 Recreational Plans**

##### *4.5.5.1 Greenway Plan*

This section addresses Stipulation 5, Clause 4(d), which calls for a description of the Project's consistency with *A Greenway Plan for New York City*.

In the fall of 1993, the Department of City Planning published *A Greenway Plan for New York City* to propose a system of greenways to provide for safe and enjoyable travel for pedestrians, in-line skaters, and bicyclists in New York City. The proposed greenway paths were designed to take advantage of abandoned rail corridors, green areas along parkways and highways, waterfront public access areas, most public parkland, bridges and ferry crossings, as well as some city streets.

The East River waterfront is one area that is indicated as being an ideal place for a greenway path. The Manhattan side of the East River in the area closest to the Project site is considered a "priority route" for early action based on the ease with which it could be created, the congestion on the nearby roadways, and the potential for a high volume of use due to its proximity to popular destinations. The Project will not interfere with the construction of a greenway in this area.

The Brooklyn side of the East River is also proposed as a possible greenway trail, although it is not designated as a priority route. The Project's design anticipates new public waterfront access via North 12<sup>th</sup> Street to the East River, and thereby anticipates potential greenway development.

The Project site would not preclude this section of the waterfront from being used as a greenway. This accommodation is detailed in Section 4.5.1 above. In addition, the Project's water supply interconnection would cross Eastern Parkway, a part of the Brooklyn-Queens Greenway. No permanent impact would occur at this location. The construction impact is only temporary, and efforts will be taken to minimize construction duration, both as a matter of traffic impact and disruption to recreational areas.

#### 4.5.5.2 *Open Space Plan*

This section addresses Stipulation 5, Clause 4(k). This clause requires an analysis of the compatibility of the Project with the 2001 draft of the *New York State Open Space Conservation Plan*. This version of the plan was issued in final form in September 2002, subsequent to the signing of the study stipulations (June 2002).

In 1992, the Department of Environmental Conservation and the Office of Parks, Recreation, and Historic Preservation created the state's first *Open Space Conservation Plan* to help preserve the state's parklands, natural, cultural, historic, and recreational resources. This process relies upon Regional Advisory Committees throughout New York State. By law, this plan was revised in 1992, 1998 and 2002, each time updating the recommendations outlined in the plan. The plan aims to preserve open space in New York State by working with public and private agencies, soliciting public opinion, and spending money wisely by carefully analyzing the costs of creation and maintenance of any open space proposals and prioritizing important projects and expenditures. The plan includes both descriptions of statewide plans and programs as well as the region-specific recommendations generated by the Regional Advisory Committees. The Project site is located in NYSDEC Region 2, which covers New York City.

The Region 2 Advisory Committee highlighted 16 projects as protection priorities, and several of these projects were adopted as statewide priorities as well. One of these projects is to provide recreational space and parkland to neighborhoods in the city that currently have very little open space, especially those with a low per-capita income. The plan includes a list of representative sites upon which new open space areas could be created. Several of these proposed projects are located in the Greenpoint and Williamsburg neighborhoods, including restoring the India St. pier, creating parkland at the former Brooklyn Eastern District Terminal (BEDT) site, and establishing open space at the Bushwick Inlet. The BEDT site is the nearest publicly owned waterfront land and is the site of a future NYU athletic facility and community park at North 7<sup>th</sup> to North 9<sup>th</sup> streets (former Eastern District Terminal site). This site is listed in the Open Space Plan as a government property "with potential for transfer to public recreational use." The Bushwick Inlet site is listed as a half-acre upland that would provide public waterfront access to

the north side of the Inlet, a vestige of Bushwick Creek. This site is listed as a property “with potential for fee purchase.”

As shown in Section 4.4.3 and 4.4.4 above, construction of the TGE facility would not be inconsistent with the improvement of these potential open space resources, and may enhance them. It should be noted that the *Open Space Conservation Plan* recognizes that maintaining and enhancing recreational areas requires spending state and federal money wisely. The plan stresses the importance of land use controls to cluster industrial facilities in areas suitable for industrial use and focus new development on sites that have previously been disturbed. By constructing the Project on a contaminated brownfield, TGE will channel its massive investment in the waterfront toward a site where economic and environmental benefits are greatest. The Project will foster the creation of new waterfront access and will not deprive adjacent neighborhoods of non-industrial land that could also be used for open space purposes.

#### 4.5.5.3 *Bicycle Master Plan*

Stipulation 5, Clause 4(j) calls for a description of the Project’s compatibility with the *New York City Bicycle Master Plan*.

The *New York City Bicycle Master Plan* is the outcome of the first phase of the Department of Transportation and the Department of City Planning’s Bicycle Network Development Project. The goal of the plan is to encourage cycling as a mode of transportation in the city by expanding bicycle access on roads and bridges, improving bicycle safety, and raising awareness by institutionalizing cycling in public agencies and private organizations. The plan seeks to create and maintain a bicycle network and greenway system throughout New York City.

Several streets and bridges in Brooklyn are within the proposed network. The *Bicycle Master Plan* designates several proposed routes as priority routes due to their access to mass transit, residential, or recreational areas, their probable popularity with citizens, their geographic location, and the low cost at which they can be created and maintained.

The Bicycle Plan for New York City recommends the use of north-south orientation bicycle routes along Driggs Avenue, Berry Street, Lorimer and Guernsey Streets, Leonard and Eckford Streets, Kent Avenue and West Street. An east-west connection at Calyer and Oak Streets is also recommended. Greenpoint Avenue, between the Queens line and Manhattan Avenue, is recommended as a cautionary on-street route.

Bicycle routes will not be adversely affected by Project-related traffic. Project traffic and Bicycle Plan routes will occur along Driggs Avenue, Kent Avenue and Greenpoint Avenue.

Project traffic will cross Bicycle Plan routes along Franklin Street at Oak and Calyer Streets; along Nassau Avenue and Leonard and Eckford Streets; and along North 11<sup>th</sup>/12<sup>th</sup> Streets at Berry Street and Driggs Avenue. The Plan also emphasizes the importance of bicycle access over bridges. Some Project-related traffic will come to Brooklyn over the Greenpoint Avenue and Pulaski Bridges, but will not prevent the city from making these bridges safer for bicyclists. Both of these bridges already have a large volume of truck-related traffic, while the Project very little traffic.

Kent Avenue is highlighted by the Plan as being a potential connection to the network based on its proximity to the waterfront. The reconstruction of Kent Avenue and Franklin Street, scheduled for 2004, is likely to enhance bicycling opportunities along this route. The Project will not encroach onto Kent Avenue or pose any difficulties for bicycles along this route. Rather, because the Project will reduce truck traffic in the area, it will make Kent Avenue/Franklin Street and other nearby streets safer and more suitable for bicycling. This will help encourage more bicycle use in the neighborhood, consistent with the overall goal of the *New York City Bicycle Master Plan*.

#### 4.6 Local Law Compliance and Permits

##### 4.6.1 Table of Compliance/Non-Compliance

Stipulation 5, Clause 5(a) requires identification of all substantive New York City laws, ordinances, regulations and rules applicable to the construction or operation of the Project and interconnections. Clause 5(g) requires a summary comparison table in two columns listing the applicable substantive provisions in the first column and the degree of compliance in the second column. That table is provided here as Table 4-19.

<b>Table 4-19: New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and its Interconnections</b>		
<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
<b>CHARTER OF THE CITY OF NEW YORK</b>		
§86	Opening and closing of streets	Full
§197-b	Notification of plans and proposals	Full
§220	Improvement payable other than by City	Full
§2904	Duties and obligations of property owners	Full
<b>NEW YORK CITY ADMINISTRATIVE CODE</b>		
<b>Title 10</b>	<b>Public Safety</b>	Full
§10-101	Communication of alarms	Full

<b>Table 4-19: New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and its Interconnections</b>		
<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
<b>Title 15</b>	<b>Fire Prevention and Control</b>	Full
§15-127	Auxiliary fire alarm systems	Full
<b>Title 16</b>	<b>Sanitation</b>	<b>Full</b>
§16-119	Dumping prohibited	Full
§16-120	Receptacles for the removal of waste material	Full
§16-123	Removal of snow, ice and dirt from sidewalks; property owner's duties	Full
<b>Title 18</b>	<b>Parks</b>	<b>Full</b>
§18-107	Replacement of trees removed during construction	Full
<b>Title 19</b>	<b>Transportation</b>	<b>Full</b>
§19-102	Unlawful use or opening of street	Full
§19-107	Temporary closing of streets	Full
§19-109	Protection at work site	Full
§19-111	Curbs	Full
§19-112	Ramps on curbs	Full
§19-113	Construction generally	Full
§19-121	Construction and excavation sites	Full
§19-122	Removal of debris	Full
§19-123	Commercial refuse containers	Full
§19-137	Land contour work	Full
§19-139	Excavations for private purposes	Full
§19-142	Workers on excavations	Full
§19-146	Prevention of disturbances of street surfaces	Full
§19-147	Replacement of pavement and maintenance of street hardware	Full
§19-152	Duties and obligations of property owner with respect to sidewalks and lots	Full
<b>Title 22</b>	<b>Economic Affairs</b>	<b>Full</b>
§22-112	Navigable waters, fouling, obstructing	Full
§22-116	Improvement of water front property; permit required	Full
<b>Title 24</b>	<b>Environmental Protection and Utilities</b>	<b>Full</b>
<b>Chapter 1</b>	<b><i>Air Pollution Control</i></b>	Full
§24-109	Registrations generally	Full
§24-120	Installation and alteration, permit required	Full

<b>Table 4-19: New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and its Interconnections</b>		
<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§24-141	Emission of air contaminants (including odorous air contaminants) or water vapor; detriment to person, property, or plant life	Full
§24-142	Emission of air containment; standard smoke chart	Full

New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and Its Interconnections (page 2)

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§24-144	Emission of air containment; sulfur compounds; volume standard	Full
§24-145	Emission of particulate matter from refuse burning equipment, fuel burning equipment; weight-rate standard	Full
§24-146	Preventing particulate matter from becoming airborne; spraying of insulating material and demolition regulated	Full
§24-146.1	Asbestos work	Full
§24-147	Emission of nitrogen oxides	Full
§24-153	Emission of air contaminants; environmental ratings	Full
§24-155	Maintenance of equipment and apparatus	Full
§24-156	Use of equipment without using apparatus prohibited	Full
§24-160	Use of air contaminant recorder; boilers	Full
§24-161	Use of fuel burning equipment using residual fuel oil; operation and supervision by trained person	Full
§24-163	Operation of motor vehicle; idling of engine restricted	Full
§24-165(e)	Use of contaminant recorder; recording of time, duration, concentration and density of air contaminant	Full
§24-168	Use of proper fuel in fuel burning equipment	Full
§24-169	Sulfur content of fuel restricted	Full
§24-170	Reporting of fuel supplies	Full
§24-176	Fuel information ticket required for shipping or delivery of fuel into New York city	Full
<b>Chapter 2</b>	<b>Noise Control</b>	<b>Full</b>

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§24-208	Registrations	Full
§24-224	Construction activities	Full
§24-225	Construction devices	Full
§24-226	Containers and construction material	Full
§24-227	Exhausts	Full
§24-229	Noise sensitive zones	Full
§24-232	Motor vehicles	Full
§24-241	Paving breakers	Full
§24-243	Ambient noise quality zones, criteria and standards	Full
§24-245	Operating certificates and tunneling permits	Full
§24-248	Standards for granting operating certificates and tunneling permits	Full
<b>Chapter 3</b>	<b>Water Supply</b>	<b>Full</b>
§24-308	Opening, tampering with or opening valves of fire hydrants	Full
§24-309	Connections	Full
§24-310	Closing of taps before building is demolished	Full
<b>Chapter 4</b>	<b>Gas and Electric Lines</b>	<b>Full</b>
§24-404	Permits; excavations in street; gas distribution lines; electrical corridors	Full
§24-405	Permit required	Full
<b>Chapter 5</b>	<b>Drainage and Sewer Control</b>	<b>Full</b>
§24-504	All sewers to be in accordance with general plan	Full
§24-507	Private sewers and drains	Full

New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and Its Interconnections (page 3)

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§24-509	Construction of sewers	Full
§24-513	Constructors; license and bond	Full
§24-516	Newtown Creek sewers	Full
§24-520	Steam and hot water	Full
§24-521	Excavations for public works	Full
§24-523	Industrial wastes; sewer surcharges	Full
<b>Chapter 6</b>	<b>Hazardous Substance Emergencies</b>	<b>Full</b>
§24-602 et seq.	Declaration of policy	Full

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
<b>Chapter 7</b>	<b>Community Right-to-Know Law</b>	<b>Full</b>
§24-702 et seq.	Community right-to-know law	Full
<b>Title 25</b>	<b>Land Use</b>	<b>Full</b>
§25-110	Height, bulk, yard and density regulations	Full
§25-111	Location of trades, industries and specific uses	Full
§25-303	Establishment of landmarks and historic districts	Full
§25-305	Regulation of construction, reconstruction, alterations and demolition	Full
<b>Title 26</b>	<b>Housing and Buildings</b>	<b>Full</b>
§26-192	Requirement of license	Full
§26-205 et seq.	Building Construction	Full
§26-222	Requirement of certificate of occupancy	Full
§26-228	General safety requirements	Full
§26-229	Safety requirements during excavation operations	Full
§26-232	Retaining walls	Full
§26-252	Sidewalks, sheds, fences, railings, etc.	Full
<b>Title 27</b>	<b>Construction and Maintenance</b>	<b>Full</b>
§27-118	Alterations involving change in occupancy or use	Full
§27-127	Maintenance requirements	Full
§27-130	General requirements	Full
§27-147 through 190	Building Permits (Articles 10 through 18 of Building Code)	Full
§27-195	Notice of commencement of work	Full
§27-198.1	Asbestos inspection reports/removal plan	Full
§27-203	Compliance with safety requirements	Full
§27-204	Builder's pavement	Full
§27-214	New buildings; sidewalk requirements	Full
§27-217	Changes in occupancy or use	Full
§27-228 et seq.	Fire protection plan	Full
§27-243	Occupancy group A (high hazard)	Full
§27-291	Frontage	Full
§27-292	Building access	Full
§27-296	Limitations inside fire districts	Full
§27-301	Area limitations	Full
§27-305	Height limitations	Full
§27-307	Permissible projections beyond the street line	Full
§27-316	Special flood hazard areas	Full

New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and Its Interconnections (page 4)

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§27-318 et seq.	Fire protection construction requirements	Full
§27-354 et seq.	Means of egress	Full
§27-400 et seq.	High hazard occupancies	Full
§27-419 et seq.	Boilers and furnace rooms	Full
§27-479 et seq.	Open parking lots	Full
§27-498 et seq.	Outdoor signs and display structures	Full
§27-550 et seq.	Loads	Full
§27-580 et seq.	Structural work	Full
§27-652 et seq.	Foundations	Full
§27-725 et seq.	Lighting, heating, and ventilation	Full
§27-787 et seq.	Heating and combustion equipment	Full
§27-856 et seq.	Chimneys.	Full
§27-879 et seq.	Gas vent systems	Full
§27-901 et seq.	Plumbing and gas piping	Full
§27-904	Establishing gas supply	Full
§27-909	Drainage system permits	Full
§27-932 et seq.	Standpipe requirements	Full
§27-954 et seq.	Automatic sprinkler requirements	Full
§27-962 et seq.	Sources of water for sprinkler systems	Full
§27-968 et seq.	Interior fire alarm and signal system	Full
§27-1007 et seq.	Safety of public and private property during construction operations	Full
<b>Chapter 3</b>	<b>Electrical Code</b>	<b>Full</b>
§27-3008	Public service corporations	Full
<b>Chapter 4</b>	<b>Fire Prevention Code</b>	<b>Full</b>
§27-4001 et seq.	Fire Prevention Code	Full
§27-4010	Hazardous industries	Full
§27-4011	Permits	Full
§27-4039	Use, blasting	Full
§27-4053	Bulk oil storage plants	Full
§27-4054	Storage of fuel on privately owned waterfront property	Full

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§27-4055	Limited storage permit	Full
§27-4056	Waste oil disposal	Full
§27-4057	Transportation and delivery	Full
§27-4060	Lubricating oils	Full
§27-4066	Flammable materials	Full
§27-4070	Combustible materials	Full
§27-4093	Paints, varnishes and lacquers	Full
§27-4099	Gases under pressure: permit	Full
§27-4100	Compressing	Full
§27-4101	Acetylene	Full
§27-4102	Blow-pipes	Full
§27-4190	Mechanical refrigeration: permit	Full
§27-4265	Fire extinguishers	Full

New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and Its Interconnections (page 5)

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
<b>NEW YORK CITY RULES AND REGULATIONS</b>		
<b>Title 1</b>	<b>Department of Buildings</b>	<b>Full</b>
§1-01	Material and Equipment application procedures	Full
§6-01	Cranes	Full
§8-01	Demolition	Full
§9-01	Rigging operations	Full
§12-01	Emergency power systems	Full
§15-06	Design of composite construction with metal decks or lightweight concrete	Full
§16-01	Inspection of existing structures during construction operations	Full
§18-01	Resistance to progressive collapse under extreme local loads	Full
§20-01	Witnessing test of gas piping systems	Full
§20-02	High pressure steam piping systems	Full
§26-01 et seq.	Safety of public and property during construction operations	Full
§32-01	The design and installation of non-loadbearing exterior wall systems	Full

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§39-01	Cooling Towers and Evaporative Condensers	Full
<b>Title 2</b>	<b>Board of Standards and Appeals</b>	<b>Full</b>
§3-01 et seq.	Construction	Full
§10-01 et seq.	Fire extinguishing systems and appliances	Full
§14-01	Gas shut-off valves	Full
§16-01	Oil burning equipment	Full
§19-01	Plastic piping and fittings	Full
§25-01	Arc and gas welding, and oxygen cutting of steel	Full
<b>Title 3</b>	<b>Fire Department</b>	<b>Full</b>
§1-01	Tanks used for the bulk storage of acids	Full
§3-01 et seq.	Air compressors	Full
§7-01 et seq.	Bulk oil facilities	Full
§3-01 et seq.	Cable oils	Full
§11-02 et seq.	Use of liquid oxygen cylinders and oxygen trailers	Full
§17-01 et seq.	Fire alarm systems	Full
§20-01	Flammable and/or combustible liquids and mixtures	Full
§21-02	Out-of-service storage systems	Full
§21-17	Installation of tanks and piping for combustible liquids	Full
§23-06	Storage and use of ammonia with dissociating equipment	Full
§23-11	Carbon dioxide	Full
§32-01	Storage and use of pressurized products	Full
§33-01	Plan requirements for refrigerating systems	Full

New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and Its Interconnections (page 6)

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
<b>Title 15</b>	<b>Department of Environmental Protection</b>	<b>Full</b>
§2-01 et seq.	Fuel oil burning equipment	Full
§2-08	Installation performance	Full
§2-11	Installation design	Full
§2-11	Determination of acceptable location of chimney outlet	Full
§7-01	Tunneling permits	Full
§8-01	Submission of environmental rating reports from	Full

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
	industrial sources	
§9-01 et seq.	Gas-fired burner installations	Full
§11-01 et seq.	Hazardous substances emergency response	Full
§19-02	Disposal of wastewater, storm water, and groundwater	Full
§19-03	Materials and substances excluded from public sewer	Full
§19-04	Toxic substances accepted conditionally	Full
§19-05	Terms and conditions for the issuance of a permit	Full
§19-08	House and trailer connections	Full
§20-01 et seq.	Use and supply of water	Full
§20-08	Water use restrictions and fire hydrant use	Full
§21-01 et seq.	Drought emergency rules	Full
§23-01 et seq.	Construction of private sewers or private drains	Full
§41-01 et seq.	Community Right-to-Know Regulations	Full
<b>Title 16</b>	<b>Department of Sanitation</b>	<b>Full</b>
§2-07	Construction and demolition waste and transporters	Full
§11-02	Solid waste removal plans submission	Full
<b>Title 34</b>	<b>Department of Transportation</b>	<b>Full</b>
§2-04	Canopies	Full
§2-05	Construction activity	Full
§2-06	Land Contour Work	Full
§2-07	Utility hole covers, transformer vault covers and gratings	Full
§2-11	Street openings and excavations	Full
§4-13	Truck Routes	Full
§4-15	Limitations on the dimensions and weights of vehicles	Full
<b>Title 66</b>	<b>Department of City Planning</b>	<b>Full</b>
§5-02(d)	Applicability of CEQR	Full
E.O. 91, §6-04	Exempt Actions under CEQR	Full
§6-01(b)	Policy guidance for 197-a Plans	Full
<b>Title 63</b>	<b>Landmarks Preservation Commission</b>	<b>Full</b>
<b>Title 66</b>	<b>Department of Business Services</b>	<b>Full</b>
§2-03	Improvement and alteration of waterfront property and marginal streets	Full
§2-04	Maintenance of waterfront property	Full

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§2-05	Dumping	Full
§2-06	Obstructing waterfront property	Full
§2-11	Hazardous, flammable, or explosive substances	Full
§2-12	Berthing and moving of vessels	Full

New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and Its Interconnections (page 7)

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
<b>HEALTH CODE OF THE CITY OF NEW YORK</b>		
<b>Article 131</b>	<b>Buildings Generally</b>	<b>Full</b>
§131.11	Receptacles for the removal of waste materials	Full
§131.13	Flexible gas tubing	Full
<b>Article 153</b>	<b>Littering and Disposal of Refuse</b>	<b>Full</b>
§153.01 et seq.	Littering and disposal of refuse	Full
<b>Article 173</b>	<b>Hazardous Wastes</b>	<b>Full</b>
§173.01 et seq.	Hazardous wastes	Full
<b>NEW YORK CITY ZONING RESOLUTION</b>		
<b>Article I</b>	<b>General Provisions</b>	<b>Full</b>
§11-111	New uses	Full
<b>Article IV</b>	<b>Manufacturing District Regulations</b>	<b>Full</b>
§41-13	M3 Heavy Manufacturing Districts	Full
§42-00	General provisions	Full
§42-15	Use Group 18	Full
§42-20	Performance standards	Full
§42-213	Maximum permitted decibel levels	Full
§42-214	Special provisions along district boundaries	Full
§42-223	Maximum permitted steady state vibration displacement	Full
§42-224	Maximum permitted impact vibration displacement	Full
§42-225	Special provisions along district boundaries	Full
§42-232	Maximum permitted emission of smoke	Full
§42-233	Maximum permitted emission of dust	Full
§42-234	General control over smoke and other particulate matter	Full
§42-242	Odorous matter in M3 Districts	Full

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
§42-252	Regulation of toxic or noxious matter	Full
§42-273	Regulations applying to Class I materials or products	Full
§42-274	Regulations applying to Class II materials or products	Full
§42-275	Regulations applying to Class III materials or products	Full
§42-283	Humidity, heat, or glare in M3 Districts	Full
§42-52 et seq.	Sign regulations	Full
§43-12	Maximum floor area ratio	Full
§43-22	Level of yards	Full
§43-23 & 43-26	Rear yards	Full
§43-25	Minimum required side yards	Full
§43-42	Permitted obstructions	Full
§43-43	Maximum height of front wall and required front setbacks	Full
§44-12	Maximum size of accessory group parking facilities	Full
§44-21	General provisions for the amount of accessory parking	Full
§44-32	Off-site spaces for all permitted uses	Full
§44-34	Additional regulations for required spaces located off-site	Full
§44-35	Restrictions on use of accessory off-street parking	Full
§44-40 et seq.	General provisions for the size, location, surface, and screening of parking spaces	Full

New York City Laws, Ordinances, Regulations, and Rules Applicable to the TransGas Energy Cogeneration Facility and Its Interconnections (page 8)

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
<b>Article VI</b>	<b>Special Regulations for Waterfront Areas</b>	<b>Full</b>
§62-12	Applicability to developments in the waterfront area	Full
§62-211	Water-dependent uses	Full
§62-241	Uses on existing piers and platforms	Full
§62-28	Special sign regulations	Full
§62-31	Bulk computations on waterfront zoning lots	Full
§62-326	Waterfront floor area ratio requirements for	Full

<b>Number</b>	<b>Short Title</b>	<b>Compliance Degree</b>
	manufacturing districts	
§62-33	Special yard regulations on waterfront blocks	Full
§62-34	Height and setback requirements on waterfront blocks	Full
§62-41	Requirements for waterfront public access	Full
§62-42	Requirements for visual corridors	Full
§62-522	Accessory non-residential off-site parking	Full
§62-552	Off-site parking in public parking facilities	Full
§62-71	City Planning Certifications	Full
§62-736	Bulk modifications on waterfront blocks	Full

#### ***4.6.2 Demonstration of Compliance***

### **CHARTER OF THE CITY OF NEW YORK**

**§86 Opening and closing of streets.** No person, agency, or other entity may remove the pavement, disturb the surface, or otherwise open or close a street unless a written notice at least ten days before the action is filed with the construction coordinator and consulting engineer for the borough in the office of the borough president and the office of the district manager for the community district in which the project will be located.

Prior to construction, TGE will notify the appropriate personnel at the Office of Brooklyn Borough President and Brooklyn Community Board 1 of actual construction on the basis of any approved street openings. TGE anticipates that utility companies constructing Project interconnections (steam, electric, gas and industrial water/wastewater) will also follow this requirement. The list of anticipated street openings is addressed under the Administrative Code, Title 19.

**§197-b Notification of plans and proposals.** Advance notice of all preliminary and final plans filed with the city relating to the use, development or improvement of land subject to city regulation shall be given to the borough offices and community boards.

TGE has forwarded and will continue to forward its application filings to the Office of the Borough President and to Community Board 1. Both offices are well aware of the proposed Project. Consultation with both is required, as further described in the study stipulations agreed to by New York City and TGE, among other parties. Thus, TGE complies fully and expects to continue to comply fully with this provision. This statement should not in any way be interpreted to waive any position that may be taken, or rights to be asserted, under §172 of the New York State Public Service Law (PSL).

**§220 Improvements Payable by Other Than City.** Any owner of real property or any other person interested may apply to the council to authorize an improvement such as a public betterment in a City street, provided that work is done in accordance with requirements of jurisdictional City agencies; is paid for by the private party, with security provided to the City. Procedurally, Uniform Land Use Review Procedure (ULURP, pursuant to §197-c) and City Council approval (§197-d) are required.

To the degree that any of the interconnections under TGE's own purview (as described relative to §19-102 below) are public betterments, TGE will comply with the substantive requirements of this provisions, except that TGE will ask the Siting Board to issue directly, without delegating to New York City, any permits that would on their own require City Environmental Quality Review, Uniform Land Use Review Procedure or City Council approval. In particular, the water and wastewater supply line may be covered under this provision. Article X will provide the same level of review as the ULURP and City Council approval requirements. Permits from City agencies necessary for such work will still be obtained, subject to the Siting Board's continuing jurisdiction, a protocol established in prior Board decisions on in-City Article X projects.

**§2904 Duties of property owners.** The owner of any property shall, at his or her own cost install, reconstruct, repave, and repair the sidewalk flags in front of or abutting this property and fill in or cut down any portions of the lots whenever ordered to do so by the Department of Transportation pertinent to §19-152 of the Administrative Code.

TGE will comply with these requirements, as described in the compliance statement for Administrative Code, Title 19.

## **NEW YORK CITY ADMINISTRATIVE CODE**

### **Title 10: Public Safety**

**§10-101 Communication of alarms.** The owners and proprietors of all manufactories, tenement houses, apartment houses, piers, wharves, bulkheads, bulkhead sheds, pier sheds, or other waterfront structures shall provide means of communicating alarms of accident or danger to the New York City Police Department in the manner prescribed by the New York City Police Commissioner.

In the event of an accident, emergency response personnel will be notified immediately. The warning alarms installed for the Project will be wired to alert the police to any possible dangerous situation in the manner prescribed by the Police Commissioner.

## **Title 15: Fire Prevention and Control**

**§15-127 Auxiliary Fire Alarm Systems.** The owners and proprietors of all factories, office buildings, warehouses, offices, multiple dwellings, piers, bulkheads, and waterfront structures must provide means of communicating fire alarms to the New York City Fire Department in the manner prescribed by the New York City Fire Commissioner.

The fire protection system installed for the Project will include automatic fire detection and alarm systems directly wired to the New York City Fire Department so that emergency personnel will be dispatched immediately, in the manner prescribed by the Fire Commissioner.

## **Title 16: Sanitation**

**§16-119 Dumping prohibited.** It is illegal for any person to suffer or permit any dirt, sand, gravel, clay, loam, stone, rocks, rubble, building rubbish, household waste or any other organic or inorganic material or thing to be dumped, deposited, or otherwise disposed of in or upon any street, park, lot, public place or any other publicly or privately owned area.

All waste and spoils generated during the construction and operation of this facility will be removed from the site by a licensed hauler and disposed of in an appropriate place. The maximum generation of material leaving the site will be during construction, primarily from the removal of rock and soil associated with tunnel excavation. The primary means of removal is anticipated to be by barge. TGE will comply with this provision.

**§16-120 Receptacles for the removal of waste material.** The owner, lessee, agent, occupant or any other person who controls or maintains a building must provide separate receptacles for incinerator residue and ashes, solid waste, and liquid waste. These receptacles should be of sufficient size to contain all of the wastes generated by a facility in 72 hours, and should be made of metal or another material of acceptable grade and type as decided by the Departments of Sanitation, Health, and Housing Preservation. Metal containers should be fitted with tight-fitting metal covers, and receptacles for liquid waste must be constructed to prevent leaking.

The Project will separate liquid waste, hazardous waste, and non-hazardous solid waste. All waste receptacles will be designed and maintained to be fully compliant with this section.

**§16-123 Removal of snow, ice and dirt from sidewalks; property owner's duties.** The owner, lessee, agent, occupant, or any other person who controls or maintains a property abutting a street with a paved sidewalk is responsible for cleaning any snow, ice, dirt, or other material that

may fall on this sidewalk within four hours of when it appears (not including the time from 9 pm to 7 am).

The Project will comply with this requirement by continuously monitoring and maintaining the sidewalks along TGE's frontage on North 12<sup>th</sup> Street and Kent Avenue.

## **Title 19: Transportation**

**§19-102 Unlawful use or opening of street.** No person shall remove, open, excavate in, or otherwise disturb the pavement of any public street so as to obstruct travel therein without a permit from the Commissioner of the Department of Transportation. The excavation or use must be carried out in accordance with this subsection and with section 24-521 of the Administrative Code, which states that public service corporations must be notified if any sewer, culvert, water main, or pipe is to be constructed or altered in a street under which water pipes, sewer pipes, and other conduits laid by the public service corporation are located.

The Project has been designed to minimize street openings, but some construction within public streets will occur. Specifically, the Project would involve the following *temporary* work in streets and/or occupancy of a street by construction vehicles:

- North 12<sup>th</sup> Street between Kent Avenue and East River, for the purpose of construction vehicles, cranes, etc.
- If necessary, a portion of the Kent Avenue frontage (with adequate provisions for traffic flow and following coordination with NYC DOT).
- It is expected that interconnections for the Project will be constructed by utility companies that have franchise rights for street openings, as follows:
- Con Edison electric interconnection loop into Project site from existing cables underneath [redacted];
- KeySpan gas interconnection, from a point along the existing KeySpan pipeline located at [redacted].
- Water infrastructure between MTA subways system dewatering deep wells and the Project site.
- Manhattan terminus of steam interconnection may require a street opening in the vicinity of East River Station.

TGE will obtain all necessary permits and will alert all public service corporations that may be affected, with respect to all activities under TGE's direct purview. It is anticipated that all utility companies will similarly follow this provision of the Administrative Code regarding the Project

interconnections. Note also the provisions of the NYC Charter, §86. Consent for all TGE activities in public streets will be obtained pursuant to this provisions, as well as §19-146, from the New York City DOT.

**§19-107 Temporary closing of streets.** It is unlawful to close any street, or portion thereof, to pedestrian or vehicular traffic without a permit from the Commissioner of Transportation.

No permanent street closures are expected. However, during Project construction, North 12<sup>th</sup> Street and portions of the Kent Avenue sidewalk will be occupied temporarily for safety reasons, which is expected to require diversion of pedestrian traffic to the east side of Kent Avenue and limits on both pedestrian and vehicular traffic along North 12<sup>th</sup> Street. Consent for this activity will be obtained pursuant to §19-102 and §19-121 from the New York City DOT.

**§19-109 Protection at work site.** Any person who removes, opens, excavates in, or otherwise disturbs the pavement of any part of a public street so as to obstruct travel therein must provide barriers, shoring, lighting, and other protective measures in accordance with the rules of the Department of Transportation to prevent danger to persons or property. Legible signs should be displayed at the site detailing the permittee, the names of the contractors, and the person for whom the work is being done. These signs and protective barriers shall be maintained in accordance with these rules until the work is completed or the danger removed.

Where such excavation is required, the TGE will comply with all of these requirements. It is furthermore expected that utility companies building Project interconnections will likewise comply with these requirements, which are part of standard practice.

**§19-111 Curbs.** All curbs constructed for the support of sidewalks should be of the material or materials, dimensions, and construction as required by the Department of Transportation.

Any sidewalks created as a part of Project construction will comply with these requirements by coordinating with the appropriate New York City DOT personnel at the time of curb reconstruction. For Project interconnections, it is expected that utility companies building those interconnections will likewise comply fully.

**§19-112 Ramps on curbs.** All curbs constructed at street intersection corners or pedestrian crosswalks will include two ramps at every street intersection corner and one at every pedestrian crosswalk.

Any curbs created or reconstructed as a part of the Project will comply with these requirements.

**§19-113 Construction generally.** Streets of twenty-two feet in width and upward shall have sidewalks on each side thereof. The materials and construction of streets, including the width of the sidewalk thereon, shall fully conform to department specifications for such work.

North 12<sup>th</sup> Street, Kent Avenue and most (if not all) streets in which Project interconnections will be built are wider than 22 feet and presently have sidewalks. DOT specifications for street and sidewalk reconstruction will be required for TGE's contractors. It is expected that utility companies will follow these specifications also. Thus, there will be full compliance.

**§19-121 Construction and excavation sites.** No person may obstruct, or cause the obstruction of, any portion of a street with construction equipment or materials unless a permit has been obtained from the Commissioner of the Department of Transportation. Sidewalks, gutters, crosswalks, and driveways shall be kept clear and unobstructed, except as permitted by the Commissioner of the DOT. Any construction equipment or material stored on a street must be clearly marked with reflectors, high-intensity fluorescent paint or other markings that produce a warning glow when struck by the headlights of vehicles or other sources of illumination. The street under which the construction material will be located must be protected by shields, wood planking, or other covering as determined by the Commissioner.

Construction of the Project may require portions of some streets to be temporarily blocked by construction materials and equipment. TGE and/or the applicable utility company will obtain all necessary permits (including any commercial refuse container permits otherwise required under §19-123) from the New York City DOT. Any materials and equipment on a public street will be clearly marked, and the street will be sufficiently shielded from any damage.

**§19-122 Removal of debris.** Any person other than the commissioner of environmental protection or the commissioner of design and construction, who may hereafter pave or cause to be paved any street, shall remove the sand, dirt, rubbish or debris from such street and every part thereof, within seven days after the pavement shall have been completed.

TGE will comply with this requirement through diligent construction practices. It is furthermore expected that utility companies building Project interconnections will likewise comply with this requirement, which is part of standard practice.

**§19-123 Commercial refuse containers.** Commercial refuse containers may be placed temporarily on the street for such purposes and in such manner as the commissioner shall prescribe. Such containers shall not be used for the deposit of putrescible waste. The name and

address of the owner of the container and the permit number shall be posted on the container in the manner provided in the rules of the department. The container shall be painted with a phosphorescent substance, in a manner to be set forth in the rules of the department, so that the dimensions thereof shall be clearly discernible at night. The street under such container shall be shielded by wooden planking, skids or other protective covering approved by the commissioner.

TGE will comply with this requirement by obtaining a permit pursuant to §19-121 and observing all the limitations on such containers described in §19-123. It is furthermore expected that utility companies building Project interconnections will comply with this requirement, which is part of standard practice, by obtaining a permit under either of these provisions.

**§19-137 Land contour work<sup>5</sup>.** No person may perform, cause, permit, or procure any land contour work without a written permit from the Commissioner of the Department of Transportation unless the land contour work is being done in conjunction with the erection of one or more buildings or structures, is located entirely within the lot in which these buildings or structures will be located, and is specifically authorized in the Department of Buildings permit for the construction of these edifices. The land contour work must not interfere with the existing drainage of the site unless a substitute is provided that is acceptable to the commissioners of the Departments of Transportation, Environmental Protection, and Health. Watercourses, conduits, and other means of removing surface water and draining water from the site shall not be obstructed in ways that will inhibit water drainage or cause the impoundment of surface water either on or off the site. All fill material must consist of inert, inorganic matter unless specifically permitted by the Commissioner of the DOT.

At present, storm water drainage from the site is discharged under a State Pollutant Discharge Elimination System (SPDES) permit immediately to surface waters. Similarly, after Project construction, all site-generated storm water will be drained to avoid the sewer treatment system, being discharged via a SPDES permit to adjacent surface waters or to a NYCDEP interceptor relief sewer that discharges to adjacent surface waters. All fill will consist only of inert, inorganic material. The Project site will be elevated, at least in certain areas, so that it lies above the 100-year flood plain. Because this requires elevation changes adjacent to the site's frontage, a permit from the New York City DOT will be needed pursuant to this provision.

**§19-139 Excavations for private purposes.** The person by whom or for whose benefit the excavation of a street will be completed must notify public service corporations with pipes, mains, or conduits under the street at least 48 hours before the commencement of the excavation.

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<sup>5</sup> Land contour work is defined as clearing, grubbing, grating, filling, or excavating vacant lots or other land areas (New York City Administrative Code §19-137).

The person must, at his or her own expense, protect these pipes, mains, and conduits from being damaged and replace them if broken or otherwise damaged during the excavation.

All public service corporations that will be potentially affected by Project-related construction will be notified. Every effort will be made to protect existing pipes, water mains, and conduits, and should they be damaged, they will be replaced by TGE and/or the utility company responsible for construction of a Project interconnection.

**§19-142 Workers on excavations.** Any person using or opening a street must use only competent workers, skilled in the work required of them, and must pay these workers the prevailing union wage.

TGE will employ only skilled workers and will pay them appropriately in accordance with this section. The same is standard practice for utility companies that will be responsible for building Project interconnections.

**§19-146 Prevention of disturbances of street surfaces.** Without a permit from the Commissioner of the DOT, it is unlawful for any person to raise, fill in, or cause to be raised or filled in, any public street. A permit is also required of those who take up, remove, or carry away any asphalt, concrete, turf, sand, gravel, or earth from any part of a street, or cause the removal of these materials.

See the discussion relating to §19-102 above. Consent for all TGE activities in public streets will be obtained from the New York City DOT, pursuant to both §19-102 and §19-146. It is also expected that all utility companies will obtain all necessary permits for construction of Project interconnections.

**§19-147 Replacement of pavement and maintenance of street hardware.** Any person who causes the opening of a street must restore the sidewalk, curb, gutter, and pavement to its proper condition. All street hardware, such as utility maintenance hole covers and castings, must also be maintained.

TGE will restore all opened streets to their proper condition after construction is finished. All street hardware will be maintained, and any damaged hardware will be replaced at the expense of TGE. Similarly, it is expected that utility companies building Project interconnections will follow these requirements, which are a part of standard practice.

**§19-152 Duties and obligations of property owner with respect to sidewalks and lots.** The owner of any real property, at his or her own cost and expense, shall install, construct, repave, reconstruct and repair the sidewalk flags in front of or abutting such property, including but not limited to the intersection quadrant for corner property, and shall fence any vacant lot or lots, fill any sunken lot or lots and/or cut down any raised lots comprising part or all of such property whenever the commissioner of the department shall so order or direct. (Note: subsequent language of this provision circumscribes the conditions under which such a directive may or may not be issued. The goal is to prevent any hazards to the public.)

TGE will restore all streets and sidewalks to DOT specifications.

## **Title 22: Economic Affairs**

**§22-112 Navigable waters; fouling; obstructing.** No person is permitted to place, discharge or deposit any piles, driftwood, refuse, sand, mud, dredging, or acid into the river unless under the supervision of the United States supervisor of the harbor.

The Project's very limited activities within water are described relative to §22-116 below. All such activity is subject to United States Army Corps of Engineers permitting. Compliance with Federal requirements will ensure full compliance with this provision.

**§22-116 Improvement of water front property; permit required.** A permit must be obtained from the Commissioner of the Department of Ports and Trade<sup>6</sup> before: (i) any construction on waterfront property when such property is used in conjunction with, and in furtherance of, waterfront commerce and/or navigation, and (ii) any piles are driven on, or any construction, repairs, filling-in, removal, dredging, or demolitions completed on, any other waterfront property. Waterfront property is property adjacent to tidal waters extending "to the property line of the first adverse owner".<sup>7</sup>

The Project site is on the waterfront, and therefore the building permits program will include obtaining the necessary authorization from DBS. Section 3.8 outlines the waterfront structures that the Project will require.

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<sup>6</sup> This program has been transferred to the Department of Business Services.

<sup>7</sup> Administrative Code, §1-112.

## Title 24: Environmental Protection and Utilities

### Chapter 1: Air Pollution Control

**§24-109 Registrations generally.** The following actions require registration with the Department of Environmental Protection: (i) the spraying of insulating material on any building or structure during its construction, alteration, or repair; (ii) the demolition of any building or structure, except as exempted in this section; and (iii) the installation, alteration, operation, or use of fuel burning equipment as required by this section (including equipment rated at more than 0.35 mmBtu/hr but less than 2.8 mmBtu/hr if using certain fuels, including gasoline and number 2 oil). In addition, the Commissioner of Environmental Protection may order the registration of any other emissions sources except those used in vehicles or one- and two family dwellings.

TGE expects that registrations will be made for the following: demolition of existing buildings on the site; spraying of insulating material during construction; and registration of an emergency backup firewater pump with a heat input of approximately 1 mmBtu/hr. Such registration will be subject to the jurisdiction of the Siting Board with respect to municipal permits, as established in prior Board decisions, and will only be made to the degree consistent with the requirements of the New York State Department of Environmental Conservation.

**§24-120 et seq. Installation and alteration, permit required.** A permit is required before the installation or alteration of any equipment or apparatus used in commercial and industrial activity, including non-exempt fuel oil burning equipment. Exemptions are provided in **§24-121**, and include HVAC systems, vents for oil tanks and other types of storage tanks, vents for sanitary and storm sewers, steam vents/safety valves, stationary combustion equipment rated at less than 2.8 mmBtu/hr and using certain fuels (including gasoline and number 2 oil). An operating certificate must be obtained from the New York City Department of Environmental Protection before non-exempt industrial and commercial equipment can be operated or used. A separate application is required of each unit of equipment and apparatus.

The following stationary air emission sources exceed the minimum heat input thresholds for equipment that requires a permit:

<b>Source</b>	<b>Quantity</b>	<b>Heat input per unit</b>
Combustion turbines	4	1.3 – 2.2 BBtu/hr
Auxiliary boilers	2	~700 mmBtu/hr
Emergency generator	1	~30 mmBtu/hr

All sources have a common emission point (a single multi-flue exhaust building). The permit(s) will be obtained from the New York City DEP, subject to the jurisdiction of the Siting Board with respect to municipal permits, as established in prior Board decisions, and only to the degree consistent with the requirements of the New York State Department of Environmental Conservation.

**§24-141 Emission of air contaminant (including odorous air containment) or water vapor; detriment to person, property, or plant life.** No person shall cause or permit the emission of any air contaminant or water vapor if the emission causes or could cause harm to the health, safety, welfare, or comfort to any person; injury to any plant or animal life; or damage to property or business.

The operation of TGE's facility will not adversely affect human, plant, or animal life, and will not damage any property or business. As described in the *Air Quality Permit Application* submitted to the New York State DEC and circulated to New York City DEP, the Project will not contravene New York and National ambient air quality standards (NYAQS and NAAQS) or the screening criteria in US EPA's *Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals*.<sup>8</sup> Further demonstration of the Project's compliance with this requirement is made through TGE's "cumulative air impact analysis" (CAIA) conducted under the auspices of the New York City DEP and submitted in Attachment X-2. In Section 4, it is shown that no odors will be emitted.. Harm from water vapor is not an issue because the Project uses no evaporative cooling and thus avoids potential fogging or icing impacts.

**§24-142 Emission of air contaminant; standard smoke chart.** No person shall cause the emission of an air contaminant of a density that appears as dark or darker than number two on the standard smoke chart, or which obscures vision of an equal or greater amount than smoke of a number two density on the standard smoke chart at the point of emission. Emissions of greater density than number one on the chart, or emissions that obscure vision more than smoke of number one density, are prohibited if the emission continues for more than two minutes in the aggregate of any sixty-minute period.

The Project will fully comply with this provision. Modern combustion technology and clean fuels generally ensure that smoke and opacity are not a problem. Specifically, New York State requirements under Subpart 227-1.3 of Title 6 of the New York Code of Rules and Regulations (6 NYCRR) are more stringent than §24-142, and thus compliance with state law ensures compliance with this provision of local law.

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<sup>8</sup> See *Air Quality Permit Application*, Sections 7.5 and 7.6.1.

**§24-144 Emission of air contaminant; sulfur compounds; volume standard.** No person shall allow the emission of air contaminants from equipment used in a manufacturing process if the contaminant contains sulfur compounds of more than 500 parts per million of undiluted process emissions. It is illegal to emit an air contaminant from a boiler with a capacity of 500 million BTU per hour if the contaminant has a sulfur dioxide content of more than 100 parts per million by volume of undiluted emissions, measured at ten percent excess air.

The Project will comply with all of these sulfur emissions standards. As presented in the *Air Quality Permit Application* (Table 1-1), maximum sulfur dioxide emissions will be 0.203 lb/mmBtu, or approximately 7 ppm at 10% O<sub>2</sub>, well under both limits.<sup>9</sup>

**§24-145 Emission of particulate matter from refuse-burning equipment, fuel-burning equipment; weight-rate standard.** The permissible emissions of particulate matter<sup>10</sup> for fuel burning equipment with a capacity rating of more than 10 mmBtu/hr will be determined by the dry basis measurement of the equipment capacity rating as set out in Figure 3 of §24-153 of the New York City Administrative Code. The formula cited there is as follows:  $E = 0.6575 * P^{0.7841}$ , where E is emission limit in lb/hr and P is the heat input in mmBtu/hr. For equipment less than 10 mmBtu/hr, the limit is 0.4 lb/mmBtu.

The resulting emission limits, on the basis of the cited chart are compared to the proposed emission limits from Table 1-1 of the *Air Quality Permit Application*. Thus, the Project will comply with New York City’s particulate matter emission limits from combustion sources.

Source	Heat input mmBtu/hr	NYC Limit (lb/hr)	Equivalent Limit (lb/mmBtu)	TGE Emission Limit (lb/mmBtu)
Turbines - gas	2168	271.5	0.125	0.007
Turbines - oil	2096	264.4	0.126	0.040
Aux. boilers - gas	718	114.1	0.159	0.002
Aux. boilers - oil	686	110.1	0.160	0.016
Emergency generator	30	9.4	0.32	0.10
Emergency fire pump	1	NA	0.40	0.31

<sup>9</sup> Calculated as follows: 655 ppm/(lb/mmBtu) at 0% O<sub>2</sub>, x ((20.9-10)/20.9), where 10 is derived from reference of 10% O<sub>2</sub> x 0.0203 lb/mmBtu.

<sup>10</sup> For purposes of the Air Pollution Control Code, particulate matter includes a gas or vapor which becomes a solid or liquid at specified atmospheric conditions (§24-104(38)).

**§24-146 Preventing particulate matter from becoming airborne; spraying of insulating material and demolition regulated.** Particulate matter must not be handled, transported, or stored without taking the proper precautions ordered by the Commissioner of Environmental Protection to prevent particulate matter from becoming airborne. No person shall cause or permit the construction of a building and its appurtenances or the construction, alteration, or repair of a road without taking proper precautions to ensure particulate matter does not become airborne. Proper procedures, as outlined in this section, must be followed when installing insulation or demolishing buildings and other structures.

The Project will comply with all of these requirements. Skilled demolition and construction personnel will be employed in order to prevent particulate matter from becoming airborne during the construction of the Project. All demolition will be carried out in accordance with the requirements of this section and will employ appropriate wetting procedures and methods of transporting debris.

**§2 4-146.1 Asbestos work.** This provision is the enabling statute for the New York City DEP's comprehensive regulatory program for asbestos. Requirements include: (1) asbestos handling qualifications and certification; (2) asbestos inspection reporting; (3) asbestos removal plan. The disturbance of asbestos-containing materials (ACM) is further regulated by New York City DEP's Asbestos Control Program as promulgated 15 RCNY 1.

In addition to New York City DEP, the New York State Department of Labor and U.S. Environmental Protection Agency regulate the handling and disposal of ACM. The requirement for pre-project notifications to these regulatory agencies is based upon the quantity of ACM to be disturbed and the procedures to be employed. These regulations require that a survey for suspect asbestos-containing materials (ACM) be performed prior to any alteration or demolition activities. Confirmed or assumed ACM shall be removed by a licensed Asbestos Abatement Contractor. The York City DEP and New York State Department of Labor also require air monitoring prior to, during, and following abatement activities be performed by an independent third party.

The New York State Department of Labor issues licenses and certificates to contractors and consultants performing asbestos related activities. Additionally, personnel performing asbestos abatement or survey related activities must be licensed by the New York City DEP.

**Demolition of existing facilities at the Project site may require asbestos removal.** In such cases, it is expected that the demolition contractor will fully comply with the NYCDEP regulatory requirements for asbestos removal. Certified demolition and asbestos removal

personnel will be employed. Appropriate forms will be filed with NYCDEP, and an asbestos removal plan will be presented for approval.

**§24-147 Emission of nitrogen oxides.** No air contaminants of more than 100 parts per million nitrogen oxides by volume of undiluted emissions at 10% excess air may be emitted from a boiler with a capacity greater than or equal to five hundred million Btu per hour.

The Project includes two boilers with a heat input exceeding 500 mmBtu/hr per boiler. Maximum NO<sub>x</sub> emissions are 2.0 ppm at 15% O<sub>2</sub> for natural gas and 6.0 ppm for light distillate oil. Converting to 10% O<sub>2</sub>, the maximum emission will be less than 3.7 ppm (natural gas) and 11.1 ppm (light distillate oil). Both values are well under New York City's 100 ppm limit for nitrogen oxide emissions from boilers.

**§24-153 Emission of air contaminants; environmental ratings.** No equipment shall emit any air contaminant in excess of the permissible emissions rates outlined in this section.

The Project carries an environmental rating of "D" ("A" being the most adverse and "D" -- the least adverse). This rating applies to sources "where, in view of properties and concentrations of the emissions, isolated conditions, stack heights, and other factors, it can be clearly demonstrated that discharge of [a] contaminant will not result in measurable or observable effects on receptors and not add to an existing or predictable atmospheric burden of that contaminant which would reasonably be expected to cause adverse effects." This demonstration has been completed for the Project in Section 7 of TGE's *Air Quality Permit Application*. The only applicable emission limitation pursuant to this provision is the particulate emission limit described with respect to §24-145 above.

**§24-155 Maintenance of equipment and apparatus.** All equipment and apparatus should be kept in good operating order by conducting regular inspections and cleanings and making repairs promptly.

**By complying with similar provisions that will be enforceable under state and federal law, the Project will ensure compliance with this provision of local law.**

**§24-156 Use of equipment without using apparatus prohibited.** No person may use equipment fitted with a required air pollution control apparatus without the apparatus. For equipment designed to burn more than one type of fuel, the apparatus that corresponds to the fuel being burned must be used.

In TGE's detailed BACT/LAER analysis, submitted in Section 4 of the *Air Quality Permit Application*, the principle of selecting air emission control technology on the basis of the primary fuel was used. All specified emission controls will be used as a requirement of permits that will be enforceable under state and federal law, thus ensuring that the Project will comply with this provision of local law.

**§24-160 Use of air contaminant recorder; boilers.** No owner of a boiler with a capacity of five hundred million Btu per hour or more shall operate it without the installation and operation of an air contaminant recorder.

The Project includes two boilers with a heat input exceeding 500 mmBtu/hr per boiler. In accordance with state regulations (NO<sub>x</sub> Budget at 6 NYCRR 204 and NO<sub>x</sub> RACT at 6 NYCRR 227-2.6), a continuous emissions monitoring system (CEMS) will be installed, thus ensuring that the Project will comply with this provision of local law.

**§24-161 Use of fuel burning equipment using residual fuel oil and use of refuse burning equipment; operation and supervision by trained person.** No person may use residual fuel oil burning equipment except under the supervision of a person who has successfully completed a course in air pollution control approved by the Commissioner of Environmental Protection.

The Project will not utilize any residual oil combustion process. The only oil used for the TGE facility will be very low sulfur light distillate oil. Thus, the Project will be in compliance with this provision.

**§24-163 Operation of motor vehicle; idling of engine restricted.** No person shall cause or permit the engine of a motor vehicle, other than a legally authorized emergency motor vehicle, to idle for longer than three minutes, unless the engine is used to operate a loading, unloading or processing device.

Restrictions against idling will be placed into TGE's contract documents with construction personnel. On-site construction supervisors will be responsible for the observance of this provision. Thus, TGE will comply with this provision.

**§24-165(e) Use of contaminant recorder; recording of time, duration, concentration and density of air contaminant.** Whenever the use of an air contaminant recorder is required by this code, the air contaminant recorder must (1) continuously produce a record of the time, duration, concentration and density of an air contaminant of a density which appears darker than number one on the standard smoke chart, or of an opacity which obscures vision to a degree greater than

number one; and (2) continuously produce a record of the time, duration and concentration of sulfur dioxide and nitrogen oxides by volume and particulate matter by weight.

The continuous emissions monitoring system (CEMS) required by state and federal law will include both NO<sub>x</sub> and opacity monitoring. Particulate matter and sulfur dioxide will also be monitored as prescribed by NYSDEC pursuant to state and federal law (stack testing for filterable and condensable particulate matter, fuel sampling for sulfur dioxide). Through these protocols NYSDEC will enforce emission limits more stringent than those found in the NYC Code. Thus, there will be compliance with the requirements of this provision.

**§24-168 Use of proper fuel in fuel burning equipment.** The proper kind and grade of fuel must be used in all fuel burning equipment.

Project fuels will be specified in TGE's air emissions permit issued pursuant to state and federal law. Thus, TGE will comply with this requirement.

**§24-169 Sulfur content of fuel restricted.** No person, without a sulfur exemption certificate, shall cause the use of fuel oil grade number two (as defined by the American society for testing and materials) that contains more than 0.2 percent sulfur by weight or residual fuel oil or fuel oil grade number four with more than 0.3 percent sulfur by weight.

The backup fuel for the Project will be a very low sulfur (0.02% by weight) light distillate oil. Thus, the Project will comply with this requirement. No sulfur exemption certificates (which are further described in §24-171) will be necessary.

**§24-170 Reporting of fuel supplies.** The owner of any boiler with a capacity of five hundred million Btu per hour or more shall report fuel supply information to the commissioner on or before the first day of each month.

TGE will submit monthly reports regarding fuel consumption by the Project's auxiliary boilers to NYCDEP, and thus will comply with this requirement.

**§24-176 Fuel information ticket required for shipping or delivery of fuel into New York City.** No person other than a dealer in solid fuel shall cause or permit the shipment or delivery of fuel into New York City for use in the city until reporting the delivery to the Department of Environmental Protection on a form known as a fuel information ticket.

Fuel delivery to the Project site will primarily occur by natural gas pipeline. Additional backup fuel (light distillate oil) will be delivered by pipeline and/or barge. Shippers will be responsible for submitting fuel information tickets as appropriate.

## **Chapter 2: Noise Control**

**§24-208 Registrations.** (a) The commissioner may require the written registration of air compressors, paving breakers, refuse compacting vehicles and rapid transit railroads. A period of sixty days shall be allowed for the filing of such registration. However, in cases of emergency, the commissioner may designate a shorter period of time.

Registration of any pavement breakers and other construction equipment will be coordinated with the New York City DEP. During the detailed design and installation phases, if DEP requires the registration of any specific noise-producing elements, this too will be coordinated.

**§24-224 Construction activities.** Construction shall only be allowed on weekdays between the hours of 7 AM and 6 PM unless the project is granted a variance from the city due to pressing public need.

The construction phase of the Project will be planned so as to comply with this requirement. Specifically, between the hours of 6:00 PM and 7:00 AM, TGE will not conduct pile driving, jack hammering or demolition; will not use bulldozers, excavators or dump trucks for site excavation, remediation or regrading; will not use trucks to load or unload materials that could make excessive noise; and will not conduct scheduled steam or air blows. Any barge deliveries that must be completed without interruption for safety reasons will maximize the use of daytime hours before any night-time barge unloading or loading takes place. Indoor construction activities will be conducted during the mechanical piping and electrical installation phases, within the interior of buildings, once the exterior walls and roof are substantially complete. These practices have been accepted in several in-City Article X proceedings as compliant with the NYC Noise Code.

**§24-225 Construction devices.** No construction devices may be operated so as to make an unreasonable noise.

The Project will comply with this requirement through the use of mufflers and good noise control practices for construction equipment.

**§24-226 Containers and construction material.** Construction materials and containers must be handled and transported in a way that will not create an unreasonable noise.

The Project will comply with this requirement through good noise control practices and, when necessary, through the timing of deliveries, as described for §24-224 above.

**§24-227 Exhausts.** No person shall emit the exhaust from any device, including steam and turbine engines, so as to create an unreasonable noise.

The Project will conform to this requirement through good noise control practices, timing of scheduled steam releases and, when necessary, through use of mufflers.

**§24-229 Noise sensitive zones.** Noise sensitive zones can be established by the Commissioner of Environmental Protection and the Board of Health to set forth special noise regulations for a selected geographical area. These noise sensitive zones are in existence for a period of sixty days, at which point they can be renewed. During this time, it is illegal for any person to cause an “unreasonable noise” in that noise sensitive zone, as defined specifically for that area. Any person may request a hearing should the regulations for a noise sensitive zone cause him or her undue hardship.

Applicable noise zones for the area surrounding the proposed site are as described in §24-243 below, and the Project will comply with applicable limits. Any temporary noise-sensitive zones would be addressed depending upon the specific circumstances and the special limits established for that purpose.

**§24-232 Motor vehicles.** Motor vehicles must not be used in any way to exceed the appropriate sound level outlined in this section. The sound levels are determined based on the weight and type of the vehicle, the speed of the vehicle, and the location of the vehicle.

Motor vehicles used during the construction and operation of the TGE facility will be required to conform to these requirements.

**§24-241 Paving breakers.** No person shall operate or cause to be operated a paving breaker that, when operated, produces a maximum sound level exceeding 95 dBA, when measured at a distance of one meter from a face of such paving breaker. (For non-pneumatic, non-electric pavement breakers manufacture prior to 1973, a muffler providing a dynamic insertion loss of 5 dBA is required.)

Paving breakers used during the construction of the TGE facility will be required to conform to these requirements.

**§24-243 Ambient noise quality zones, criteria and standards.** All uses must conform to the requirements of the ambient noise quality zones as set out in this section, except as exempted therein. No action in a more permissive zone may cause the ambient noise levels in another zone to be exceeded. The ambient noise level ( $L_{EQ}$ ) requirements are as follows:

Ambient noise zone	Daytime Standard (7 AM-10 PM)	Nighttime Standard (10 PM-7 AM)
N-1 -- Low-density residential: zones R-1, R-2, R-3	60 dBA	50 dBA
N-2 -- High-density residential land use zones	65 dBA	55 dBA
N-3 -- Commercial and manufacturing land use zones	70 dBA	70 dBA

Exceptions from the applicability of these standards include: construction activities between the hours of 7 AM and 6 PM (per §24-224), devices such as air compressors, paving breakers, etc. (for which specific limits exist under the Noise Code), and buildings for which a building or occupancy permit specifies the noise performance standards under the zoning resolution.

The Project site is in a manufacturing zone, and consequently falls in an N-3 Ambient Noise Quality Zone. Based on preliminary modeling, the Project is expected to make  $L_{EQ}$  noise contributions that are more than 15 dBA below the applicable N-2 and N-3 limits. There are no N-1 zones within the vicinity of the proposed site. The nearest such areas are several miles away, in the vicinity of Prospect Park (Brooklyn) and Highland Park (Brooklyn and Queens). In summary, the Project will comply with the New York City noise code limits.

**§24-245 Operating certificates and tunneling permits.** No person shall use any device (such as paving breakers, air compressors, etc.) for which an operating certificate is required by the Commissioner of Environmental Protection without that operating certificate. No person shall engage in tunneling without having obtained a tunneling permit, except as exempted by 15 RCNY §7-01 (*e.g.*, cut-and-cover utility work). A separate permit is required for each shaft of a tunnel. No blasting operations, even when licensed as part of tunneling activities, may take place except between the hours of 7 AM to 7 PM unless a permit has been obtained from the Fire Department pursuant to §27-4039.

During construction, as outlined with respect to §24-208 above, registration and/or operating certificates will be obtained for all specialized equipment if and as required by the New York City DEP. For tunneling, a permit will be obtained for associated equipment that produces noise

at the surface. If the Noise Code limits during shaft construction cannot be met, shaft construction will be limited to the hours of 7 AM to 6 PM pursuant to §24-224.

**§24-248 Standards for granting operating certificates and tunneling permits.** All tunnel construction devices, including construction devices, storage bins and hoppers, must incorporate advances in the art of noise control developed for the kind and level of noise emitted by the device and must be without causing a violation of the Noise Code. Noise controls include appropriate closures around devices and sound deadening linings on storage bins and hoppers. Any motor vehicles employed in such tunneling must be timed and routed to avoid unreasonable noise.

The Project will comply with this requirement by including comprehensive noise control for tunnel construction equipment, with the goal of complying with the Noise Code. The noise control will include physical devices and, as necessary, timing and placement/routing of equipment.

### **Chapter 3: Water Supply**

**§24-308 Opening, tampering with or opening valves of fire hydrants.** It is unlawful for anyone who is not an employee of the Department of Environmental Protection or Fire Department to open, use, operate, or tamper with a fire hydrant without a written permit from the Commissioner of Environmental Protection.

TGE does not expect to open any fire hydrants, except if authorized by the Fire Department during an emergency. All municipal water will be supplied via a metered connection, assuring compliance with this provision.

**§24-309 Connections.** No person may open any street, bore any pipe, or connect to any main or pipe for water supply purposes without the supervision of the NYC Commissioner of Environmental Protection.

It is planned that the only public water supply for the Project will come from the adjacent water main that presently connects to on-site buildings. (See §24-310 for temporary disconnection and reconnection.) The predominant water supply is planned to be from the reuse of non-potable water that is presently discharged to surface marine waters around New York City. Any off-site interconnection for such a water supply will be constructed as a force main. The route will be specified as part of the Project's Article X Certificate. Furthermore, the design will be coordinated with the DEP to ensure that separation requirements are maintained.

**§24-310 Closing of taps before building is demolished.** It shall be unlawful to demolish any building in the city without first having obtained a permit from the department of environmental protection, providing for the withdrawal of existing taps supplying the premises, in the manner specified in the permit.

The Project will require demolition activities, and thus a permit for the withdrawal of existing taps will be obtained as part of the overall construction effort.

#### **Chapter 4: Gas and Electric Lines**

**§24-404 Permits; excavations in street; gas distribution lines; electrical corridors.** No person may take up pavement on any street or excavate to lay down gas distribution lines or electrical corridors underground or to erect poles without the express written consent of the Commissioner of the DEP. It is illegal to string, lay, or maintain any gas distribution lines or electrical corridors above or below the surface of any street without written permission from the DEP.

It is expected that gas and electric interconnections for the Project will be constructed by utility companies that have franchise rights for street openings, as described relative to §19-102 above. Specifically, it is expected that Con Edison will build an electric interconnection loop into Project site from existing cables underneath [redacted] and KeySpan will build the gas interconnection, from a point along the existing KeySpan pipeline located at [redacted]. It is anticipated that both utility companies will comply this provision of the Administrative Code, consistent with current practice.

**§24-405 Permit required.** A permit from the NYC Department of Transportation must be obtained before the installation of any pipes, mains, or conduits for the transmission of electricity, gas, pneumatic power, or steam in any street or public place.

Permits required from the NYC DOT will be obtained as described relative to §19-102 above.

#### **Chapter 5: Drainage and sewer control**

**§24-504 All sewers to be in accordance with general plan.** The construction of any sewer or drain must be constructed in accordance with the general plan for sewerage of the district in which the new sewer or drain will be constructed.

TGE proposes no construction of new public sewers or drains. The only off-site interconnections related to wastewater or drainage would be a sanitary sewer discharge via an on-site connection that exists today and a new force main to be constructed privately and thus governed by §24-507, as described below.

**§24-507 Private sewers and drains.** A permit is required for the construction of any new sewer or drain or connection to any existing sewer or drain in any street by any privately owned entity at its own expense, the terms of which must be agreed upon by this entity.

For drainage, TGE will rely on a SPDES permit for most process as well as storm water discharges, with outfalls directly to surface waters or to the lowest segment of a NYCDEP interceptor relief sewer that flows into the East River. No new private sewer are contemplated.

**§24-509 Construction of sewers.** It is unlawful to make any connection to any sewer or drain without a permit from the Commissioner of Environmental Protection, except when the Department of Buildings has issued such a permit as part of the permitting for a construction or alteration of a structure inside the curb line. The connection must be made in the manner prescribed by the Commissioner of Environmental Protection.

TGE will cause a partial disconnection and subsequent reconnection for sanitary sewerage purposes within or adjacent to the Project site. A permit for all sewer connections will be obtained from the DEP.

**§24-513 Constructors; license and bond.** Only those who have been licensed by the Commissioner of Environmental Protection are authorized to open any sewer or drain for the purposes of making a connection with it.

Any connections to the sewer system will be made by licensed personnel in accordance with this requirement.

**§24-516 Newtown Creek sewers.** All sewers emptying directly or indirectly into Newtown Creek shall be closed and may only be used as tributaries to sewers that do not directly or indirectly empty into Newtown Creek.

No sewers or storm drains from the Project will empty into Newtown Creek. Rather, most process wastewater (demineralization system effluent) will be discharged directly to adjacent surface waters, with only approximately 80,000 gpd of sanitary and industrial wastewater being discharge to the sewer system for treatment. Thus, the Project will not be detrimental to the water quality of the Newtown Creek.

**§24-520 Steam and hot water.** Wastewater may not be discharged into a sewer at a temperature higher than prescribed by the Commissioner of the DEP. It is unlawful to use a connection with or opening into any sewer or drain for the conveyance or discharge of hot water or steam at a temperature above that prescribed by the Commissioner for that sewer, drain, or sewage system.

The Project's industrial wastewater (primarily reject water from water treatment systems, but also including HRSG blowdown) will be discharged via a force main that is not commingled with sanitary wastewater. Furthermore, flows with elevated temperature will be very small, and are therefore expected to comply with temperatures that may be prescribed by DEP. No temperature influent standards, however, are listed in 15 RCNY §19, which regulates sewer use.

**§24-521 Excavations for public works.** Public service corporations must be given written notification 48 hours in advance of the construction or alteration of any sewer, culvert, water main, or pipe in a street under which water pipes, sewer pipes, and other conduits that serve the public service corporation are located.

TGE will notify all public service corporations that may be affected by construction of the Project and its interconnections, at least 48 hours in advance.

**§24-523 Industrial wastes; sewer surcharges.** All sewage, industrial waste, and other wastes emptied into the municipal sewer system must conform to the set of standards set out in this section. The Commissioner of Environmental Protection has the authority to require a permit for some types of industrial wastes (further detailed in 15 RCNY §19).

As part of the Article X application, TGE is submitting a form to NYCDEP relative to the industrial user discharge permit program ([Attachment W](#)).

## Chapter 6: Hazardous Substance Emergencies

**§24-602 et seq. Hazardous substance emergencies.** Emergencies caused by the release or potential release of hazardous substances must be handled by the city in a manner that protects human, animal, and plant life and property. The costs of all recovery efforts must be paid by the party responsible for the emergency as set out in the section. The Commissioner of Environmental Protection may require the implementation of a certain emergency response plan if he or she has reason to believe that a hazardous substance has been spilled or is in danger of spilling into the environment.

The Project will be designed to minimize all potential hazardous substance emergencies. Nevertheless, TGE will prepare an emergency response plan that outlines the steps to be taken in the event of a hazardous substance spill, and this plan is intended to comply with not only federal and state requirements, but also local requirements pursuant to this provision. A preliminary version of the emergency response plan will be included in the Article X Application.

## **Chapter 7: Community Right-to-Know Law**

**§24-702 et seq. Community right-to-know law.** As set out under this section, all individuals and organizations must disclose which hazardous substances or special health hazards will be present at any facility or site for which they are responsible, and describe the handling, storage, and required labeling procedures that will be employed when dealing with these substances and hazards.

TGE will comply with all of the requirements set out in this section by presenting the required information as part of the Project's spill prevention and emergency response planning documents.

## **Title 25: Land Use**

**§25-110. Height, bulk, yard and density regulations.** The city planning commission is empowered to regulate and limit the height and bulk of buildings, to regulate and determine the area of yards, courts and other open spaces and to regulate density of population. The commission may divide the city into districts for this purpose, provided regulation is applied uniformly for each class of buildings throughout each district. Such regulations shall be designed to secure safety from fire and other dangers and to promote the public health and welfare, including, so far as conditions may permit, provisions for adequate light, air and convenience of access. The goal of these regulations is to promote public health, safety and welfare and the most desirable use for which the land of each district may be adapted, to conserve the value of the buildings and to enhance the value of land throughout the city.

The Project will comply with the Zoning Resolution, for which this provision is an enabling statute. Compliance with the Zoning Resolution and other applicable laws and regulations, therefore, will indicate that the Project is consistent with promoting public health, safety and welfare and the most desirable use for which the land of each district may be adapted, the conservation of the value of the buildings and the enhancement of the value of land throughout the city.

**§25-111 Location of trades, industries and specific uses.** The city planning commission is empowered to regulate and restrict the location of trades and industries and the location of buildings designed for specific uses, and may divide the city into districts for this purpose. Such regulations shall be designed to promote the public health, safety and general welfare. Regulations shall reflect reasonable consideration of the character of the district, its peculiar suitability for particular uses, the conservation of property values, and the direction of building development in accord with a well-considered plan.

The Project will comply with the Zoning Resolution, for which this provision is an enabling statute. Compliance with the Zoning Resolution and other applicable laws and regulations, therefore, will indicate that the Project is consistent with promoting public health, safety and general welfare, consistent with the character of the district, its peculiar suitability for particular uses, the conservation of property values, and the direction of building development in accord with a well-considered plan.

**§25-303 Establishment of landmarks and historic districts.** For the purpose of effecting and furthering the protection, preservation, enhancement, perpetuation and use of landmarks, interior landmarks, scenic landmarks and historic districts, the commission shall have power to establish such, after a public hearing.

TGE has consulted with the Landmarks Preservation Commission (LPC) regarding the location of landmarks and historic districts. The Project will not include any alteration or construction of a landmark; nor will it involve developments of property in historic districts. However, appropriate studies will evaluate potential impacts to off-site landmarks.

**§25-305 Regulation of construction, reconstruction, alterations and demolition.**

No person in charge of a landmark or land located in an historic district may alter, reconstruct, demolish or construct or permit work to be performed on any improvement constituting a part of such landmark or district, before acquiring a certificate of no effect on protected architectural features, a certificate of appropriateness or a notice to proceed authorizing such work from the LPC.

Because the Project will not include any alteration or construction of a landmark or the developments of property in historic districts, no CNE or CoA is required from the LPC. However, appropriate studies will evaluate potential impacts to off-site landmarks through ongoing consultation with the LPC.

## **Title 26: Housing and Buildings**

**§26-192 Requirement of license.** All oil-burning equipment must be installed by, or under the supervision of, an individual licensed to do such work.

The Project will use licensed contractors.

**§26-205 et seq. Building Construction.** All construction, demolition, alteration, repair, removal, maintenance, occupancy and use of all new or existing buildings and their associated appurtenances must conform to the applicable regulations of the Administrative Code except when such requirements conflict with, *inter alia*, general city law or the Zoning Resolution. Any person constructing, demolishing, or removing any building must obtain a written permit from the New York City Building Commissioner prior to the commencement of construction as set out in these sections.

The Project will comply with all of the requirements of the Administrative Code except as specified in this section. All necessary building permits will be obtained prior to the start of construction.

**§26-222 Requirement of certificate of occupancy.** No building shall be occupied or used until a certificate of occupancy is issued by the Commissioner of Buildings certifying that the development conforms to the approved plans, the building code, and other applicable laws and regulations.

All necessary occupancy certificates will be obtained prior to building occupancy.

**§26-228 General safety requirements.** All persons engaged in building operations must provide reasonable and adequate safety protection for all persons and property that may be affected by the operations, and must comply with all safety requirements of the Administrative Code and Article 10 of the New York State Labor Law.

The Project must comply with all applicable safety requirements, which will assure compliance with this local law.

**§26-229 Safety requirements during excavation operations.** All excavation operations must comply with the safety standards set out in this section. These requirements include the installation of adequate fencing, sheet piling, bracing, and other supports as may be necessary to protect all people, property, and buildings in the area of excavation.

The Project will comply with the safety requirements by incorporating them into contractor specifications.

**§26-232 Retaining walls.** Where any owner shall maintain his or her property at a level above or below the curb level of the street on which it is situated, the retaining wall required to support the fill or excavation shall be made and maintained at the expense of the owner, and the thickness of the retaining wall shall be built on the property of the owner.

While no retaining walls are planned near the street, TGE will maintain any structures to which this provision may apply, including the rip rap along the Bushwick Inlet.

**§26-252 Sidewalks, sheds, fences, railings, etc.** A permit must be obtained before the construction of any sidewalk, shed, fence, railing, catch platform, footbridge, or an over-the-sidewalk chute.

All necessary sidewalk or similar permits will be obtained prior to their construction.

## **Title 27: Construction and Maintenance**

### **Chapter 1: Building Code**

**§27-118 Alterations involving change in occupancy or use.** If a building or space therein is altered due to a change in occupancy or use, as classified under Subchapter 3 of the Building Code, the entire building must be made to comply with all of the provisions of the Building Code.

The Project will retain only one building (warehouse/office building) and there is no plan to change its occupancy status or use (generally, occupancy classifications D-2, industrial, and E, office). Offices, equipment and warehouse facilities will continue to be used for similar purposes. All other buildings will comply with the building code because they will be new.

**§27-127 et seq. Maintenance requirements.** All buildings must be maintained to be in safe condition at the responsibility and expense of the owner. All service equipment, means of egress, devices, and safeguards must be kept in working order, and the building must comply with all requirements of the Administrative Code.

The Project will be maintained in a safe condition and in good working order.

**§27-130 et seq. General requirements.** All materials, assemblies, forms, methods, machines, devices and service equipment used in construction must conform to the requirements set out in these sections and in other portions of the Administrative Code.

The Project will conform to building code requirements.

**Articles 10 through 18 (§27-147 through §27-190). Building Permits.** No building construction, alteration, demolition, removal, or plumbing work shall commence, nor shall any signs or equipment for this work be constructed, installed, altered, repaired or used, until the proper written permits have been issued by the Commissioner of Buildings. As set out in this section, separate work permits are required for: (i) the construction of new buildings, (ii) the alteration of existing buildings, (iii) all foundation and earthwork, (iv) the demolition and removal of any existing buildings, (v) the installation or alteration of plumbing and plumbing systems including gas piping, (vi) the erection and alteration of signs, (vii) the installation or alteration of service equipment, and (viii) the use and operation of service equipment. These eight categories of building permits are covered by Articles 11 through 18 (§27-156 through §27-190). The applications for these permits must conform to the standards set out in these sections. For each type of building permit, the sections prescribe the specific types of plans that must be submitted. The primary types of plans are architectural, structural and mechanical (as detailed in §27-157). For demolition and earthwork permits, notification of adjoining lot owners and protection of adjoining properties is required (§27-165, 166, 170, 171).

All building permits will be obtained from the Buildings Department prior to construction. The specific types of plans to be submitted will be made a requirement as part of contractor bid packages. Preliminary analysis of Articles 11 through 18 indicates that most of these types of buildings permits will be necessary, as shown below.

<b>Type of building permit</b>	<b>TGE known or possible activity requiring such permit</b>
New Building	All new enclosed structures on the site
Building Alteration	Alterations to warehouse/office building subject to review only if they include activities listed in §27-126
Foundation & Earthwork	Activities following demolition and prior to building erection
Demolition & Removal	Maintenance garage; oil tanks; loading rack; utilities
Plumbing	Permanent plumbing fixtures
Sign	Permanent signs if greater than 6 square feet (Note: all temporary construction signs are exempted)
Equipment work	Fuel-burning equipment and fuel-oil storage; boilers
Equipment use	Fuel-burning equipment and fuel-oil storage; boilers

**§27-195 Notice of commencement of work.** At least 24 hours written notice shall be given to the Commissioner of Buildings before the commencement of any work for which a permit has been issued. If the work requires controlled inspection, those responsible for the controlled inspection shall be given 72 hours advance notice.

The Project will comply with these requirements during construction.

**§27-198.1 Approval of plans and permit applications where an asbestos project is performed.** This section applies to building permits prior to which asbestos removal is required. It states that an asbestos removal plan pursuant to §24-146.1, or an asbestos inspection report, must precede any construction pursuant to a building permit.

TGE anticipates asbestos removal as part of the demolition process, and therefore will comply with this provision by not constructing the Project until approval for asbestos removal of existing buildings is obtained.

**§27-203 Compliance with safety requirements.** All building operations must be conducted in conformance to all safety requirements in the Administrative Code and all other applicable laws, regulations, and orders from the Commissioner of Buildings.

The Project will comply with this section as summarized in below.

**§§27-204 and 27-214 Builder's pavement; new buildings; sidewalk requirements.** No certificate of occupancy or letter of completion shall be issued for any building unless the sidewalk in front of or abutting the building has been installed and paved in the manner and with the materials prescribed by the Department of Transportation, except where exempted by the Commissioner. No permit for the construction or alteration of a building shall be issued until the owner furnishes the DOT with a policy of liability insurance.

Sidewalks will be rebuilt, where necessary, per DOT specifications.

**§27-217 Changes in occupancy or use.** A new certificate of occupancy is required if a change in occupancy or use of a building is inconsistent with the latest certificate of occupancy for that building.

As stated relative to §27-118 above, no change in occupancy classification is planned for the warehouse/office building, which will remain on the site.

**§27-228 et seq. Fire protection plan.** A fire protection plan must be filed with the New York City Department of Buildings by a registered architect or licensed professional engineer for any building classified in occupancy group A, B, C, D, E, or G that is two or more stories high with over twenty thousand gross square feet per floor or a total building floor area of over fifty thousand gross square feet. The plan must include, where applicable, a building description, key plans, and narrative descriptions of safety systems and features as set out in this section. Proof that the plan has been accepted by the Fire Department is also required.

TGE will file a fire protection plan prior to the commencement of operations with the NYC Fire Department in accordance with this section.

**§27-243 Occupancy Group A (High Hazard).** Buildings and spaces shall be classified as high hazard if they involve storing, manufacturing, or processing highly-explosive, highly-combustible or highly-flammable materials. All uses involving gas piping at a pressure of 15 psig or more, regardless of the quantities of gas, shall be considered an occupancy in Group A. Such occupancy classes, and certain other lower hazard occupancy classes described in subsequent subsections of the Building Code, may not be located on the second floor of buildings, or in buildings constructed of wood (“combustible” buildings, or construction group II, as classified in §27-269) if they contain residential occupancy.

The pressure of the gas piping for the Project will be more than 100 psig upon entering the site, and it will be compressed further on site. Consequently, the gas compressor building and the generation (gas turbine) building is a group A occupancy. All storage and use of gas under pressure will be in enclosed non-combustible steel buildings with walls adequate for the occupancy class. The design of these buildings will ensure that adjacent uses are protected (e.g., through the use of appropriate walls, gas monitoring and shutoff valves, as well as through safety practices). The Project will comply not only with fire protection requirements of the Building Code, but will also be required by its insurers to follow National Fire Protection Association recommended practice (*NFPA 850 - Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations*).

**§27-291 Frontage.** At least eight percent of the perimeter a building (but exclusive of accessory buildings) must front directly upon a street or frontage space.

The interior roadway system of the Project has been designed to allow more than 8% coverage for all buildings on site.

**§27-292 Building access.** There must be appropriate Fire Department access, as described in this section, to every story of every building, except for any story of any building that is completely

protected by an automatic sprinkler system. Proper access shall be provided for people with physical disabilities as set out in this section.

Automatic sprinkler systems will be installed in all new spaces at the facility except those containing energized electric conduits, where an appropriate alternative will be used. All publicly accessible spaces will be appropriately accessible to people with physical disabilities. The Project will therefore comply with this section.

**§27-296 Limitations inside fire districts.** No prohibited uses shall be constructed in any fire district.

No attributes of the Project will constitute a prohibited use.

**27-301 et seq. Area limitations.** No building shall be constructed or altered so as to exceed the area limits set in these sections. For sprinklered buildings made of non-combustible material, 1-hour protection is always required. As building area increases, the required fire protection increases, as follows: if area exceeds 10,500 s.f. – 2-hour protection; if area exceeds 14,000 s.f. – 3-hour protection; if area exceeds 17,500 s.f. – 4-hour protection. There is no overall limit on area in this regulation.

The Project will comply with area requirements. By designing the Project with state-of-the-art safety systems, including automatic sprinklers and backup firefighting equipment, TGE will comply with these provisions for each building.

**§27-305 Height limitations of buildings.** No building shall be constructed or altered so as to exceed the height limits described in these sections. For sprinklered buildings made of non-combustible material, 1-hour protection is always required. As building height increases, the required fire protection increases, as follows: if height exceeds 65 feet – 3-hour protection; if area exceeds 75 feet – 4-hour protection. There is no overall limit on height in this regulation.

The Project will comply with height requirements. By designing the Project with state-of-the-art safety systems, including automatic sprinklers and backup firefighting equipment, TGE will comply with these provisions for each building.

**§27-307 Permissible projections beyond the street line.** No part of a new building may extend over the street line unless listed specifically in this chapter.

Any construction extending over the street line would be for architectural purposes (e.g., awnings, display windows along Kent Avenue). A permit for any such projections will be obtained.

**§27-316 Special Flood Hazard Areas.** Uses and occupancies within special flood hazard areas must meet the special requirements for the permitting, construction, and use or operation of these facilities set out in this section. These restrictions include: (i) permissible uses and measures to reduce flood loss must take precedence over other conflicting laws; (ii) the construction of any major repairs and alterations must use materials, equipment, and practices to minimize flood damage as described in these sections; (iii) all new and proposed construction must use materials, equipment, and practices to prevent flood damage as described in these sections; (iv) any encroachment in the floodway, including new construction, filling, or any other development, that would result in the increase of flood waters into the community is prohibited; (v) new or replacement water or sewer supply lines must be located and designed so as to prevent the infiltration of flood waters into the system or the discharge of water in the system into flood waters; and (vi) a special permit for construction in a flood hazard area must be completed in accordance with the standards set out in §27-316.

The Project will be designed, and will be constructed and operated, in a manner that will prevent flood and water damage to the facilities and materials as well as any effect on the water quality of the adjacent surface waters. The Project site grade will be elevated in the western portions so that the site lies outside the 100-year floodplain of the East River thereby reducing possible water damage to the facility. Because the East River is not a constrained floodway, such filling will not cause the flood levels to rise in other parts of the community. All sewer connections and water mains will be sited in accordance with the standards in this section. A permit for special flood hazard area construction will be obtained.

**§27-318 et seq. Fire protection construction requirements.** These sections set standards for the use and assembly of all materials of construction with respect to fire resistance, flame spread resistance, and smoke and toxic fume limitation as well the use and location of fire protective and other integral structural elements of buildings. These include fire protection test procedures, fire resistance requirements, and other requirements to prevent exterior and interior fire spread.

The Project will be designed comply to all of the applicable requirements outlined in these sections.

**27-354 et seq. Means of egress.** These sections control the design, control, protection, location, arrangement, and maintenance of required exit facilities in all buildings erected, altered, changed, or used after December 6, 1968. The standards address: (i) exit requirements, (ii)

location of exits, (iii) number of exits, (iv) access requirements and exit types, (v) exit lighting, (vi) exit signs, (v) stair and elevator signs, and (vi) emergency power requirements.

The Project will be designed to comply to all of the requirements highlighted in these sections.

**§27-400 et seq. High hazard occupancies.** All high hazard occupancies must comply with the special requirements outlined for these uses in the Fire Prevention Code. High hazard occupancies shall not be located within, or attached to a building occupied by another use, unless separated from such other use by noncombustible construction having not less than a four hour fire resistance rating. The appropriate sprinkler protection systems must be installed for these uses.

The Project will be designed comply with all of these requirements. For example, the combustion turbine building will be separated from the built space along Kent Avenue by a non-combustible wall with 4-hour fire resistance.

**§27-419 et seq. Furnace and boiler rooms.** Boilers and furnaces located inside or adjacent to occupancy group A uses must be located in separate buildings or inside a separate room constructed of non-combustible materials with a two-hour fire resistance rating. The size, location, and ventilation requirements must also comply with the other standards set out in these sections.

The Project will be designed to conform to all these requirements.

**§§27-479 and 27-480. Open parking lots and curb cuts.** Open parking lots should be unobstructed and free of other uses. All curb cuts, driveways and open spaces used for the parking or storage of motor vehicles should be surfaced with concrete asphalt, or a material that is equivalently durable and dustless. The drainage of the lot and all cut curbs and bumpers must conform to the standards set out in this section. Parking spaces shall be provided for people with disabilities as required by law.

The Project will be designed conform to all of these requirements.

**§27-498 et seq. Outdoor signs and display structures.** The construction, alteration, and use of all outdoor signs, display structures and any appurtenant or auxiliary devices must comply with the requirements set out in these sections. These requirements include restrictions on the location, materials, supports, illumination, and dimensions of these display structures.

All signs and display structures used during the construction and operation of the Project will comply with the applicable requirements.

**§27-550 et seq. Loads.** All buildings and structures must be designed to safely support an appropriate load of weight, as defined by the requirements for live, dead, wind, earthquake and other loads described in this section.

The facility will be designed with an adequate amount of support.

**27-580 et seq. Structural work.** Projects must conform to the minimum requirements for the materials, design, and construction for all structural elements in buildings set forth in this regulation. In areas such as flood hazard areas, where more stringent requirements apply, those will take precedence.

The Project will be designed to conform to all applicable requirements, including special flood hazard area requirements to the degree applicable. However, buildings will be located above the 100-year floodplain.

**§27-652 et seq. Foundations.** The design and construction of all foundations must comply with the requirements set forth in these chapters. In special flood hazard areas, the more stringent requirements for those areas shall apply.

The Project will be designed to conform to all applicable requirements.

**§27-725 et seq. Lighting, heating, and ventilation.** All buildings shall comply with the standards for lighting heating and ventilation set out in this section.

The Project will be designed to conform to all standards that apply.

**§27-787 et seq. Heating and combustion equipment.** This section contains the minimum requirements for the design, construction, installation, use, and alteration of heating, combustion, fuel storage and related equipment. Special requirements apply to equipment in special flood hazard areas.

All Project equipment will conform to the requirements set out in this section, specifically those for equipment in special flood hazard areas to the degree applicable. However, buildings will be located above the 100-year floodplain.

**§27-856 et seq. Chimneys.** All chimneys and the equipment associated with them shall conform to the requirements set out in this article.

The chimneys for the Project will be designed to comply with the requirements of these sections. TGE will use the appropriate techniques, materials, and equipment when constructing and operating these chimneys.

**§27-879 et seq. Gas vent systems.** Vent systems for gas-fired equipment must be built so as to completely exhaust the products of the smoke to the outdoor air. The vents must be of the correct type, height, material, and apparatus as outlined in these sections. All gas vents and connectors must be supported and maintained in accordance with the provisions of these sections.

Exhaust flues will be designed to conform to applicable gas vent requirements.

**§27-901 et seq. Plumbing and gas piping.** The design, installation, and maintenance of plumbing systems and gas piping, including sanitary and storm drainage and the disposal of industrial waste, must conform to the requirements set out in this section. These include: (i) all buildings intended for human occupancy and use must have potable water; (ii) plumbing fixtures, devices, and appurtenances must be supplied with a sufficient amount of water to run properly while conserving water as much as possible; (iii) all devices for the heating or storage of water must be designed, installed, and maintained to safeguard against explosion; (iv) the connections to any public water supply lines or sanitary or combined sewer systems must comply with the requirements of this section; (v) the systems conveying sewage from a building must be designed, constructed, and maintained in conformance to the requirements of this section; (vi) no detrimental or dangerous material or prohibited industrial waste will enter the water system; (vii) the disposal of storm water must meet the requirements set out in this section; (viii) the required plumbing fixtures should be used and installed in the appropriate locations and provide appropriate accessibility; (ix) all pipes and other structural elements must be designed and installed in accordance with the requirements of this section; and (x) the system must be properly maintained.

The Project will be supplied with potable water from the adjacent municipal water mains, as occurs today. Under the proposed design, industrial process water will be received from reclaimed non-potable water via a separate piping system. All plumbing fixtures, pipes, connections, drains, and other structural elements will be built in compliance with the requirements set out in this section. Backflow preventers will be installed, and no prohibited industrial material will enter the Project wastewater supply. The system will be properly maintained in conformance to the Administrative Code.

**§27-904 Establishing gas supply.** A certificate of approval from the NYC Department of Buildings must be filed with a utility company before that company can supply gas to a building, place, or premises where new meters will be required.

The utility supplying natural gas to the Project will comply with these requirements.

**§27-909 Drainage system permits.** All of the permits for the installation of a building sewer from the street line to the connection at the street sewer must be obtained from the Commissioner of Environmental Protection, except when the sewer or drain will be built in conjunction with the construction or alteration of a building within the property line, in which case the permit will be issued by the Commissioner of Buildings. The permits for any street or sidewalk openings must be obtained from the Department of Transportation.

The Project will conform to all of these requirements.

**§27-932 et seq. Standpipe requirements.** Wet standpipe systems must be installed in all buildings of two or more stories with more than 10,000 square feet on any floor. During the construction or demolition of any such structure, provisions shall be made for the use of this standpipe in accordance with this section. The size, the number, the material and the location of the standpipe risers and other structures must conform to the standards set out in this section. The water supply for this standpipe system must also conform to the regulations outlined in these sections.

The Project will include standpipes that conform with the provisions of this section.

**§27-954 et seq. Automatic sprinkler requirements.** Automatic sprinklers must be installed in all buildings and spaces that are classified as occupancy group A, which includes all buildings used in the storing, manufacturing, and processing of potentially-explosive, highly-combustible, and/or highly-flammable products and materials.

Automatic sprinklers will be installed in this facility as required by its occupancy group classification and size.

**§27-962 et seq. Sources of water for sprinkler systems.** All automatic sprinklers must be supplied with appropriate sources of water as described in these sections. Sprinklers for buildings classified in occupancy group A must have at least two automatic sources of water, either a gravity tank, pressure tank, automatic fire pump, or the direct connection of sprinklers to the public water system.

The automatic sprinkler system installed for this facility will comply with all of the requirements. The raw water tank and the municipal water system will be directly connected to the sprinkler systems. In addition, both a standard (electric) and a backup (direct-fired) pump will be installed for delivering firefighting water to the sprinkler systems.

**§27-968 et seq. Interior fire alarm signal systems.** Areas containing gas distribution piping at pressures above 15 psig shall have a combustible gas detection-alarm system and a suitable fire system as approved by the Commissioner of Buildings and the Fire Commissioner. All systems and materials required by these sections must be made with approved materials, and an approval must be obtained from the Commissioner of Buildings before the installation of any such system.

The Project will have a complete instrumentation control and gas monitoring system, and will comply with these requirements.

**§27-1007 et seq. Safety of public and private property during construction operations.** All construction operations must comply with the regulations outlined in this subchapter. These regulations address: (i) the maintenance of the site and adjacent areas; (ii) protection of adjoining property; (iii) excavation operations; (iv) erection operations; (v) demolition operations; (vi) repair or alteration operations; (vii) scaffolding requirements; (viii) structural ramps, runways, and platforms; (ix) material handling and hoisting equipment; (x) explosives and blasting; and (xi) the handling of hazardous substances as well as other general requirements.

Project construction will be planned so as to fully comply with all of the requirements of these sections. In particular, sidewalk sheds will be constructed where necessary.

### **Chapter 3: Electrical Code**

**§27-3008. Public Service Corporations.** The Electrical Code is not applicable to, *inter alia*, generating stations and substations used in connection with lighting and power companies. However, the code applies to such portions of commercial, industrial or office buildings owned or leased by power companies, when not used for plant operations, such as public spaces leased or rented to other persons or corporations.

Any electrical work done for buildings to which the Electrical Code applies will comply with the code. Electric system safety and reliability will be assured through compliance with applicable requirements of the New York Independent System Operator and the Public Service Commission.

## Chapter 4: Fire Prevention Code

**§27-4011 Permits.** A permit and certificate must be obtained from the New York City Fire Commissioner prior to the storage, use, or transfer of any combustible, flammable, or explosive material.

TGE will obtain all of the permits and certificates necessary for Project operation, described in more detail below.

**§27-4039 Use; blasting.** This provision sets requirements and specifications for blasting operations, in terms of quantity of explosives and method of blasting operations. It also prohibits blasting between 7 pm and 7 am unless a special permit has been obtained.

Tunneling work will require some blasting for shaft construction. The anticipated method of construction is a tunnel boring machine, which does not require blasting as a principal method of tunnel construction, and therefore it is not anticipated that any blasting will need to occur during the night-time hours. If unanticipated conditions are encountered, a permit will be obtained.

**§27-4053 Bulk oil storage plants.** Such a facility is defined in §27-4002(31) as "a building, shed, enclosure or premises, or any portion thereof, in which petroleum or coal tar, or the liquid products thereof, are stored or kept for sale in large quantities." Relevant provisions of the regulation concerning bulk oil storage are as follows. A permit for this activity is required. Tanks must be adequately designed and constructed of adequate materials. Tanks must be located so as to maintain a minimum distance to adjoining property which may be built upon. The minimum distance is not less than one-half of either the diameter or the height of the tank, whichever is greater, but this distance need not exceed 120 feet and in no case may be less than 25 feet. Tank height is limited to 48 feet as-of-right, and up to 64 feet if allowed by the Fire Commissioner. Firefighting and electrical distribution equipment must be located at least 50 feet from the tank. Maximum capacity per tank is 6,000,000 gallons. Tanks may not be installed within 1,000 feet of schools or hospitals, or the portals or ventilating buildings of tunnels. Tanks may not be installed within 250 feet of bridges, public parks or residential land. Adequate ventilation is required. All aboveground piping must be constructed to specifications. Containment of the tank's contents, plus 10%, is required. Automatic overflow protection is required. A fire extinguishing system and a direct telecommunications link with the Fire Department must be installed. Variances may be granted by the Board of Standards and Appeals, but not for the storage of liquid natural gas, synthetic or substitute natural gas or naphtha in a liquid or gaseous state.

The Project will comply with all these requirements. The Project will reduce the existing oil storage on the site from 5 million gallons to 2 million gallons. Construction of the proposed oil storage tank will be of adequate design and materials. The internal diameter of the proposed tank is approximately 72 feet, and the height is less (limited to 64 feet above grade). Hence, the minimum distance to adjoining property which may be built upon is 36 feet. The proposed minimum distance, under the Project's site plan, is no less than 120 feet, so that the requirement is clearly met. The proposed tank height is 64 feet. Adequate provision for access will be made to ensure that this height is compatible with Fire Department requirements. The site's firefighting and electrical distribution equipment is located in the eastern portion of the site, more than 50 feet from the proposed tank location. The capacity of the proposed tank is 2 million gallons (one-third the maximum size). The nearest school or hospital is located approximately 1900 feet from the proposed tank. The nearest ventilating building of a tunnel is approximately 1300 feet from the tank. The nearest bridge is several thousand feet away. The nearest public park is approximately 1900 feet from the proposed tank. New York State has acquired land to be converted to a public park that would be 800 feet away. The nearest residentially zoned land is more than 1300 feet away. Tank ventilation systems, piping systems, overflow protection, and fire protection will comply with this regulation. No activity requiring a variance is anticipated, but a variance would not be precluded, because no storage of LNG and similar materials is proposed.

**§27-4054 Storage of fuel on privately owned waterfront property.** A permit is required to use barges or vessels anchored or moored to privately owned waterfront property for the storage of fuel oil to be used on that property. In order to receive such a permit, the barges, vessels, and fuel oil must comply with the requirements described in this section.

No storage of oil on barges is proposed adjacent to the Project site. However, the site is ideally suited for transportation of oil by barge, and a permit for transportation of oil will be obtained (see §27-4056 below).

**§27-4055 Limited storage permit.** Permits may be issued by the Fire Commissioner for the storage of oil, in buildings other than storage plants, as long as the requirements of the fire prevention code are met.

Permits obtained from the Fire Department will also include the limited storage of oil in areas other than the proposed bulk oil storage tank. For example, the emergency diesel generator will be equipped with its own small oil tank.

**§27-4056 Waste oil disposal.** It is unlawful to discharge or dispose of any type of waste oil into any public drain, sewer, river, or any other body of water or on any ground area.

Any waste oil, or product detained in oil/water separators, will be removed by a licensed company. No potentially oil areas will be connected to public sewers or drains, but rather will be controlled through a SPDES permit.

**§27-4057 Transportation and delivery.** Except as otherwise provided, it is unlawful to transport, store, sell, deliver, or use oil without a permit from the Fire Commissioner. The oil must be transported in a container that complies with the standards set out in this section. This regulation specifies containers that may be transported on highways and streets in New York City, and does not address delivery by barge.

Because of the ability to receive oil by both pipeline and barge, bulk delivery of oil by trucks is not proposed. Trucks may deliver oil to smaller on-site tanks, and thus it is anticipated that this permit will be required.

**§27-4060 Lubricating oils.** A permit from the Fire Commissioner is required for the storage of lubricating oils in quantities exceeding 70 gallons.

Other than inside production machinery, lubricating oil storage will be limited. If use of oil inside machines is subject to this requirement, or if at any time lubricating oil storage exceeds 70 feet, this permit will be obtained.

**§27-4066 Transportation, storage, and sale of flammable materials.** It is illegal to store more than five gallons of a flammable mixture without a permit. A flammable material is one with a flash point lower than 100°F.

No oils with a flash point below 100°F are proposed. Natural gas will be used at the site, and to the degree this provision is applicable to natural gas, the necessary permit will be obtained.

**§27-4070 Transportation, storage, and sale of combustible materials.** No combustible mixture may be transported, stored, or sold without a certificate of approval unless exempted by this section. Combustible material is a liquid or solid with a flash point between 100°F and 300°F. No certificate of approval is required if a permit for flammable materials under §27-4066 of the Administrative Code is obtained.

TGE will obtain either the flammable or the combustible material permit.

**§27-4093 Paints, varnishes and lacquers.** A permit is required for the storage of paints and similar materials exceeding 20 gallons.

During construction, more than 20 gallons of paints will be stored on-premises, and therefore a permit will be obtained.

**§27-4099 Gases under pressure: Permit.** A permit is required to compress gas at pressures exceeding 6 psi, to compress atmospheric air to 100 psi, to store acetylene, and similar activities.

The Project will include activities such as those listed above, and thus the permit will be obtained.

**§27-4100 Compressing.** Any gases compressed and stored for sale must comply with this regulation.

The Project will include gas compression, which the FDNY will review for safety purposes

**§27-4101 Acetylene.** Generation or compression of acetylene requires a permit. Storage of acetylene to a greater pressure than 250 psi at 70°F is prohibited.

The Project will not store acetylene in excess of the pressure limit. A permit for acetylene storage will be obtained pursuant to §27-4099.

**§27-4102 Blow-pipes.** Use of a combustible gas alone or in combination with oxygen for heating, melting or welding is only permitted through a blow-pipe or other similar device or apparatus.

Welding activities will occur during construction and periodically for maintenance purposes. Adequate blow-pipes, or equivalent, will be used.

**§27-4110, 4122, and 4190 Mechanical refrigeration.** The refrigeration provisions of the fire prevention code are not intended to apply to condensers that use air or water. For industrial occupancy, there are no limits on storage of refrigerant, except flammable refrigerant. Permits are required certain types of refrigerant in connection with air conditioning systems.

These regulations do not apply to the primary method of cooling at the Project. An auxiliary closed circuit cooling loop will be built, with a non-flammable working fluid. However, air-conditioning for certain spaces is anticipated, and necessary permits will therefore be obtained.

**§27-4265 Fire extinguishers.** The owners and proprietors of all factories, warehouses, stores, offices, office buildings, bulkhead sheds, waterfront structures, multiple dwellings, and any places where large numbers of people congregate must provide the appropriate means of preventing and extinguishing fires as determined by the Fire Commissioner. Specifications for fire systems; qualifications; inspections; and gas shutoff tools are included in this regulation.

The Project will have a complete set of fire extinguishing systems, each to be designed in coordination with the Fire Department and complying with applicable provisions of the fire prevention code. These systems will include off-site gas shutoff operable by the Fire Department, as required by §27-4265(h).

## **RULES OF THE CITY OF NEW YORK**

### **Title 1: Department of Buildings**

**§1-01 Material and Equipment application procedures.** All materials whose use is regulated by the Building Code must be approved by the NYC Department of Buildings.

The Project will obtain Material and Equipment Acceptance (MEA) numbers for all materials regulated by the Department of Buildings.

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**§6-01 Cranes.** An erection and dismantling plan for cranes must be filed in accordance with the provisions of this section. This section does not apply to truck or crawler mounted cranes.

The Project will comply with this requirements, submitting the necessary plant to the Crane and Derrick Division of the Department of Buildings, and providing for on-site inspections of cranes subject to this regulation.

**§8-01 Demolition.** No demolition of a building or structure shall commence until a complete application has been filed and permit obtained from the Department of Buildings. Before filing this application, a pre-demolition report must be filed and a pre-demolition inspection must be completed and approved by the Department of Buildings.

Prior to demolition activities, the applicable pre-demolition inspections and approvals will be obtained.

**§9-01 Rigging operations.** This section prescribes qualifications necessary of Master Riggers and outlines their supervisory responsibilities.

A licensed master rigger will be used, in accordance with this regulation.

**§12-01 Emergency power systems.** This section provides minimum requirements for emergency power systems.

The Project will have a comprehensive emergency power system that will provide for the safe shutdown of combustion turbine equipment, power to Project buildings during emergencies, power for firefighting purposes, and backup water pumping capacity for double contingencies, where a fire emergency and an electrical outage occur simultaneously.

**-§15-06 Design of composite construction with metal decks and lightweight concrete.** All construction involving metal decks and lightweight concrete must comply with the provisions of this section regarding the use of these materials and structures in the interest of fire safety.

To the extent that this requirement applies to the Project, TGE will design such structures in conformance to it.

**§16-01 Inspection of existing structures during construction operations.** All alterations to existing structures in which loads will be moved around or structural elements altered must be carried out under controlled inspection as described in this section.

Building alteration in which loads are moved or structural elements altered is not planned. If such an activity is found to be necessary during construction, controlled inspection will be implemented.

**§18-01 Resistance to progressive collapse under extreme local loads.** The layout, configuration, and structural supports of a building must be designed to prevent progressive collapse due to the presence of extreme local loads. The building must utilize the engineering and inspection techniques outlined in this section.

Some areas of the facility will be under an extreme local load, such as the area supporting the turbines. The facility has been designed and will be constructed to support these loads in accordance to the requirements listed in this section.

**§20-01 Witnessing test for gas piping systems.** This section prescribes qualifications necessary for gas piping inspections and outlines insurance and reporting requirements.

TGE will make this provision a requirement for all gas piping inspectors as necessary.

**§20-02 High pressure steam piping systems.** All new high pressure (more than 15 psig) steam piping systems must meet the design and installation requirements set out in this section.

The Project will comply with this regulation, to the degree it applies to the generating sources of steam, rather than just the internal systems of buildings that use steam from the municipal system or on-premises boilers.

**§26-01 et seq. Safety of Public and Property during construction operations.** All construction operations must be conducted in accordance to the provisions of these sections. A compliant site safety program must be filed with the applicable NYC Department of Buildings Borough Office before a permit will be issued for the construction or alteration of a major building<sup>11</sup>. All construction operations must conform to the standards for safety netting and the storage of materials, debris and waste dumpsters, as applicable, described in these sections of the code.

TGE will plan the construction effort so as to conform to all applicable requirements, including the filing of a safety program with the Department of Buildings if required.

**§32-01 The design and installation of non-loadbearing exterior wall systems.** All non-loadbearing exterior walls taller than 40 feet above the curb line of the street must conform to the requirements of this section.

All exterior non-loadbearing walls for the Project that are over 40 feet tall will be designed comply with the applicable requirements of this section.

**§39-01 Cooling towers and evaporative condensers.** A permit must be obtained before any cooling tower or evaporative condenser is constructed. The permit application must contain plans for the cooling tower or evaporative condenser showing the details of construction including the materials, dimensions, thickness of the metal, weight of the tower or condenser, and descriptions of all structural supports. The cooling tower shall be sited in an area permitted for such a use under the Zoning Resolution, and all materials and structures used to construct the facility must comply with the standards described under this section.

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<sup>11</sup> A major building, as defined in Title 1, §26-01 of the New York City Rules and Regulations, is one that: (i) is 15 or more stories high; (ii) is 200 feet or more in height; (iii) has a lot coverage of 100,000 square feet or more regardless of height; or (iv) has been given the designation by the Commissioner of Buildings. No individual building at the Project is more than 100,000 s.f. Only the exhaust building is taller than 200 feet.

Detailed plans for the air-cooled condensers and auxiliary circulating water coolers will be submitted to the Department of Buildings. To the degree the section is applicable, a permit will be obtained.

## **Title 2: Board of Standards and Appeals**

**§3-01 et seq. Construction.** Any alteration, repair, excavation, and demolition of structures or any parts thereof under the purview of the New York City Building Code and the New York State Labor Law must comply with the rules set forth under this section. A structure is defined in these sections as a building or construction of any kind. Specifically, a permit is required under §3-02(g)(3) prior to any building, application for which must include the proposed work, and such computations, plans, and detail drawings as the Department of Buildings may require.

The building permits are described in greater detail relative to Title 27 of the Administrative Code, as described above. It is anticipated that the building permits will satisfy this provision.

**§10-01 et seq. Fire extinguishing systems and appliances.** Sprinkler systems and fire extinguishing devices must comply with the requirements set forth under these regulations. Plans meeting the requirements described under this section must be submitted to, and approved by, the Fire Department before sprinkler equipment involving ten heads or more can be installed. The sprinkler system must comply with certain requirements relating to water use and electrical connections.

The Project will employ a comprehensive fire protection plan that will include the use of a sprinkler system. The system will be designed to comply with applicable municipal requirements.

**§14-01 Gas shut-off valves.** The construction and installation of all gas shut-off valves shall comply with the standards and specifications set forth under this section.

All gas shut-off valves will be constructed, installed, and maintained in compliance with this section. The Fire Department will have control of gas shutoff valves.

**§16-01 Oil Burning Equipment.** No person shall install oil burning or oil storage equipment except as provided in these sections. Hydrocarbon oils free from acid, grit and fibrous foreign matter are approved for use provided they meet the requirements set out in this section. Oil burners approved for use by the Board of Standards and Appeals must utilize suitable parts and electric controls for the service intended and include safeguards against spilling oil as set forth

under this section. The material, construction, size, and location of all oil tanks must comply with the standards set forth under this section. All piping, tubing, and valves must be designed and installed in conformance to the requirements of this section. The ventilation, fire protection, and automatic pumps required under this section must be present. The installation of any oil-burner of more than six gallons is prohibited until a Certificate of Approval has been issued by the Commissioner of Buildings and a permit for the storage of fuel oil has been granted by the Fire Commissioner.

The Project will store oil on site under a strictly controlled environment. All of the facilities and equipment, existing and proposed, to be used to burn or store fuel oil will comply with the provisions of this section. Permits for oil burning equipment and oil storage are outlined relative to Titles 24 and 27 of the Administrative Code.

**§19-01 Plastic piping and fittings.** The design, construction, and installation of plastic piping and fittings must comply with the standards set out in this section, intended to be supplementary to the applicable provisions of the Building Code. Plastic piping and fittings may not be used in the drain, waste, and vent lines and water service piping in plumbing systems for buildings more than three stories in height. Connections between fixtures, traps, and drains of waste lines shall be of metal piping and fitting only. The physical and chemical properties of these pipes must comply with the provisions of this section, and the pipes must be tested and marked as set out in this section. The installation of plastic piping and fittings must comply with the provisions of this section.

The Project will use plastic piping and fittings in compliance with the provisions of this section and the Building Code.

**§25-01 Arc and gas welding, and oxygen cutting of steel.** The commencement of any structural welding work is forbidden until an application for a permit to perform such work is obtained. The Borough Superintendent shall be notified in writing at least 48 hours prior to the date when the structural welding work is to commence.

The Project will comply with this requirement, and a permit will be obtained.

### **Title 3: Fire Department**

**§1-01 Tanks used for the bulk storage of acids.** Plans must be filed before the construction or relocation of tanks used for the bulk storage of acids. The materials of the tank and associated piping must be satisfactory for the type of acid that will be stored in these tanks. The tank must

comply with the labeling requirements, location restrictions, and design standards set forth in this section, such as protective personal equipment and safety showers. All equipment must be tested in the presence of a Fire Department representative before being placed into service.

The Project will comply with all applicable bulk chemical storage regulations. Conformance with the state regulations at 6 NYCRR 595 is expected to assure compliance with the requirements of this section.

**§3-01 et seq. Air compressors.** The requirements of §27-4099 of the Administrative Code are further specified as follows: a permit is required to compress gas in containers exceeding 30 feet, event at pressures less than 100 psi.

A permit for air compressors and/or acetylene storage will be obtained.

**§7-01 et seq. Bulk Oil Facilities.** All bulk oil facilities must comply with the requirements set forth under these sections. These requirements include: (i) testing the extinguishing systems every two years; (ii) using the correct color coding for the fire extinguishing systems as set forth under section §7-02; (iii) using the correct signage at bulk oil terminals; (iv) hydrostatic testing of buried piping in oil storage plants every 10 years; (v) complying with the hydrocarbon vapor recovery system requirements under §7-05; and (vi) using the correct oil spill control procedures and techniques.

The Project's proposed oil storage system will comply with all applicable requirements of these sections.

**§8-01 et seq. Cable oils.** The requirements of §27-4060 of the Administrative Code are further specified as follows: cable oil, or any oil with a flashpoint greater than 300°F, requires a Fire Department permit if storage is in excess of 70 gallons.

A permit for machine oil, cable oil and/or lubricating oil will be obtained.

**§11-02 et seq. Use of liquid oxygen cylinders.** The use of all liquid oxygen cylinders or oxygen trailers on construction, alteration, and demolition sites must comply with the standards set out in these sections.

Any liquid oxygen cylinders or oxygen trailers used during Project construction will be used in compliance with this section.

**§17-01 et seq. Fire alarm systems.** The installation, maintenance, operation, and use of all central station signaling systems,<sup>12</sup> including proprietary signaling systems,<sup>13</sup> must be kept compliant with the National Fire Protection Association standard 72 and must comply with any other applicable requirements set forth in these sections.

The Project's fire alarm system will comply with these requirements, except to the degree that any more stringent NFPA 850 requirements apply.

**§20-01 Flammable and/or combustible liquids and mixtures.** A permit pursuant to §27-4066 or §27-4070 is required for the storage and use of any flammable and/or combustible liquids and mixtures. The permit will be issued in accordance with the regulations described under this section.

TGE will obtain all necessary permits for the storage and use of any flammable and/or combustible liquids and mixtures necessary for the construction and operation of the Project.

**§21-02 Out-of-service storage systems.** All storage systems for gasoline, fuel oil, or other flammable or combustible mixtures that are not in use for 30 days or more must apply with the requirements of this section, unless such systems are used only for seasonal or stand-by storage but are not permanently out of service. Temporarily and permanently out-of-service storage tanks must be sealed and closed in accordance to the requirements set out in this regulation.

The Project will comply with these requirements as applicable.

**§21-17 Installation of storage tanks and piping for liquids with a flashpoint of 100°F or higher.** Before any such installation, an application must be filed with the Fire Department in accordance to the provisions of this section along with a copy of the plans approved by the Department of Buildings. The construction and location of the tanks and piping must comply with the rules set forth in this section. This section does not apply to fuel oil and bulk oil storage tanks.

As described above relative to the limited storage permit provisions of §27-4055, the Project will conform to the requirements of this section.

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<sup>12</sup> A central signaling system is defined as “a system comprised of the protected signaling system at the protected premises, the central station physical plant, and the exterior communications channels and satellites if applicable (3 RCNY §17-07(b)).

<sup>13</sup> A proprietary signaling system is a central signaling system where the central station facility is located on the protected premises and owned by the owner of those premises (3 RCNY §17-07(b)).

**§23-06 Storage and use of ammonia with dissociating equipment.** The location of all storage tanks of ammonia will be approved by the Department of Buildings after a site inspection by the Fire Department. The tanks must meet the appropriate structural and masonry requirements as established under this section and by the Department of Buildings. Any piping, valves, and dissociating equipment must be designed and constructed so as to be compliant with the provisions of this chapter.

The Project will avoid the storage of ammonia through use of an "ammonia-on-demand" system to supply its catalyst for air pollution (nitrogen oxides) control.

**§23-11 Carbon dioxide.** Any carbon dioxide containers must meet US DOT specifications and obtain a Certificate of Approval from the Fire Department. Any applicant seeking to store carbon dioxide must demonstrate that adequate Fire Department and Dept. of Buildings permits have been issued.

Portions of the Project will be protected by an alternative (*e.g.*, a carbon dioxide) firefighting system. The requirements of §27-4100 and this regulation will be taken into account during detailed design, and the necessary documentation regarding building and fire protection permits will be provided at the appropriate phase of the construction or commissioning effort.

**§32-01 Storage, sale or use of pressurized products.** Ten (10) gallons or more of combustible (flashpoint between 100°F and 300°F), flammable (flashpoint between 20°F and 100°F) and extremely flammable (flashpoint below 20°F) products may only be stored or used with a permit.

Permits for pressurized products will be obtained in concert with the requirements of §27-4066, §27-4070 and §27-4099.

**§33-01 Plan requirements for refrigerating systems.** This regulation prescribes the types of plans to be submitted, depending upon the classification of the refrigerant used in air-conditioning systems.

Permits and plan submissions for refrigeration systems associated with air-conditioning will be obtained in concert with the requirements of §27-4110, §27-4122 and §27-4190.

Title 15: Department of Environmental Protection

**Chapter 2 (Fuel oil burning equipment) and Chapter 9 (Gas-fired burner installations).** Under **§9-01** (Installation of and conversion to gas or gas/oil fired burners), for installations

where it is necessary to install a new gas or gas/oil burner, then a complete new filing will be required pursuant to Chapter 2.

**§2-01. Introduction.** The owners of all new-oil burning equipment must obtain a Certificate of Operation from the Bureau of Air Resources of the New York City Department of Environmental Protection before any equipment is installed. The application for the Certificate must comply with the provisions established under these sections. All installations must be operated and maintained so that there is an optimal combustion of fuel and maximum heat exchange which will both reduce emissions and conserve fuel. All installations must meet the performance requirements set forth in §2--08. All equipment and apparatus must conform to the provisions of these sections in addition to the applicable requirements of any other city and state agencies. The locations of chimney outlets must meet the requirements established by this section.

TGE will comply with substantive requirements of the New York City Air Pollution Control Code and 15 RCNY §2. TGE will obtain federal and state air quality permits in order to assure such compliance. Permits and Certificates of Operation will be obtained from the New York City DEP, but only to the degree consistent with the requirements of the New York State Department of Environmental Conservation.

**§2-08 Installation Performance.** All installations shall be operated and maintained such that there is optimum combustion of fuel and maximum heat exchange. This not only results in minimal emissions, but can provide an economic dividend for the equipment owner in the form of reduced fuel consumption. Further subsections, along with **§2-09** and **§2-10**, provide details of performance and emissions tests.

This is a requirement for good combustion controls. Good combustion controls will be a required feature of TGE's air quality permits pursuant to state and federal law, assuring compliance with this provision. Performance tests will be those specified by such permits, which substantively assure compliance with DEP's performance and stack testing procedures.

**§2-11 Installation Design.** General considerations under this section (**§2-11(a)**) include a statement that installations should comply with applicable requirements of non-City agencies and standards of nationally recognized considerations. Also included are standards for minimum sizing of residual oil burners (not applicable to Project) and recommendations as to multiple versus single boiler installations. With respect to boiler design (**§2-11(b)**), the regulations require equipment to comply with its stated gross output, firing rate and combustion chamber temperature. With respect to burner design (**§2-11(c)**), the regulations specify an acceptable burner firing range of 50% to 110%, thus requiring multiple burners in order to accommodate

boiler loads of less than 50%. With respect to oil handling (§2-11(d)), the regulations related only to the heating of residual oil, inapplicable to the Project. With respect to gas handling (§2-11(e)), the regulations require adequate pressure differential (often referred to as draft) to provide sufficient combustion air and remove the products of combustion under normal conditions of use or when the outside temperature varies between 11°F and 94°F. The regulations require minimum turn-down ratios of 5:1 (smaller ratios for smaller boilers). The Project's boilers will feature a 5:1 turn-down ratio. The boiler must also be designed for its most severe potential operating conditions. Boiler chimney design is specified. With respect to control devices (§2-11(f)), boilers are required to use such devices in order to maintain adequate output, steam pressure, oil temperature and the desired fuel-air ratio under all normal operating conditions in order to assure complete and smokeless combustion by coordination of the oil and combustion air supply. Draft controls are also specified.

The Project will be designed to comply with all applicable provisions of these regulations. Generally, the regulations are aimed at minimum standards for much smaller boilers -- with fewer standard controls -- than those proposed for the Project.

**§2-13 Determination of acceptable location of chimney outlet.** Chimneys must extend above adjacent buildings, and a minimum distance between the chimney and off-site receptors ("radial distance") must be maintained. For a stack larger than 60 inches in diameter, such distance can be provided upon request. If a new building is erected, enlarged, or increased in height so that any receptor location in such building is within the minimum radial distance of any previously constructed chimneys, the owner of such new or altered building shall have the responsibility of altering such chimneys to make them conform with the minimum requirement.

This is a requirement for proper engineering design for small boilers. For the Project, EPA's specification for good engineering practices (GEP) is followed, as described in Section 6 of TGE's *Air Quality Permit Application*. Compliance with GEP assures substantive compliance with this provision.

**§7-01 Tunneling permits.** No tunneling permits are required for tunneling operations taking place solely between the hours of 7 a.m. to 6 p.m. on weekdays. A separate tunneling permit shall be issued for each shaft site.

A permit will be obtained for tunneling equipment that produces noise at the surface. If the Noise Code limits during shaft construction cannot be met, shaft construction will be limited to the hours of 7 AM to 6 PM pursuant to §24-224, and therefore would not require a permit as specified in this provision, 15 RCNY §7-01.

**§8-01 Submission of environmental rating reports from industrial sources.** Environmental rating reports must be submitted to the NYC Department of Environmental Protection Bureau of Air Resources for all industrial equipment and processes capable of emitting solid, liquid or gaseous contaminants to the open air, except as exempted under this section for oil and gas burners. The report must include substantive information showing that the equipment is being operated in compliance with the air emission standards established in §24-153 of the New York City Administrative Code.

The Project will coordinate with DEP to ensure that environmental rating reports, if necessary, are filed. Since the only emission limitation pursuant to §24-153 relates to particulate matter, and the Project's limits will be much less than the limits of the NYC Code, the submission of regular reports as required by state and federal law will satisfy the substantive requirements of this section.

**§11-01 et seq. Hazardous substances emergency response.** In the event of an emergency involving a hazardous substance, any people who are either responsible for the emergency or aware of it must conform to the requirements of these sections. These include notification requirements and the protocol for any administrative proceedings. A comprehensive list of hazardous substances and the reportable quantity (RQ) for each is provided. It is noted that "[t]his notification is intended to supplement, not replace, other required emergency notifications."

TGE's emergency response plans will include not only federal and state requirements, but also these provisions of 15 RCNY §11. Notification of hazardous substance emergencies will be made to both NYSDEC and NYCDEP.

**§18-01 et seq. Protection from Contamination, Degradation and Pollution of the New York City Water Supply and Its Sources.** All regulated activities, which include uses that involve hazardous materials, hazardous wastes, and petroleum products, must be planned, designed, scheduled, and conducted in a manner that will not contaminate or degrade the water supply. The regulated activities must prove compliance with the requirements of the applicable sections of Chapter 18 of Title 15 of the Rules and Regulations of New York City in all permit applications. These sections also outline notification and emergency procedures in the event of an accident. The regulations are applicable throughout the watershed of the New York City water supply.

The Project will undertake no activities in the vicinity of the New York City water supply. These regulations are therefore not applicable.

**§19-02 Disposal of wastewater, storm water, and groundwater.** Except with written approval of the Commissioner of Environmental Protection, no storm water outlet, nor any drain from a body of water, shall be connected to a public sewer, a private sewer connected to a public sewer, or an inceptor-collector. No industrial or sanitary wastewater shall be allowed into a storm sewer, and no wastewater, except storm water, shall be discharged so as to enter a catch basin without the written approval of the Commissioner. Discharges of more than 10,000 gallons per day of groundwater may not be discharged into a public sewer unless the party responsible has filed a groundwater discharge permit in accordance with the provisions of this section.

During Project operations, all sanitary sewage and small amount of industrial wastewater will flow to the adjacent sewer system; most industrial wastewater flow (demineralization system effluent) will be discharged under a SPDES permit to surface waters. Storm water runoff from clean roof areas will discharge to either a NYCDEP interceptor relief sewer or via the existing storm water outfall, as part of a SPDES modification. A small tunnel water collection system is also planned, and that discharge will be made to surface waters directly. During the construction phase, discharge of groundwater in excess of 10,000 gpd is possible, but in such an event the flow would be directed to adjacent surface waters, not to the public sewer.

**§19-03 Materials and substances excluded from public sewer.** Public sewers are sewers owned by the City of New York (as defined in 15 RCNY §19-01). Prohibited discharges, except in such small quantities as may be present in normal household wastes are as follows: construction materials, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, paunch manure, coffee grounds, fur, wax, or any solids or viscous substances capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewerage system; snow and ice; steam or wastewater above 150° F; flammable or explosive liquids, solids or gases; oil sludges; petroleum hydrocarbons in concentrations greater than 50 mg/L; coal tar; paints and related waste products; wastewater that is corrosive and/or has a pH lower than 5.0 or higher than 11.0; toxic substances in quantities that interfere with sewer treatment or are injurious to environmental or public health or violate federal, state or city law or regulations; noxious or malodorous gases or substances capable of creating a public nuisance; still bottom or sludge residues; unshredded garbage or refuse; or radioactive material.

None of the materials listed in this regulation will be discharged to the public sewer. The only discharge to the public sewer will be from sanitary wastewater at the Project site. Furthermore, the discharge to the private force main return line is also expected to meet all the characteristics of a permitted flow.

**§19-04 Toxic Substances Accepted Conditionally.** Certain substances may be accepted into the sewer system provided the following limits are not exceeded. However, lower limits or

additional limits on other substances may be imposed by the Department of Environmental Protection as part of an industrial wastewater discharge permit.

<b>Substance</b>	<b>Limit</b>
Cadmium, mg/L	5
Cadmium (daily avg.), mg/L	0.69
Chromium, mg/L	5
Copper, mg/L	5
Cyanide, mg/L	0.2
Lead, mg/L	2
Mercury, mg/L	0.05
Nickel, mg/L	3
Zinc, mg/L	5

Attachment W contains TGE's analysis regarding wastewater quality, concluding that TGE will comply with the applicable limits for its minor wastewater discharge flow.

**§19-05 Terms and conditions for the issuance of a permit.** Anyone discharging industrial wastewater to a public sewer may be required to complete an industrial wastes questionnaire form; allow an inspection of the processes that contribute wastewater to a public sewer; and measure and sample to determine volume and characteristics of the effluent. No discharge of industrial wastewater to the public sewer is allowed without a permit, as required by §24-509.

TGE will comply with the Department of Environmental Protection Industrial User questionnaire form and permitting program.

**§19-08 House and trailer connections.** For a construction trailer that is necessitated by the construction of a Building, the trailer connection is to be filed together with certification for sewer site connection overall.

Additional sewer connections from trailers during construction are anticipated, and TGE will comply with DEP's procedures.

**§20-01 et seq. Use and supply of water.** The use and supply of water in New York City must conform to the requirements listed in these sections regarding permits, infrastructure connections, restrictions (such as cross-connection control), uses, apparatus (such as a backflow preventer), and all other conditions involving the water supply and use.

The Project will conform to all requirements of this regulation and will obtain the necessary plumbing and water supply permits. Specifically, permits are anticipated for: meter disconnection; new meter setting; relay of service pipe; installation of tap with plug of prior tap; and installation of a new connection with termination of prior connection.

**§20-08 Water use restrictions and fire hydrant use.** Among the City's water use restrictions are the following three. (1) Prohibition of use as a source of energy -- the use of the pressure or flow of water as a source of energy is prohibited, except when specifically approved by the Department. (2) Restrictions on use for coolant purposes -- the use of City water for coolant purposes in industrial and commercial equipment is prohibited, except with the use of an approved "water conservation device" in an air conditioning system. (3) Required recirculation in fountains, ornamental pools, aquariums and similar structures -- display fountains, ornamental pools, aquariums, and similar structures using water in excess of the rate of one-half (0.5) gpm shall be recirculated.

Water will not be a source of energy for the Project. City water also will not be used for cooling. The recirculation requirement for ornamental water uses will be made a requirement for the Project, unless non-potable water is used for such purposes.

**§21-01 et seq. Drought emergency rules.** During a drought emergency, the special restrictions on water use set forth in these sections must be fulfilled. Drought emergencies are divided into three phases, with Stage I being the least severe and Stage III being the most severe.<sup>14</sup> During a Stage I drought emergency, this regulation sets forth prohibitions against allowing any leaks from the City water system to continue; against washing vehicles or outdoor areas (streets, driveways) from a fire hydrant or a power hose when using City water; against the use of City water for any ornamental purpose; against watering plants and lawns from a fire hydrant or a power hose when using City water, with several exceptions: limited morning and evening hours on alternate days, new plantings, and hand-held or water-conserving low-flow/low-pressure irrigation systems; against the opening of a fire hydrant except for firefighting; against serving water in restaurants except on request; against AC systems rated at 2 tons or more; against refrigeration systems rated at 10 hp or more; against refilling pools, unless they use recirculating water; and against any showerheads except those meeting low-flow specifications. For Stage II drought emergencies, additional restrictions are added against washing vehicles altogether; against washing building exteriors from a fire hydrant or a power hose when using City water; against any watering of lawns; and against the use of City water in private swimming pools, even if with recirculating water. For Stage III drought emergencies, additional restrictions are placed on AC systems that use City water: these systems must be set to above 78°F, with few

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<sup>14</sup> For example, the drought of 2001-02 caused a Stage I emergency.

exceptions. Furthermore, the following immediate water use reductions are imposed during a water emergency: for Stage I, 15%; for Stage II, 20%; for Stage III, 25%.

The Project will be unaffected by this regulation, because instead of contributing to potable water use, it is expected that the Project will *reduce* such use. A reduction of much more than 25% has already been achieved. Nevertheless, conservation measures will be in place during droughts for potable water use by posting water conservation announcements near sinks and showers. Furthermore, none of the prohibited activities listed in this regulation is required for Project operation. To the degree that any ornamental use of water or irrigation is supplied from rainwater that is retained on-site, or from the demineralized water that is the treated product of non-potable supplies, such activities would continue at the Project irrespective of a drought emergency, since abatement of these activities would provide no assistance in the relief of said emergency.

**§23-01 et seq. Construction of private sewers and private drains.** A permit is required before any private sewer is built. The plans, permit applications, and construction of all private sewers and drains must comply with the regulations set forth in these sections, except for internal private drains, to which this regulation does not apply. Owners proposing to construct a private sewer or private drain in a City-owned street shall also submit a letter from the office of the appropriate borough president verifying that title to the street in which a private sewer or private drain is to be constructed has vested in the City. For sewers crossing private property (including public streets title in which is private), appropriate easement agreements and title insurance must be provided. Owners must also provide a specifically worded indemnity to the City, and must carry liability insurance. Clearance between storm drains and sanitary sewers shall be 2 feet (but 6 inches at street intersections without site connections). Standards generally apply to gravity sewers, not to force mains carrying industrial wastewater.

As described relative to §24-507 of the Administrative Code, above, TGE will finance a private force main conveying non-potable water supply as well as industrial wastewater return. Plans and permits will also be submitted to the Department of Environmental Protection, per this regulation.

**§41-01 et seq. Community Right-to-Know Regulations.** The responsible party involved in the processing, storage, handling, or use of hazardous, extremely hazardous, or regulated toxic substances as defined in this chapter must comply with the community right-to-know regulations outlined in this chapter. These guidelines include facility inventory reporting, labeling, risk management plan filing and review, and the creation of risk reduction and emergency response programs as required by this section.

The Project will comply with all right-to-know regulations by presenting the required information as part of the Project's spill prevention and emergency response planning documents, and updating the Project's right-to-know list throughout operation.

## **Title 16: Department of Sanitation**

**§2-07 Construction and demolition waste and transporters.** The transporters of construction and demolition waste must comply with the requirements of this section regarding the removal and storage of this waste.

TGE will use licensed haulers to remove all construction and demolition waste from the property. Such hauler will be required to comply with the provisions of this section.

**§11-02 Solid waste removal plans submission.** Any person who generates solid waste must file a solid waste removal plan with the Department of Sanitation in compliance with the requirements of this section.

TGE will file a compliant solid waste removal plan. If the Department of Sanitation so requires, TGE will also be copy it on any solid waste plans that may be required by the New York State DEC, depending upon the volume of solid waste generated.

## **Title 34: Department of Transportation**

**§2-04 Canopies.** No canopy may be constructed over a sidewalk without a permit, and in compliance with design standards for canopies.

If any portion of Project design concept includes a canopy, a permit for such will be obtained.

**§2-05 Construction activity.** A separate construction activity permit is required for each of the activities listed below. All uses must comply with the requirements and conditions outlined in this section.

- (i) placing construction material on the street during working hours (18 conditions apply, relative to protection of streets, pedestrians, traffic; clearance from fire hydrants and certain street furniture; delineation and signage of storage areas, etc.);
- (ii) placing construction equipment other than cranes or derricks on the street during working hours (same 18 conditions apply);

- (iii) temporarily closing sidewalks, either partially (by 3 feet or more) or fully (such that a minimum width of 5 feet cannot be maintained);
- (iv) constructing temporary pedestrian walks in the roadway;
- (v) temporarily closing the roadway (one or more lanes of a roadway; *e.g.*, during any blasting operations);
- (vi) placing trailers in the street (which must be in the same location as the materials storage area, and may not be rented out as space);
- (vii) crossing the sidewalk (limited to two crossing every 300 linear feet, and applicable if sidewalk crossings other than approved curb cuts are used);
- (viii) placing cranes or derricks on the street during working hours (cranes may not occupy more than one third of the roadway and providing 12-foot wide passage, except as provided by a street closure permit; steel tracks must be supported by steel plates or timber platforms; the crane and loads shall not exceed 3,500 lb/s.f.; the surface upon which the crane will rest must be capable of supporting the above pressures, or as approved by a Department of Buildings when a “Certificate of On-Site Inspection” is required);
- (ix) storing construction material on the street during non-working hours (previously mentioned 18 conditions apply); and
- (x) storing construction equipment on the street during non-working hours (same 18 conditions apply).

TGE anticipates the need to obtain permits for most of these types of construction activities. These activities will be planned and designed so as to comply with the applicable provisions and conditions listed in this regulation.

**§2-06 Land contour work.** A permit must be obtained from the Commissioner of Transportation to perform any land contour work, defined in this section as clearing, grubbing, grading, filling, or excavating any land parcel. This land contour work must comply with all of the conditions set forth in this section. These include not interfering or obstructing existing drainage without an alternate drainage plan approved by the Department of Environmental Protection, keeping all excavations well-drained, and keeping all water bodies, conduits, and drainage ditched free of debris.

At present, storm water drainage from the site is discharged under a State Pollutant Discharge Elimination System (SPDES) permit to surface waters. Similarly, after Project construction, all site-generated storm water will be drained to avoid the sewer treatment system, and will instead be discharged via a SPDES permit or via a NYCDEP interceptor relief sewer to adjacent surface waters. All fill will consist only of inert, inorganic material. The Project site will be elevated, at least in certain areas, so that it lies above the 100-year flood plain. Because this requires

elevation changes adjacent to the site's frontage, a permit from the New York City DOT is expected pursuant to this provision.

**§2-07 Utility hole covers, transformer vault covers and gratings.** A permit must be obtained for any work requiring the opening of manholes. Except for emergency work, no more than 11 feet of roadway may be restricted, and not more than 1 manhole at a time may be opened. Other traffic-related, safety and maintenance provisions are included.

Some work requiring opening of manhole covers is anticipated, and a permit from NYC DOT will therefore be obtained.

**§2-11 Street openings and excavations.** No street excavations will be permitted until a Street Opening Permit is obtained. All requirements and conditions outlined in this section regarding the apparatus, procedure, and equipment used for this work must be met.

TGE will obtain all necessary permits for all activities under TGE's direct purview. It is anticipated that all utility companies will similarly follow applicable provisions regarding the Project interconnections. Consent for all TGE activities in public streets will be obtained pursuant to this provision, as well as §19-102 and §19-146, from the New York City DOT.

**§4-13 Truck routes.** This section outlines the truck routes for local and through traffic that should be used for any local or through truck traffic in the city. Local truck traffic, defined as traffic that must stop within the Borough it is traveling in, must follow the most direct route to and from the designated truck routes when traveling to its destination. On the basis of the designated truck routes, the most direct route for most truck deliveries is likely to be Brooklyn-Queens Expressway/Meeker Avenue, to Union Avenue, to North 11<sup>th</sup> Street, to Kent Avenue, with the return trip following North 10<sup>th</sup> Street. Supplemental routes include:

BQE/Meeker, to Union, to North 11<sup>th</sup>, to Kent Ave; return trip follows North 10<sup>th</sup>;  
McGuinness, to Franklin, via Commercial; return trip follows same routes;  
McGuinness, to Franklin, via Greenpoint Ave.; return trip follows same routes;  
Metropolitan Ave., to Kent Ave.; return trip follows same routes.

Truck traffic will be only temporary, with minimal truck deliveries during Project operation. Truck traffic will be much reduced compared to baseline truck traffic generated by the Bayside Oil facility. Trucks will follow designated routes to the site.

**§4-15 Limitations on the dimensions and weights of vehicles.** All trucks and vehicles operating in New York City must comply with the height, width, depth, and weight requirements

outlined in this section. This regulation also provides for permits for oversize vehicles and self-propelled cranes.

All vehicles used during the operation or construction of the Project will be required to conform to these requirements. The number of oversize vehicles to be greatly reduced, as compared to construction of a similar facility at a landlocked site, because most such deliveries can be made by barge. Any permits for self-propelled cranes and oversize vehicles will be obtained from the New York City DOT pursuant to this provision.

**Title 62: Department of City Planning.** This title includes regulations regarding the procedures of the City Planning Commission and its staff (Department of City Planning), as provided in Title 25 of the Administrative Code.

**§5-02 (d) Applicability of CEQR.** These rules and Executive Order 91 shall apply to environmental review by the city that is required by the State Environmental Quality Review Act (Environmental Conservation Law, Article 8) and regulations of the State Department of Environmental Conservation thereunder and shall not be construed to require environmental quality review of an action where such review would not otherwise be required by such act and regulations, or to dispense with any such review where it is otherwise required.

The Project subject neither to the SEQR nor to the CEQR process because review is not required for a facility under Article X.

**Executive Order No. 91 of 1977, as amended: §6-04 Exempt Actions.** The following actions shall not be subject to the provisions of this chapter: ... (g) actions subject to the provisions requiring a certificate of environmental compatibility and public need in Article 7 and 8 of the Public Service Law.

The Project is subject to the successor legislation of Article VIII of the Public Service Law, Article X. As such, it is subject to neither the SEQR nor the CEQR processes.

**§6-01(b) Policy guidance for plans pursuant to Charter Section 197-a.** City agencies are urged to consider adopted 197-a plans as guidance for pertinent actions, whether or not such actions are subject to City Planning Commission review. The existence of an adopted 197-a plan shall not preclude the sponsor or any other city agency from developing other plans or taking actions not contemplated by the 197-a plan that may affect the same geographic area or subject matter.

TGE is proposing an action that is consistent with the Greenpoint 197-a plan and the Williamsburg Waterfront 197-a plan. The Article X application will analyze in detail the Project's consistency with both plans.

**Title 63: Landmarks Preservation Commission.** This title includes regulations regarding the issuance of City historic preservation permits for alterations to landmarks, Certificates of No Effect, and Certificates of Appropriateness, as provided in Title 25 of the Administrative Code. Since the Project does not alter a City Landmark, this title contains no provisions that are substantive for the Project.

### **Title 66: Department of Business Services**

**§2-03 Improvement and alteration of waterfront property and marginal streets.** No person shall erect, place, or maintain any building, platform, sign, or advertising device or a construction or obstacle of any kind on a wharf property or marginal street without a permit from the Commissioner of the Department of Business Services. A permit is also required for any land contour work, demolitions, pile-driving, or dredging on any waterfront property or marginal street. No marginal streets may be opened, closed, altered, repaired, or installed upon without a permit. All work must comply with the requirements established in this section.

The Project will comply with this provision by acquiring all necessary authorizations.

**§2-04 Maintenance of waterfront property.** All waterfront property must be maintained in a safe condition so as not to endanger people or property. All orders from the Commissioner of the Department of Business Services requiring the upkeep or alteration of property in the interest of safety must be followed.

The Project will conform to this requirement through the active maintenance of the Project site, including the reinforcement and maintenance of existing piers and rip rap.

**§2-05 Dumping, polluting, or obstructing waters.** No snow or ice shall be dumped into the waters of the port of New York except in places specially designated by the Commissioner of Business Services. No person shall place, discharge, or deposit any drift or debris onto any waterfront property, marginal street, or waters of the port of the City of New York without the supervision of the United States Supervisor of the Harbor and the prior written consent of the Commissioner.

The Project will comply with this section by virtue of its compliance with the SPDES program (limiting discharge to surface waters) as well as through accepted handling practices for snow removal and waste disposal. In no case will snow, ice, drift or debris be dumped to adjacent surface water.

**§2-06 Obstructing waterfront property.** No person shall impede, encumber, or obstruct the free access to, egress from, or use of any waterfront property or marginal street with any merchandise, cargo, goods, refuse, or other material or with a vehicle or vessel of any type.

TGE will comply with this requirement by not storing any materials between its own fenceline and the water.

**§2-11 Hazardous, flammable, or explosive substances.** No person may load, unload, discharge, place, store, or keep any material, fluid, gas, or substance of a flammable, explosive, or hazardous nature upon any waterfront property or marginal street except at locations designated in writing by the Commissioner of Business Services and receiving all permits and approvals outlined in this section and other portions of local, state, and federal law. No person shall drain, remove, or discharge any gasoline, oil, or explosive, flammable, or hazardous liquid from any vehicle on any waterfront property without the written approvals and consents listed in this section. All regulations regarding the use and storage of hazardous, flammable, or explosive substances on waterfront property must be followed.

TGE will comply with this requirement by not storing hazardous, flammable or explosive substances between its own fenceline and the water.

**§2-12 Berthing and Moving of Vessels.** No person shall tie, anchor, or make fast any vessel, barge, ship, aircraft or floating structure at or about any wharf property or marginal street without the prior written permission of the Commissioner.

The Project will comply with this provision by acquiring all necessary authorizations.

## **HEALTH CODE OF THE CITY OF NEW YORK**

### Article 131: Buildings Generally

**§131.11 Receptacles for the removal of waste materials.** All incinerator residue and ashes, refuse, and liquid waste must be disposed of in accordance with the requirements of this section.

The three types of waste must be separated and kept in containers that comply with the requirements of the Department of Health.

TGE will comply with all of the requirements of this section and will manage its waste receptacles accordingly.

**§131.13 Flexible gas tubing.** All flexible gas tubing used for residential, manufacturing, and other purposes must be made of suitable metal and constructed with the requirements of this section. Permitting or causing the installation of leaky, defective, or imperfect tubing is illegal.

Gas pipeline and compressor infrastructure will conform to applicable federal and state guidelines, and will not be flexible. Flexible gas tubing, if any, that may be associated with ancillary systems, will be designed to comply with this provision.

Article 153: Littering and Disposal of Refuse

**§153.01 et seq. Littering and disposal of refuse.** All refuse must be disposed of in a manner that complies with the requirements of this article. Littering is prohibited.

All waste materials generated by Project construction and operation shall be disposed of in a manner that conforms to the requirements of the Health Code. Solid waste will be removed by private haulers.

Article 173: Hazardous Waste

**§173.01 et seq. Hazardous waste.** All hazardous waste materials must be stored, transported, handled, and labeled as described in the provisions of these sections.

All hazardous material and hazardous waste management will follow applicable federal and state guidelines. Such management will assure compliance with this general Health Code provision.

## **NEW YORK CITY ZONING RESOLUTION**

### **Article I: General Provisions**

**§11-111 For new uses.** Any new building or structure on any property shall be used, constructed, and developed in accordance with all applicable regulations of this Resolution.

As established below, TGE will comply with the requirements of the Zoning Resolution.

## Article IV: Manufacturing District Regulations

**§41-13 M3 Heavy Manufacturing Districts.** M3 districts are designed to accommodate the essential heavy industrial uses which are incompatible with other types of development and can not feasibly conform to high performance standards. Residential development is prohibited.

The Project site is in an M3 Heavy Manufacturing District.

**§42-00 General provisions.** Uses Groups 4B, 4C, 5, 6A, 6B, 7, 8, 9B, 9C, 10B, 10C, 11, 12A, 12C, 12D, 12E, 13, 14, 16, 17, or 18 are allowed in Manufacturing Districts as set forth in this chapter of the Resolution.

As established below, electric generating facilities are classified into Use Group 18, a land use category allowed in M3 Heavy Manufacturing Districts.

**§42-15 Use Group 18.** Use Group 18 consists primarily of industrial uses presumed to involve a considerable danger of fire, explosion, or other hazards to public health and safety or uses presumed to be unable to conform to high performance standards with respect to the emission of objectionable influences; or to generate a considerable amount of traffic, both pedestrian and freight. Use Group 18 includes “electric power or steam generating plants.”

The Project is an electric power and steam generating facility. It is therefore classified under Use Group 18.

**§42-20 Performance standards.** All uses in Use Groups 11A, 16, 17, or 18 must conform with all of the performance standards governing noise, vibration, smoke and other particulate matter, odorous matter, toxic and noxious matter, radiation hazards, fire and explosive hazards, humidity, heat, and glare that apply to the zoning district in which such a use is located. In the case of any conflict between the performance standards and the use group standards, the performance standards shall control. Should there be any conflict between the performance standards and the rules and regulations of the Department of Environmental Protection, the more restrictive shall apply.

Electric generating facilities are categorized into Use Group 18. As established below, the Project will comply with all of the performance standards that apply to M-3 Zoning District.

**§42-213 Maximum permitted decibel levels.** The sound pressure level for all manufacturing districts, at any point on or beyond any lot line, shall not exceed the maximum decibel level for the designated octave band as established in the table below. The measurements must be taken using the methods established by §42-212 of the *Zoning Resolution*.

The Project site is in an M3 District and is within several hundred feet of an M1 District. A detailed description of noise modeling is presented in Section 11. As summarized in the table below, modeling shows that the Project is well below the applicable M3 property line standards. As shown in Section 11, design goals quieter than that allowed by zoning have been used for many locations..

**Maximum Permitted Sound Levels in M3 Districts and TGE Maximum Predicted Property Line Sound Levels (in decibels)**

Octave band (cycles per second)	Maximum Permitted	TGE Impact	Compliance Status
63	79	74	compliant
125	74	61	compliant
250	69	52	compliant
500	63	44	compliant
1000	57	38	compliant
2000	52	38	compliant
4000	48	33	compliant
8000	45	29	compliant

**§42-214 Special provisions along district boundaries.** Whenever a Manufacturing District adjoins a Residence District, the maximum decibel levels within that Residence District is six decibels less than the numbers listed in the table above for all octave bands.

The Project is not located along a district boundary. Certain nearby residential district boundaries are applicable. As summarized in the tables below, preliminary modeling indicates that the Project will conform to residential district noise performance standards.

**§42-223 Maximum steady state vibration<sup>15</sup> displacement.** In all manufacturing districts, no activity shall cause or create a steady state vibration at any point on any lot line with a displacement that exceeds the standards set for each frequency in the table below (as measured by the methods established in §42-222 of the *Zoning Resolution*).

Frequency	Steady State Vibration Maximum Permitted Displacement	Impact Vibration Maximum Permitted Displacement
10 and less cycles per second	.0039 inches	.0078 inches
10-20 cycles per second	.0022 inches	.0044 inches
20-30 cycles per second	.0011 inches	.0022 inches
30-40 cycles per second	.0007 inches	.0014 inches
40-50 cycles per second	.0005 inches	.0010 inches
50-60 cycles per second	.0004 inches	.0008 inches
60 and more cycles per second	.0004 inches	.0008 inches

Source: New York City, City Planning Commission and City Planning Department (Sections 42-223 and 42-224)

Combustion turbines are highly balanced and do not normally generate ground borne vibration. The design requirements for the design of the foundations will specify the above-cited amplitude limits, including limits for the support of the gas and steam turbines, which will operate at 3600 RPM (60 cycles per second). The amplitude of vibrations at the base of the foundations will be less than this due to dynamic damping. The Project will be designed to comply with the vibration displacement performance standard.

**§42-224 Maximum permitted impact vibration<sup>16</sup> displacement.** No activity in a manufacturing district shall cause or create an impact vibration at any point on any lot line with a displacement that exceeds the standards established in this section, as measured with the methods set forth in §42-222. The limits for impact vibration are set forth in the table above.

Impact vibration from construction activities such as blasting or pile driving can and will be controlled in such a way that minimizes any individual vibration impact. A detailed blasting or pile driving plan will address this issue after Project certification. Both construction and operation of the Project will be designed so as to comply with the impact vibration performance standard.

<sup>15</sup> Defined in §42-221 of the *Zoning Resolution* as “earth-borne oscillations that are continuous” or discrete pulses occurring more than 100 times per minute (*NYC Zoning Resolution*, 2002).

<sup>16</sup> Defined in §42-221 of the *Zoning Resolutions* as “earth-borne oscillations occurring in discrete pulses at or less than 100 pulses per minute” (*NYC Zoning Resolution*, 2002).

**§42-225 Special provisions along district boundaries.** Whenever a M3 or M2 District adjoins a Residence District, the steady state or impact vibration displacement, as measured at the district boundary, must not exceed the levels permitted for an M1 District as set forth in §42-223 and §42-224 of the *Zoning Resolution*.

The site is not along a district boundary. The applicable limit of 0.0001 inches (high frequency steady state vibration) will be specified for residential zones, which are several hundred feet away. As such, the M3 limits are controlling.

**§42-232 Maximum permitted emission of smoke.** The density of smoke emitted during normal operations must not exceed Standard Smoke Chart number 2, and the quantity of smoke emitted must not exceed 30 smoke units per hour per stack in M3 Districts. The method of measurement and any additional or special-case restrictions shall be determined in accordance to the rules and regulations set forth by the Department of Environmental Protection.

The Project will fully comply with this provision. Modern combustion technology and clean fuels generally ensure that smoke and opacity are not a problem. Specifically, New York State requirements under Subpart 227-1.3 of Title 6 of the New York Code of Rules and Regulations (6 NYCRR) are more stringent, and thus compliance with state law ensures compliance with this provision of local law.

**§42-233 Maximum permitted emission of dust.** The maximum permitted emission of dust in M3 Manufacturing Districts for combustion processes is 0.70 lb/mmBtu for minimum sized industrial plants (10 mmBtu/hr or less) and 0.18 lb/mmBtu for maximum sized industrial plants (10,000 mmBtu/hr or more). In addition, untreated open areas (including storage areas or service roads) shall be treated and improved as specified by the rules and regulations of the Department of Environmental Protection to minimize wind-borne air pollution.

The dust and particulate matter<sup>17</sup> emission limits of 0.18 to 0.70 lb/mmBtu for combustion sources are less stringent than the Air Pollution Control Code limits discussed relative to §24-145 above. On the basis of the Zoning Resolution definition, the Project emission limits will be as shown in the table below, and will comply with the particulate emission requirements.

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<sup>17</sup> Particulate matter is defined in §42-231 as “solid and liquid matter capable of being airborne”, with the solid component referred to as “dust.” This differs from the Air Pollution Control Code (Administrative Code, §24-104(38)), which includes gases or vapors condensing to form particulate matter. Thus, the Air Pollution Control Code is all the more restrictive for particulate emissions, as compared to the Zoning Resolution.

Source	Heat input mmBtu/hr	M3 District Performance Standard (lb/mmBtu)	TGE Emission Limit (lb/mmBtu)
Turbines - gas	2168	0.21	0.004
Turbines - oil	2096	0.21	0.013
Aux. boilers - gas	718	0.25	0.002
Aux. boilers - oil	686	0.25	0.016
Emergency generator	30	0.47	0.10
Emergency fire pump	1	0.70	0.31

Note: Zoning Resolution limit is based on logarithmic averaging, from 0.18 lb/mmBtu for sources with a heat input of 10,000 mmBtu/hr or more, 0.70 lb/mmBtu for sources with a 10 mmBtu/hr or less, and all intermediate values determined from a straight line plotted on logarithmic graph paper.

**§42-234 General control over smoke and other particulate matter.** In addition to the performance standards regarding smoke and other particulate matter, the emission of such matter will be controlled so as not to be detrimental to or endanger public health, safety, comfort or other aspects of the general welfare, and so as not to cause any damage or injury to property.

As established in the *Air Quality Application*, the Project will cause no contravention of the health-based standards for air quality, and thus will not be detrimental to or endanger public health or the other public welfare considerations cited in this provision.

**§42-242 Odorous matter in M3 Districts.** Odorous matter may not be emitted on or beyond lot lines at levels that would cause a public nuisance or hazard.

The Project processes do not involve the emission of odorous matter. Thus, odors will not be detectable and will not cause a public nuisance or hazard.

**§42-252 Regulation of toxic or noxious matter.** Toxic or noxious matter, defined as any substance with chemical properties that can cause injury to people or property, shall be emitted in accordance to the limits established by the Department of Environmental Protection. The emission of such matter shall, in addition, be so controlled so that no concentration on or beyond any lot line shall be detrimental to public health, safety, comfort, and other aspects of the general welfare, and shall not cause damage or injury to property.

The Project will comply with these requirements. In addition to the demonstration of compliance already submitted pursuant to the Clean Air Act, compliance will be further demonstrated through a comprehensive study of air toxics (“non-criteria pollutants”) coordinated

with the New York State Department of Health, and to be filed with TGE’s Article X application. It is anticipated that impact concentrations for all pollutants will be less than applicable health-based thresholds, on the basis of a broad search of available literature.

**Section 42-27** of the Zoning Resolution is entitled **Performance Standards Regulating Fire and Explosive Hazards**. Materials are classified into four classifications based on fire and explosive hazard with a separate category for oxygen, as shown below. The Zoning Resolution specifies specific standards for manufacture, utilization, and storage of materials with fire and explosive hazards. In M3 Districts, Class II & III materials may be stored or utilized as shown below.

<b>Class</b>	<b>Definition</b>	<b>M3 Standards</b>	<b>TGE Method of Compliance</b>
I	Materials that will not ignite after exposure to 1200°F heat for 5 minutes; liquids with a flash point of 182°F or more.	Materials may be stored, manufactured, or utilized in manufacturing processes or other production without limitation.	Most materials to be used at the Project, including lube and insulating oils, are Class I materials.
II	Materials that will ignite after exposure to 1200°F heat for 5 minutes or will burn with great intensity by virtue of low ignition temperature, high rate of burning, and large heat evolution; liquids with open cup flash point between 100°F and 182°F.	Materials may be stored, manufactured, or utilized in manufacturing processes or other production without limitation.	Backup light distillate oil will be stored in a new storage tank, equipped with all applicable containment, alarm and safety systems, including fire extinguishing systems.
III	Materials that produce flammable or explosive vapors under ordinary weather conditions; liquids with an open cup flash point of less than 100°F.	Materials may be stored, manufactured, or utilized in manufacturing processes or other production without limitation.	The Project’s primary fuel, natural gas will be utilized at the site, but not manufactured or stored. All gas utilization will be in completely enclosed buildings with incombustible exterior walls and automatic fire extinguishing systems.

IV	Materials that decompose by detonation including primary explosives, high explosives, propellants and their components, pyrotechnics and fireworks, blasting explosives, unstable organic compounds, and strong oxidizing agents.	May not be manufactured. May be utilized only by special permit. Accessory storage allowed only by special permit.	No use of Class IV materials is planned at the Project.
Oxygen	Manufacture, storage, and utilization of gaseous or liquid oxygen	Manufacture allowed only by special permit. Utilization and unlimited storage allowed.	A small quantity of oxygen (several 250 c.f. bottles, or up to 0.15 mmcf at standard temperature and pressure) may be stored at the site.

**§42-283 Humidity, heat, or glare in M3 Districts.** When an M3 District adjoins any other district, any activity producing excessive humidity in the form of steam or moist air, or producing intense heat or glare shall be carried out so as to be imperceptible at or beyond the district boundary.

The proposed cooling system will use air as a heat sink, and thus will not produce water vapor or steam or any occurrences of intense heat or glare. Stack emissions are controlled and routed through flues that comply with Good Engineering Practice requirements (Section 6 of the *Air Quality Permit Application*). Thus, Project design will assure that humidity, heat, or glare caused by the operation of this facility will be imperceptible at the district boundary.

**§42-52 et seq. Sign regulations.** In February 2001, new regulations regarding signs were passed. All signs must comply with the requirements set forth in this section regarding the size, height, surface area, and illumination of signs. Each sign is limited to 1,200 square feet, and the total surface area of signs is limited to six times the overall street frontage. Illuminated signs are further restricted in terms of dimensions (five times street frontage, and not more than 500 square feet per sign if announcing the primary use and 750 square feet if an accessory use), and flashing advertising signs are not permitted. There are also limitations on the projection of signs into the street. The height of signs is limited to 40 feet above ground (non-illuminated) and 75 feet (illuminated).

The Project will conform to all of these requirements. The only types of signs that are required for the operation of the Project are non-advertising, non-illuminated signs designed for the direction or convenience of the public, and as such are specifically excluded from regulation

(definition of “sign” under §12-10 of the Zoning Resolution). Thus, the sign regulations will act only as limitations for architectural design. For the TGE site, with approximately 1,400 feet of frontage, the total surface area of all signs is limited to 8,400 square feet. Illuminated signs are limited to five times the frontage, or 7,000 square feet. Presently, all Project signs are expected to be less than 500 feet and will not project into the street. Sign heights will comply with the applicable height provisions.

**§43-12 Maximum floor area ratio.** Except as otherwise provided in this chapter, the maximum floor area ratio for all development in M3 Districts shall be 2.00.

The floor area ratio for the Project site is expected to be less than 2, and will comply with this requirement.

**§43-22 Level of yards.** The level of a yard or rear yard equivalent shall not be higher than curb level (not applicable if the natural grade level must be disturbed to comply with this requirement). No structure shall be erected above ground level in any required yard or rear yard equivalent except as provided in §43-23 below.

The Project site’s natural grade is lower than the curb lines along Kent Avenue and North 12<sup>th</sup> Street, and all drainage will be contained and treated as appropriate within the site.

**§43-23 and 43-26. Rear Yards.** The construction of the certain types of accessory structures is allowed in rear yards or rear yard equivalents. A minimum rear yard is required except for corner lots and under certain other specified conditions.

Rear yards or rear yard equivalents are not applicable, because the Project site is a “corner lot” and as such has only side yards, not rear yards.<sup>18</sup>

**§43-25 Minimum required side yards.** No side yards are required, but if any open area along a side lot line is provided, it should be at least 8 feet wide.

Although not required, space has been allocated in the conceptual engineering design process to potentially allow an 8-foot wide open area along the side lot line (that is, along the East River and Bushwick Inlet waterfront).

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<sup>18</sup> More specifically, the site has two front lot lines (approximately 1,000 along North 12<sup>th</sup> Street and 400 feet along Kent Avenue) and two waterfront lot lines that intersect the front lot lines and are always within 45 degrees of being parallel to a front lot line. Hence, according to the definition of a rear and side lot line in §12-10 of the Zoning Resolution, the site has no rear lot line, but rather two waterfront side lot lines.

**§43-42 Permitted obstructions.** Chimneys or flues with a total width not exceeding 10% of the total width of the aggregate width of street walls<sup>19</sup> of a building are not considered obstructions and may then penetrate the maximum height limit or a sky exposure plane<sup>20</sup> required by this chapter. Cooling towers are also permitted as obstructions if they are more than 30 feet wide at a depth of 50 feet, and if such aggregate street wall width, multiplied by the height of the obstruction is less than 4 times the non-obstructing street wall width.

The aggregate street walls include 290 feet along Kent Avenue and approximately 900 feet along North 12<sup>th</sup> Street, or a total of 686 feet. The exhaust building, therefore, may not be more than 90 feet wide. The designed width is less than 60 feet. Therefore, the exhaust building is a permitted obstruction. The air-cooled condensers have an aggregate street wall width of approximately 460 feet; furthermore, the product of ACC height and aggregate street wall width, divided by the aggregate street wall along North 12<sup>th</sup> Street (460 x 130 / 900) is approximately 66, whereas the limit is 4. For either of these reasons, the ACCs, as proposed, do not qualify as a permitted obstruction, and must comply with height, setback and sky exposure plan requirements set forth in §43-43.

**§43-43 Maximum height of front wall<sup>21</sup> and required front wall setbacks.** For lots located on narrow streets<sup>22</sup> the setback and height requirements for walls facing a street shall be as follows: a) the initial setback distance shall be 20 feet; b) the maximum height shall be 60 feet; c) the sky exposure plane<sup>12</sup> shall begin at 60 feet above the street line and rise over the lot at a ratio of 2.7ft. vertically for every 1 ft. across the lot. Permitted obstructions (see §43-42) are exempt from these rules. Front lot lines with an open space area of 15 ft. or more are subject to an alternate set of requirements established in §43-44.

Both Kent Avenue and North 12<sup>th</sup> Streets are narrow streets. Air-cooled condensers are positioned at a distance of approximately 40 feet -- more than the minimum 26 feet from the North 12<sup>th</sup> Street boundary (ACCs being 130' high, less 60' initial height, divided by 2.7). The turbine building will be less than 60 feet for the southernmost 20 feet of depth along North 12<sup>th</sup> Street. Along Kent Avenue, a 60' high space is proposed, with a dept of 30 feet. The generation building reaches its maximum height of 115 feet at depths greater than the minimum of approximately 20' (generation building being 115' high, less 60' initial height, divided by 2.7). Thus, all structures will comply with the requirements given in this section.

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<sup>19</sup> For any building, the "aggregate width of street walls" is the sum of the maximum widths of all of the street-facing walls or portions of walls that are at or within 50 feet of a street (§12-10 of the *Zoning Resolution*, 2002).

<sup>20</sup> The "sky exposure plane" is the imaginary inclined plane beginning above the street line drawn at a height and rising over a zoning lot at a rate limited by the individual district regulations (§12-10 of the *Zoning Resolution*, 2002).

<sup>21</sup> A "front wall" is one that faces a street line (§12-10 of the *Zoning Resolution*, 2002).

<sup>22</sup> A "narrow street" is any street less than 75 feet wide (§12-10 of the *Zoning Resolution*, 2002).

**§44-12 Maximum size of accessory group parking facilities.** No accessory group parking facility in any manufacturing district shall exceed 150 spaces except as provided in another section of the *Zoning Resolution*.

There will be less than 150 parking spaces at the Project site.

**§44-21 General provisions for the amount of required accessory parking.** All new development must include sufficient off-street accessory parking as described in this section, except when these requirements cannot be fulfilled as described in §44-22 or §44-23. For uses in Use Group 18B, development in M3-1 districts requires one parking space for every 2,000 sq. ft. of space or one parking space for every three employees, whichever is fewer.

Employee-based parking results in approximately 10-13 spaces, depending upon the actual number of employees. In addition, an estimated 25 spaces are required for the built space along Kent Avenue. It is expected that these spaces will be provided off-site pursuant to §44-32.

**§44-32 Off-site spaces for all permitted uses.** All required or permitted accessory parking spaces for the land uses listed above may be provided in another zoning lot in an adjoining Manufacturing District or C8 Commercial District provided that spaces are not more than 600 feet from the nearest boundary of the zoning lot.

The Project will comply with these requirements, except as may be modified by the provisions of §62-522 of this code that apply to waterfront blocks (limit of 1,000 feet from zoning lot).

**§44-34 Additional regulations for required spaces when provided off-site.** When parking spaces are located off-site, these spaces will be owned by the same person that owns the facility to which these spaces are and accessory and will be responsible for these spaces by law. These spaces must also comply with the requirements of the district in which they are located.

Any off-site parking for the built space along Kent Avenue will comply with these requirements.

**§44-35 Restriction on use of accessory off-street parking spaces.** All accessory parking spaces of any sort in any location shall be used primarily for the owners, occupants, customers, employees, or visitors of the use or uses to which the spaces are accessory.

This requirement will be enforced as part of the facility's overall security program.

**§44-41 et seq. General provisions for the size, street access, surface, and screening of parking spaces.** All parking spaces must conform to the size, street access, surface, and screening requirements set forth in these sections. The size of all parking spaces shall be 300 sq. ft. except as exempted in these sections. The street access areas for any parking lot must be 50 feet from any intersection, unless otherwise exempted. The lots shall be constructed and maintained so as to provide adequate drainage and minimize the release of dust in accordance to the rules and regulations promulgated by the Commissioner of Buildings and as set forth in these sections.

The accessory parking lot on the Project site will conform to all of these design and construction requirements.

## **Article VI: Special Regulations for Waterfront Areas**

**§62-12 Applicability to developments in the waterfront area<sup>23</sup>.** All new developments on waterfront blocks<sup>24</sup> must conform to the special zoning regulations for waterfront properties set forth in this chapter of the *Zoning Resolution* except where exempted by the provisions of this section.

The Project site is on a waterfront block. As set forth below, the Project will comply with the requirements of this section.

**§62-211 Water-Dependent uses.** Water-Dependent (WD) uses are land uses that require direct access to a body of water to function or use the waterways for the transport of materials or products. The land uses listed in this section are approved WD uses, including all uses in Use Group 18 that ship or receive materials or products by water as evidenced by operational docking facilities.

Electric generating facilities are in Use Group 18 and are permitted in M3 districts without being a WD use. Nevertheless, the Project will have operational mooring facilities to receive major components of the facility during construction, and these mooring facilities will remain operational to receive backup fuel oil when necessary during Project operation. As a result, the Project is a WD use under the *Zoning Resolution*. Furthermore, in Attachment M TGE

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<sup>23</sup> The “waterfront area” is the geographical area extending from the pierhead line to a line 800 feet back from the shoreline. Any block completely or partially within that area shall be considered in the waterfront area (§12-10 of the *New York City Zoning Resolution*, 2002).

<sup>24</sup> A “waterfront block” is a “block...[with] a boundary at a grade coincident with or seaward of the shoreline” (§62-11 of the *New York City Zoning Resolution*, 2002).

demonstrates is consistency with coastal policies and New York City local waterfront revitalization plan.

**§62-241 Uses on existing piers and platforms.** Uses on existing piers or platforms may be changed, enlarged, or extended provided that the use meets the regulations for the zoning district in which it is located and is a WD use.

The dilapidated North 12<sup>th</sup> Street pier is found at the west end of the Project site, and will be reinforced. Any use of the pier will meet the applicable M3 regulations and will be water-dependent. No Project buildings are planned for the pier.

**§62-28 Special sign regulations.** All signs placed on a waterfront blocks must comply with the requirements of this section regarding the number, surface area, location, and illumination of these signs. Specifically, not more than one 50-square-foot flashing sign is allowed. No limits are placed on non-flashing signs.

Signs will be designed to conform to both this provision and the manufacturing district sign regulations. As stated above, the only signs necessary for the operation of the facility are excluded from the definition of a “sign” under the Zoning Resolution.

**§62-31 Bulk computations on waterfront zoning lots.** For bulk computations on waterfront blocks, the areas of the seaward lot<sup>25</sup> and the upland lot<sup>26</sup> shall be computed separately. All bulk regulations for the upland lot must be met solely on that portion of the zoning lot. Lot coverage provisions do not apply to the seaward lot except where piers or platforms cover the water. Floor area requirements generated by these seaward piers or platforms may be located anywhere in the zoning lot in accordance to the provisions of this section.

No seaward lot area has been used to compute allowable floor space. The Project will comply with the FAR limit of 2.0 on the basis of only the upland lot.

**§62-326 Waterfront floor area ratio requirements for Manufacturing Districts.** The maximum floor area ratio shall be in accordance to the district regulations, except that no floor area bonuses shall be permitted.

The Project complies with the FAR limit of 2.0.

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<sup>25</sup> The “seaward lot” is the area of a zoning lot seaward of the bulkhead line, except when part of the upland lot (§12-11 of the *NYC Zoning Resolution*, 2002).

<sup>26</sup> The “upland lot” is the area of a zoning lot located landward of the bulkhead line, and all land above water where the shoreline projects seaward of the bulkhead line (§12-11 of the *NYC Zoning Resolution*, 2002).

**§62-33 Special yard regulations for waterfront blocks.** Yard regulations for waterfront zoning lots should be determined by the standards of this section. For WD uses and uses in Manufacturing Districts, the district regulations regarding yard requirements shall apply.

The Project is a WD use and is a use in a Manufacturing District. It will conform to the district regulations for yards, as established above relative to §43-27 and §43-28.

**§62-34 Height and setback requirements for waterfront blocks.** Manufacturing Districts consisting primarily of WD uses or uses in Use Groups 16, 17, or 18 are exempt from the special height and setback requirements listed in this section. The applicable district regulations shall control these developments.

The Project is a WD use and is a use in Use Group 18. It will conform to the district regulations for the height and setback of buildings, as established above relative to §43-43.

**§62-41 Requirements for waterfront public access.** Waterfront public access shall be provided on all waterfront zoning lots in accordance with the provisions of this section. Developments comprised primarily of WD land uses and land uses in Use Groups 16, 17, or 18 in Manufacturing Districts are exempt from the requirements.

As a WD use and use in Use Group 18 located in a Manufacturing district, the Project is exempt from all waterfront public access requirements set forth in this section.

**§62-42 Requirements for visual corridors.** Waterfront zoning lots on waterfront blocks shall provide visual corridors in accordance with the provisions of this section. Developments comprised primarily of WD land uses and land uses in Use Groups 16, 17, or 18 in Manufacturing Districts are exempt from the requirements.

As a WD use and use in Use Group 18 located in a Manufacturing district, the Project is exempt from all visual corridor requirements set forth in this section.

**§62-522 Accessory non-residential off-site parking.** Off-site accessory parking for non-residential developments in waterfront blocks must apply with the requirements of §44-32, except that accessory spaces must be within 1000 feet of the use to which they are an accessory.

The Project will conform to this requirement.

**§62-552 Off-site parking in public parking facilities.** Permitted or accessory off-street parking for uses on zoning lots within a waterfront block may be provided in a public parking lot or public parking garage if the ownership requirement for these spaces is satisfied by an interest commensurate with the interest of the principal use. The entrance to the facility may not be further than 1,000 feet from the nearest boundary of the zoning lot.

For the energy facility, all accessory parking spaces will be provided on-site. For the built space along Kent Avenue, it is expected that off-site parking spaces will be used, consistent with this provision.

**§62-71 City Planning Certifications.** The requirements in this chapter regarding certifications for public access, visual corridors, and zoning lot subdivisions shall not be required of zoning lots in Manufacturing Districts consisting primarily of uses in Use Groups 16, 17, or 18.

The Project is located in a Manufacturing District and therefore is exempt from the certification requirements.

**§62-736 Bulk modifications on waterfront blocks.** The City Planning Commission may permit modification of any applicable yard, lot coverage, height and setback, etc., if it finds that (a) the zoning lot has unique natural features such as rock outcroppings, significant grade changes or wetlands; or has an irregular shoreline or shape; or contains existing buildings or other structures; (b) the site plan of the proposed development would result in better bulk placement and articulation of buildings, and a better arrangement of open spaces than would be possible by strict adherence to the bulk regulations; (c) the proposed development would provide physical or visual public access to the waterfront in a way that is superior to that which would be possible by strict adherence to the bulk regulations; and (d) such modifications would significantly enhance the relationship between the proposed development and the surrounding area.

The site has an irregular shoreline and shape. Nonetheless, the Project's site plan and massing has been carefully designed to conform with the Zoning Resolution, and it does not appear that modification would offer a significant improvement.

#### **4.6.3 No Unreasonably Restrictive Provisions**

On the basis of the foregoing analysis, it is concluded that the Project will comply with all applicable laws and regulations of the City of New York. No waiver under PSL §168(2)(d) is sought.

#### **4.6.4 Real Property Information**

Per Stipulation 5, Clause 8, certain property-related information must be provided, as follows:

- *A demonstration the Applicant has obtained title to the Project site (including street access) or is under binding contract or option to obtain title to the Project site (including street access).*

An affiliate of TGE, Gas Alternative Systems, Inc., holds a ten-year exclusive option to purchase the Project site from Bayside Fuel Oil Depot Corp. (“Bayside”). The option covers the purchase of all of Bayside’s rights in the site, such as riparian rights and any rights to land underwater. Attachments L-6 to L-10 (found in Volume 6) contain the property descriptions, surveys and deeds to the Project site that are available to TGE. They are grouped as follows:

- Attachment L-6 Parcel ownership information from New York City tax map. This attachment includes detailed information regarding each parcel within a 1,000-foot radius of the site.
- Attachment L-7 Grants of Land Under Water, Office of General Services (OGS) files. This attachment includes Water Grant Map no. 10 and other OGS mapping. It also includes property tax maps from Manhattan.
- Attachment L-8 Property Deeds, Based on Title Search. This attachment includes parcel mapping from the official City tax map, surveys and sketches by Meserole City Surveying (1959), McElroy & Eaton (1995), Montrose Surveying (2001) and Boro Surveying (2001).
- Attachment L-9 Excerpts from the Offering Memorandum by Carlton Group for the sale of the North 12<sup>th</sup> Street oil terminal (1997).
- Attachment L-10 Agreements relating to the Project site.

Throughout the description below, reference is made to deeds, exhibits or maps within the aforementioned attachments. TGE has used the tax map, deeds and available surveys in generating the base maps for the plans and figures provided in the Article X application. Note that Attachment L-8 also contains the exceptions that result from an examination of the Project site and the Bushwick Inlet by a title insurance company.

1. As shown in Water Grant Map no. 10 (see [Attachment L-7](#)), the site is filled tideland. The plan first mentions grants of land under water for the site in the 1830s – with the southern portion of the site granted to Lewis Sandford (Chapter 128 of the Laws of 1835, dated April 22, 1835), and the northern portion to Fish, Bridgman, Van Winkle & Dubois (Chapter 371 of the Laws of 1837, dated May 9, 1837). [Attachment L-8](#), Exhibit A includes indentures between these parties (Liber 49, cp 343, Liber 93, cp 507).
2. According to Water Grant Map no. 10, grants over portions of the northern and western part of the Project site were issued in 1851 to Schermerhorn Banker & Schermerhorn and to Samuel Hunt. A subsequent grant was made to Cornelius Dubois for the entire block of between North 12<sup>th</sup> Street and North 13<sup>th</sup> Street (never laid out or built) in 1859. Neither of these grants is identified as an exception to the title in [Attachment L-8](#), and the available documentation appears to be consistent with the transfer of the property of rights of Samuel Hunt to Standard Oil (purchaser and/or successor in title to Pratt Manufacturing).
3. The 1851 Dubois grant, as well as the two grants from the 1830s, extend to the “permanent water line of Williamsburgh, established April 22, 1835.” A new pierhead line extending further westward was established under Chapter 299 of the Laws of 1891. Then, on February 29, 1892, a grant to build what is today the western portion of the North 12<sup>th</sup> Street pier was made by Pratt Manufacturing (labeled on Grant Map no. 10 in [Attachment L-7](#) as Parcel C plus a small portion of Parcel B, bounded by the 1891 pierhead line).
4. In May 1911, an agreement between the City of New York and Standard Oil (purchaser and/or successor in title to Pratt Manufacturing) shows that Standard Oil had applied to the Department of Docks and Ferries to build a concrete pier deck north of North 12<sup>th</sup> street and bounded by the East River and Bushwick Creek. (See [Attachment L-8](#), Exhibit B, Liber 3297, cp 480.) At or about the subsequent year (1912), according to Borough of Brooklyn construction drawings, the North 12<sup>th</sup> street pier and its twin barrel sewer were constructed. It appears that this construction established the present-day physical extent of the North 12<sup>th</sup> Street pier above the twin barrel relief sewer.
5. On June 30, 1947, a new pierhead line was established, slightly closer to the shoreline than the pierhead line of 1891. A 110-foot-wide federal navigation channel in the Bushwick Inlet was established. In 1958, Paragon Oil, the successor in title to Pratt Manufacturing and/or Standard Oil, received a grant for the western portion of the North 12<sup>th</sup> Street pier (labeled as Parcel C) within the 1947 pierhead line. (See [Attachment L-7](#), Conversion Grant to Paragon Oil, Book of Patents 74, page 484-485; which document is also found in [Attachment L-8](#), Exhibit K, Liber 8682, cp 201.) At the same time, Paragon surrendered to the State the small portion of Parcel B that is outside the 1947 pierhead line. (See Indenture dated August 4, 1958, Misc. Deeds and Title Papers Vol. 13, pp. 168-171).

6. Paragon Oil, which merged with Texaco Inc. in 1964, also received grants to further extend the North 12<sup>th</sup> Street pier by an additional approximately 400 feet in accordance with a five-year improvement clause and subsequent extension clause. However, Paragon/Texaco did not construct the pier extension and thus released the entirety of Parcel B to the State in 1967. (See Attachment L-7, grants to Paragon Oil in Book of Patents 74, page 486, which is also recorded in Attachment L-8, Exhibit C, Liber 8682, cp 197; also, Attachment L-7, Book 77, page 105; and Attachment L-7, the release of the property to the State in Misc. Deeds and Title Papers Vol. 17, page 262).
7. New York State also granted a 30-foot wide easement to Paragon Oil for the purpose of installing oil pipeline infrastructure in underwater lands beneath the 110-foot navigation channel in Bushwick Inlet. . (See Attachment L-8, indenture dated October 6, 1958, Liber 8682, cp 205; the same document being found at Attachment L-7, page 171; and Attachment L-8, Exhibit J, indenture dated November 3, 1960, Liber 9002, cp 228)
8. Separately, Texaco, Inc., received a grant that covered the Project site together with the eastern portion of the North 12<sup>th</sup> Street pier, the Bushwick Inlet, and land north of the Bushwick Inlet, as shown on Grant Map no. 10. (See Attachment L-7, Grant to Texaco, Inc., dated June 24, 1965, recorded in Book of Patents 78, pages 169-171; which document is also shown in Attachment L-8, Exhibit K, Liber 9406, cp 163.)
9. In November 1966, Texaco, Inc. issued an easement to Long Island Pipe Line Corporation for a valve station on the Project site, in connection with the operation of the oil terminal being rebuilt at that time substantially in its present form. (See Attachment L-8, Exhibit E, Rec. Liber 296, page 294.)
10. In December 1988, Texaco transferred the Project site and all its interest in the underwater lands beneath the Bushwick Inlet, except any mineral rights, to Star Enterprise. (See Attachment L-8, Exhibit H: special warranty deed, Reel 2329, page 1209).
11. In July 1992, Star Enterprise granted to Sun Company, Inc., a 45% undivided interested in the Project site, excepting any mineral rights. (See Attachment L-8, Exhibit F: special warranty deed, Reel 2878, page 1466).
12. In July 1997, Star Enterprise offered the oil terminal for sale as a waterfront terminal with barge access. The property being offered – the Project site – is 7.58 acres, which is coterminous with the City of New York tax parcel and inclusive of the North 12<sup>th</sup> Street pier and associated dock area. The offering also stated that the site is “strategically located on the East River” and “benefits from deep water access for barge and vessel supply.” (See Attachment L-9.) The northern boundary is stated as the Bushwick Creek. The northern and western portions of the site are described as containing former dock areas. The site is promoted as having “easy access to water” and the site maps clearly show the North 12<sup>th</sup> Street Pier is included in the parcel for sale.

13. On October 31, 1997, Star Enterprise and Sun Company sold the Project site to Bayside Fuel Oil Depot Corp. (See Attachment L-8, Exhibit F: bargain and sale deed, Reel 4089, page 1957). The mineral rights exception retained by Texaco in 1988 was released by deeds from Texaco to Star Enterprise and Star Enterprise to Bayside Fuel Oil Depot Corp. (See Attachment L-8, Exhibit D: quitclaim deed, Reel 4126, page 136, dated October 30, 1997; and quitclaim deed, Reel 4129, page 545, dated November 17, 1997).
14. Also on October 31, 1997, Star Enterprise and Bayside Fuel Depot Corp. executed agreements, assignable and running with the property, relating to (1) a boat ramp in the Bushwick Inlet; (2) a wastewater discharge into the Bushwick Inlet under a SPDES permit; and (3) the use of the site for the delivery of fuel and the construction of a dock on the existing piers that are part of the Bayside property, which will permit “the docking of barges, boats, etc. in the Bushwick Inlet.” The agreement includes the Seller’s commitment not to adversely affect these activities by virtue of Seller’s own use of the Bushwick Inlet. (See Attachment L-10). In the case of the boat ramp and SPDES permit discharge, the agreements are framed as easements by and between Star Enterprise and Bayside, together with “its successors and assigns.” In the case of dock construction and docking rights, the agreement specifies Bayside’s ownership of the pier and associated rights, and calls for a dock and bulkhead easement to be executed at a later date.

#### Analysis of Property Rights and Restrictions

The purchase agreement for the oil terminal property in 1997 between Bayside (Purchaser) and Star Enterprise (Seller) included the North 12<sup>th</sup> Street pier. However, the Seller maintains otherwise because the deed description follows the bulkhead line in that area of the property. The City Tax Map showing the Bayside property, however, includes the North 12<sup>th</sup> Street Pier area. (See the tax map in Attachment L-8.) The October 31, 1997, agreement regarding docking rights also supports this position because, among other things, the Seller acknowledges that the Purchaser owns the parcel on the south side of Bushwick Creek, references the Tax Map, and also expressly acknowledges that the Purchaser’s property includes the existing piers. The 1997 offering literature advertising the property also included the pier area. (See excerpts from the Offering Memorandum in Attachment L-9.) There is no disagreement that Bayside has the right to deliver fuel by barge via the pier. Any remaining disagreement is expected to be resolved between the parties.

In addition, Bayside – and upon exercise of its option, TGE – holds riparian rights as a waterfront landowner. According to the deed held by Bayside (Attachment L-8, Exhibit F: bargain and sale deed dated October 31, 1997, Reel 4089, page 1957), the Project site’s northwestern and northern boundary is located along the south side of Bushwick Inlet, as follows:

THENCE north east *along south side of Bushwick Inlet* to a point, 178.57 feet and 142.0 feet north of the base line formed by the north side of North 12<sup>th</sup> Street;

THENCE north east *along south side of Bushwick Inlet* to a point, 308.02 feet and 316.0 feet north of the base line formed by the north side of North 12<sup>th</sup> Street;

THENCE north east *along south side of Bushwick Inlet* to a point, 352.67 feet and 398.0 feet north of the base line formed by the north side of North 12<sup>th</sup> Street

(Emphasis added throughout.) Because the property boundary is adjacent to the Bushwick Inlet, Bayside has riparian rights along this segment of the shoreline. Riparian rights are “[t]he rights of the owners of lands on the banks of watercourses, relating to the water, its use, ownership of soil under the stream, accretions, etc.”<sup>27</sup>

Owners of upland bordering navigable waters have rights of access to the navigable portion of the water. These rights include the construction of landings, wharves, docks and piers for the owner’s or public’s use, subject, however, to governmental regulation to protect the public’s right of passage and navigation, and more recently, subject to environmental protection laws. Further, such owners may build bulkheads, fill marshy lands and build wharves for use in navigation and commerce related to their business. However, these rights are not unrestricted.<sup>28</sup>

In addition, and consistent with the public right of navigation, TGE may anchor barges and other vessels in the Bushwick Inlet and East River to accomplish the same purposes. The public right of navigation – also known as the navigational servitude – is the legal principle stating that all owners of underwater lands beneath navigable waters take title to said lands subject to the public’s use of the waterway for navigation and fishery. Waterways subject to the ebb and flood of the tides, such as the East River and Bushwick Inlet, are considered to be navigable waters. The public right of navigation supersedes an underwater landowner’s rights in lands underwater. This legal principle implicates both navigation and all incidents of navigation such as anchoring, mooring, or docking in navigable waters. As TGE is a member of the public, and Bushwick Inlet and East River being navigable waters, TGE is entitled to its use and enjoyment for navigation and for anchoring barges and other activities incidental to TGE’s use of East River and the Bushwick Inlet.

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<sup>27</sup> *Black’s Law Dictionary* 1327 (6<sup>th</sup> ed. 1990).

<sup>28</sup> James M. Pedowitz, *Real Estate Titles*, 18-17 (2d. ed. 1996). See Also, *Town of Oyster Bay v. Commander Oil Corp.*, 96 N.Y.2d 566 at 572 (“neither the Town nor Commander may exercise its rights in a manner unreasonably intrusive upon the other’s rights.”) (2001).

Therefore, even in the absence of an agreement between the parties (or successors) to the 1997 property sale, as described above, TGE would have the necessary rights to construct or rehabilitate temporary or permanent structures and work in the waterway to ensure adequate access to the Project site for the purpose of delivering materials and equipment by barge during construction and oil during operations. Further, this work can be conducted for the benefit of the landowner and for the general public, thereby giving TGE the right to create public waterfront access.

TGE proposes to provide public waterfront access where none exists at this time, along North 12<sup>th</sup> Street to a new public waterfront area at the North 12<sup>th</sup> Street pier. If any questions should arise as to TGE's rights to create such access, TGE would first seek to resolve them and will in all cases stand by its commitment to fund the improvements as part of its proposed Article X certification. The pier (see Figure 3-12A) is in dilapidated condition, is not being used and cannot be accessed by the public. TGE also stands ready to help fund waterfront access at other locations and has solicited proposals from the public. Finally, in the event none of these options are available, TGE could construct a promenade along the Project site's northern boundary, which would provide new access to the southern side of the Bushwick Inlet.

In summary, Bayside's rights to the North 12<sup>th</sup> Street Pier for dock construction, dock access and fuel delivery purposes are stated explicitly, and its ownership of the pier is also acknowledged. Bayside's property rights to the Project site include riparian rights and the public right of navigation, which are detailed above. TGE has designed the Project consistent with existing property rights, such that no new property right acquisition is necessary except licenses or consents from state and city agencies (as described in Section 1.7), and, possibly, an agreement with the Seller (or its successors) confirming that its use of the Bushwick Inlet will not adversely affect Bayside's use of the pier.

- *A statement that the Applicant has obtained, or an explanation of how it can obtain, such deeds, easements, leases, licenses or other real property interests as are necessary for all interconnections for the Project, except no such demonstration shall be required regarding any transmission interconnection subject to Article VII.*

For the steam interconnection, property rights will be acquired by a license from the NYS Office of General Services (OGS) for passage under the East River. Within an established line surrounding the island of Manhattan, the underlying property interest accrues to the City of New York. The New York City Department of Transportation issues consents for linear crossings.

With respect to the crossing under the East River, New York State holds sovereign right to its underwater lands. Pursuant to §3(2) of the Public Lands Law, TGE is required to obtain an easement from OGS. As noted in 9 NYCRR §271-1.7(a)(1), OGS grants easements for the placement of conduits – such as the proposed steam tunnel – in lands underwater for a 25-year term. The easements are 30 feet wide unless the OGS commissioner determines otherwise. Also, 9 NYCRR §271-1.7(a)(1) requires that OGS charge a fee – currently \$12.74 per linear foot of conduit – for the installation of conduits in state-owned lands underwater.

As shown in a drawing obtained from OGS (in Attachment L-7), a grant of land underwater surrounding the island of Manhattan was made to the City of New York by act of the State Legislature in 1871. The outward extent of this grant was 300 feet, within which the underlying property interest accrues to the City of New York rather than to the State, according to OGS. Thus, approximately 3,000 feet of the line are within the Manhattan segment of the route.

Within the Manhattan segment, the steam line will follow under East 20<sup>th</sup> Street and not under any private property. East 20<sup>th</sup> Street is about 80 feet wide at this location (the right-of-way widens significantly east of First Avenue). Attachment L-7 includes supplemental information in the form of tax maps of the only two adjacent parcels, both owned by the Metropolitan Life Insurance Company – the Peter Cooper Village and Stuyvesant Town. In addition, the steam line crosses under the FDR Drive and the esplanade along FDR Drive. In Brooklyn, the steam line follows underneath North 12<sup>th</sup> Street under an alignment shown in Figure 3-5 and Attachment L-7. No private property except the Project site itself is traversed by the steam tunnel alignment.

The natural gas interconnection will be built in city streets by KeySpan, which is a utility company regulated by the NYS Public Service Commission. As such, KeySpan has the necessary rights to occupy streets, subject to permitting requirements described in the local law and permits analyses presented above.

An existing oil pipeline easement for the Buckeye Pipeline Company will be temporarily rerouted during site remediation and the placed into a similar alignment. Buckeye already has the necessary rights to deliver oil to the site.

The electrical interconnection will be built in city streets by Con Edison, which is a utility company regulated by the NYS Public Service Commission. As such, Con Edison has the necessary rights to occupy streets, subject to permitting requirements described in the local law and permits analyses presented above. Temporary and permanent low-voltage connections to the site would also be under the auspices of Con Edison.

The potable water supply connection will be made directly at the Project site, not requiring a separate acquisition of property rights. The local law and permits analyses presented above describe the authorization process for municipal water connection.

The non-potable water supply line from MTA's subway dewatering operation will be constructed through public streets and can be authorized in accordance with the authorization process for water and sewer lines. Because process water lines are not yet routinely built in New York City, a contractual structure for this facility will be determined later, as the Project approaches financing.

The wastewater interconnection will be made directly at the Project site, not requiring a separate acquisition of property rights. The local law and permits analyses presented above describe the authorization process for industrial and sanitary sewer connection.

The new 12"-diameter discharge line for most of the Project's wastewater will be built in North 12<sup>th</sup> Street and along the southern side of the North 12<sup>th</sup> Street Pier, as more particularly described in Section 3.8. North 12<sup>th</sup> Street is 60 feet wide, and the pipe's proposed location within this right-of-way is approximately 20 feet from the edge, as shown in Attachment L-7. The discharge line will be authorized under a State Pollutant Discharge Elimination System permit from the New York State Department of Environmental Conservation, with a consent from New York City DOT as per the description of local permits and consents presented above.

Safety-related communication services would be installed at TGE's expense, by or in coordination with relevant agencies, such as the Police or Fire Departments. Regular communication services are found at the site presently, and any upgrades, replacements or reconstruction would be conducted under the auspices of the applicable communications utility.

- *An identification of any improvement district extensions necessary for the Project and a demonstration that the Applicant has obtained, or can obtain, such improvement district extensions.*

The Project is within a fully serviced urbanized area of New York City. It will require no extension of water, sewer, police, fire, or other type of district coverage. It is outside a state economic development zone and will not require the extension of such a zone. In summary, no improvement districts extensions are necessary for the Project.

#### 4.7 References

New York City Charter, New York City Administrative Code and Rules of the City of New York (RCNY).

New York State Department of State, Coastal Management Program Policies, August 1982.

New York City Department of City Planning, New York City Comprehensive Waterfront Plan (1993).

New York City Department of City Planning, Plan for the Brooklyn Waterfront (1994).

New York City Department of City Planning, The New Waterfront Revitalization Program (1999).

New York City Department of City Planning, Zoning Resolution for New York City – Article I, General Provisions.

New York City Department of City Planning, Zoning Resolution for New York City – Article IV, Manufacturing District Regulations.

New York City Department of City Planning, Zoning Resolution for New York City – Article VI, Waterfront Zoning.

Proposed Zoning Text Amendment: Brooklyn Loft Conversions

Brooklyn Community Board 1. Williamsburg Waterfront 197-a Plan: A Matter of Balance: Housing, Industry, Open Space (as amended by City Planning Commission and approved by NYC Council, 2002).

Brooklyn Community Board 1. Greenpoint 197-a Plan (as amended by City Planning Commission and approved by NYC Council, 2002).

Greenway Plan for New York City (Fall 1993).

New York State Open Space Plan (2001 Draft).

New York City Bicycle Master Plan (1997).

New York City Local Waterfront Revitalization Program (September 30, 1982)

19 NYCRR, Parts 600.4 and 600.5

CEQR Technical Manual (2001), Sections 3A, 3D and 3H.

*Recreation and Open Space in New York City*, Fall 1996, New York City Department of City Planning.