

A. INTRODUCTION

This environmental justice analysis has been prepared to identify and address any potential disproportionate adverse impacts on minority or low-income populations that could result from the proposed project. The need for performing an environmental justice analysis is related to the establishment of Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* (February 11, 1994). Certain state agencies, such as the New York State Department of Environmental Conservation (NYSDEC), have developed their own policies for incorporating environmental justice concerns into environmental review. NYSDEC's environmental justice policy is provided in *Commissioner Policy-29 Environmental Justice and Permitting* (CP-29). CP-29 was issued on March 19, 2003 to address environmental justice concerns and ensure community participation in the NYSDEC environmental permit review process and the NYSDEC application of the State Environmental Quality Review Act. CP-29 is intended to encourage meaningful public participation by minority or low-income communities in the environmental review process and to assist NYSDEC in addressing any disproportionate adverse impacts on minority and low-income communities.

Pursuant to CP-29, NYSDEC reviews issues related to environmental justice prior to issuing permits or approvals. This analysis of environmental justice has been prepared pursuant to CP-29 to address any potential environmental justice issues related to the proposed cogeneration plant and feeder lines at Rikers Island. In order to provide the information necessary for such NYSDEC review, this document discusses the potential effects of the proposed project on minority and low-income residents in accordance with CP-29, and determines whether these populations would be disproportionately affected by adverse environmental impacts resulting from the proposed project.

METHODOLOGY

As set forth in CP-29, "Environmental justice means the fair treatment and meaningful involvement of all people regardless of race, color, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences."

This analysis was prepared following the methodology set forth in CP-29. This methodology involves (1) identifying potential adverse environmental impacts and the area to be affected (i.e., establishing a study area); (2) determining whether potential adverse environmental impacts are likely to affect a potential environmental justice area (i.e., whether low-income and/or minority populations are present in the study area); (3) identifying the potential for cumulative environmental burdens in the study area; and (4) identifying whether potential adverse environmental impacts of the proposed action would disproportionately affect low-income and minority populations. Projects that are seeking permits from NYSDEC and have environmental

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justice areas must also seek public participation from the affected community. A separate public participation plan has been developed for the proposed project, the key details of which are summarized below. In addition, this analysis identifies other environmental burdens within the environmental justice study area.

ESTABLISH STUDY AREA

The study area for this environmental justice analysis was defined to include the area where any potential impacts resulting from the proposed project could occur. To be conservative, the environmental justice study area was defined as the area within 1 mile of the proposed cogeneration facility because this is the project element for which air permits are being sought. The areas within 1 mile of the proposed feeder lines was not included in the environmental justice study area because this use would not generate air emissions, nor would it have the potential to result in significant adverse impacts on areas beyond the project site. The 1 mile study area around the proposed cogeneration facility includes Rikers Island, a small portion of the Hunts Point neighborhood of the South Bronx, and a small portion of the Astoria neighborhood of Queens (see Figure E-1). The portion of Queens that falls within the 1 mile study area is an industrial area that includes only the existing Poletti Power Plant and does not have any population. Therefore it is not considered in the environmental justice analysis.

IDENTIFY POPULATION OF CONCERN

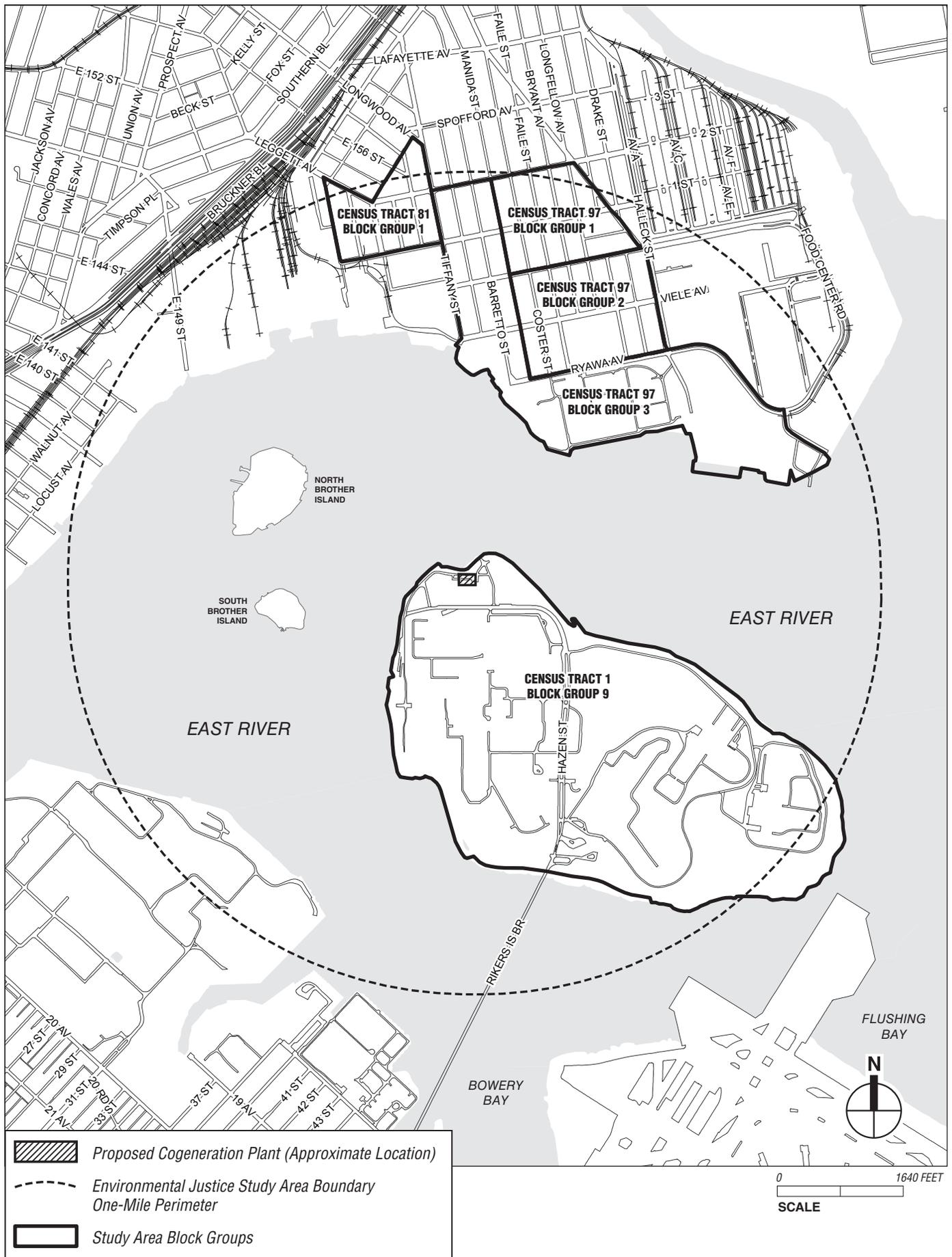
The next step in the analysis is to determine whether low-income or minority populations (“populations of concern”) are present in the study area. Following NYSDEC’s methodology to identify minority and low-income populations within the study area, demographic information from the 2000 Census was used. The U.S. Census Bureau collects information using various geographic units such as census tracts, block groups, and blocks. For the purposes of this analysis, demographic data such as population, race, and poverty status were compiled at the block group level within the environmental justice study area. The study area includes five block groups—Census Tract 1, Block Group 9; Census Tract 81, Block Group 1; and Census Tract 97, Block Groups 1, 2, and 3. Figure E-1 depicts the five census block groups in the environmental justice study area.

In addition, data were compiled for the Bronx and New York City as a whole, to allow for a comparison of study area characteristics to a larger reference area.

IDENTIFICATION OF MINORITY COMMUNITIES

NYSDEC’s Policy defines minorities to include Hispanics, African-Americans, Asian Americans and Pacific Islanders, and American Indian or Alaskan natives. In identifying minority residents within the study area, data from the U.S. Census Bureau were used to determine the population characteristics for the study area. The following information was collected for each census tract block group:

- *Data on racial and ethnic characteristics:* The population in each census tract block group in the study area was characterized using the following racial categories provided in the 2000 Census: White, Black, Asian, and “Other.” “Other” includes residents of American Indian, Alaska Native, Native Hawaiian and Other Pacific Islander descent, as well as those respondents who did not identify with any listed racial groups (White, Black, Asian), or who indicated that they are of more than one race defined in the Census. In addition to racial characteristics, the 2000 Census also includes information on Hispanic origin, which is



RIKERS ISLAND
COGENERATION PLANT

Environmental Justice Study Area
Figure E-1

considered to be an ethnic rather than racial characteristic. People of this ethnic category can be any race.

- *Total percentage of minority population:* Because Hispanic residents may be of any race, people who characterized themselves as White, Black, Asian, and Other in the 2000 Census may be non-Hispanic or Hispanic. To determine the total number of minority residents in each block group, the number of Black (both Hispanic and non-Hispanic), Asian (Hispanic and non-Hispanic), Other (Hispanic and non-Hispanic), and Hispanic Whites were tallied.

According to NYSDEC, a “minority community” is present when 51.1 percent or more of the population is minority.

IDENTIFICATION OF LOW-INCOME COMMUNITIES

CP-29 defines a low-income population as a population with an annual income below the poverty threshold as defined by the U.S. Census Bureau. Data were compiled on the percentage of persons in each block group in the study area living below the poverty threshold. CP-29 defines a low-income community to be any area where the low-income population (i.e., percent living below the poverty threshold) is equal to or greater than 23.59 percent of the total.

B. IDENTIFICATION OF POPULATIONS OF CONCERN IN THE STUDY AREA

Using the methodology described above, the 1-mile study area around the project site contains a population of concern for environmental justice. As reported in the 2000 Census, more than 51.1 percent of the population in the study area is minority and more than 23.59 percent of the population lives below the poverty level (see Table E-1).

**Table E-1
Study Area Population and Economic Characteristics**

Area	Population (2000)											Economic Profile (1999)	
	2000 Total Population	Race and Ethnicity*										Total Minority (%)	Individuals Below Poverty Level (%)**
		White	%	Black	%	Asian	%	Other	%	Hispanic	%		
Census Tract 1, Block Group 9	12,780	1,091	8.5	7,741	60.6	33	0.3	472	3.7	3,443	26.9	91.5	0.0***
Census Tract 81, Block Group 1	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
Census Tract 97, Block Group 1	60	3	5.0	7	11.7	0	0.0	6	10.0	44	73.3	95.0	100.0
Census Tract 97, Block Group 2	14	0	0.0	5	35.7	6	42.9	0	0.0	3	21.4	100.0	0.0
Census Tract 97, Block Group 3	59	3	5.1	23	39.0	0	0.0	1	1.7	32	54.2	94.9	0.0
Study Area Total	12,913	1,097	8.5	7,776	60.2	39	0.3	479	3.7	3,522	27.3	91.5	34.8
Bronx	1,332,650	193,651	14.5	416,338	31.2	38,558	2.9	39,398	3.0	644,705	48.4	85.5	30.7
New York City	8,008,278	2,801,267	35.0	1,962,154	24.5	780,229	9.7	304,074	3.8	2,160,554	27.0	65.0	21.2

Notes:

- * The racial and ethnic categories provided are further defined as: White (White alone, not Hispanic or Latino); Black (Black or African American alone, not Hispanic or Latino); Asian (Asian alone, not Hispanic or Latino); Other (American Indian and Alaska Native alone, not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone, not Hispanic or Latino; Some other race alone, not Hispanic or Latino; Two or more races, not Hispanic or Latino); Hispanic (Hispanic or Latino; Persons of Hispanic origin may be of any race).
- ** Percent of individuals with incomes below established poverty level. The U.S. Census Bureau's established income thresholds define poverty level.
- *** According to census methodology, institutionalized populations, such as the inmates of Rikers Island, are not part of the population for whom poverty status is determined. These inmates are neither poor nor non-poor as defined by the census. Therefore, these residents are not included in the calculation of the percent of study area population that is below the poverty level because they are not part of the census "population for whom poverty status is determined."

Sources: U.S. Census Bureau, Census 2000.

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According to the 2000 Census, the study area has a total population of 12,913 residents, of which approximately 91.5 percent is minority. Black residents are the largest minority group, comprising approximately 60.2 percent of the population in the study area. Thus, the study area meets NYSDEC's definition of a minority community. The minority population is higher than in the Bronx and New York City as a whole.

As shown in Table 1, the 2000 Census reports that approximately 35 percent of the residents in the study area live below the poverty level (compared to approximately 31 percent in the Bronx as a whole). All of the population below the poverty level resides in Census Tract 97, Block Group 2, where 100 percent of the residents are below the poverty level. This block group, and the study area overall, exceeds NYSDEC's 23.59 percent threshold for a low-income community. Therefore, Census Tract 97, Block Group 2 and the study area overall meet NYSDEC's definition of a low-income community.

This calculation does not include the population in Census Tract 1, Block Group 9, because this population includes only the inmates at Rikers Island, which is considered an institutionalized population by the census. According to census methodology, institutionalized populations, such as the inmates of Rikers Island, are not part of the population for whom poverty status is determined. These inmates are neither poor nor non-poor as defined by the census.

C. ANALYSIS OF EXISTING ENVIRONMENTAL BURDENS IN THE STUDY AREA

In accordance with CP-29 guidance, other sources of pollution or facility types similar to the proposed project in the study area must be considered in order to establish the baseline conditions against which project impacts will be assessed. In this case, the proposed project involves the construction of a new cogeneration facility, which would result in new air emissions. Therefore, this section identifies sources of air emissions not related to the proposed project that may be a burden on the community.

Data on air emissions discharges were gathered to assess how the study area may be burdened by the presence of local air discharges and to determine whether the study area is currently disproportionately burdened by air emissions. To make this determination, the U.S. Environmental Protection Agency's (EPA) pollution data contained in its Toxic Release Inventory (TRI) database was reviewed. TRI provides data on emissions or releases for air, surface water, and groundwater discharges. The data provided in TRI generally focuses on major sources of emissions such as power plants, chemical plants, and major manufacturing complexes. The review of the TRI database indicates that there are no TRI sites within the Census block groups that comprise the environmental justice study area.

In addition to TRI, which focuses on major records, data were gathered on total air discharge permits within a distance of 1 mile from the proposed project. These permits cover a much broader range of all regulated air discharge activities, including major sources referenced above, but also minor sources such as dry cleaners, gas stations, and auto body shops. These data for the 1-mile study area were compiled by Toxics Targeting Inc., a service that specializes in such databases. Forty-eight sites within the 1-mile radius are listed as Air Discharge Facilities on the US EPA AIRS Database. Three sites are located on Rikers Island, including the Riker's Island Power Plant, which is located adjacent to the project site. This facility is in violation of emission thresholds of nitrogen dioxide and procedural compliance. Many of the other discharges in the 1-mile study area are concentrated in the manufacturing districts within Hunts Point. Discharges in

this area include gas stations and dry cleaners, which are typical of neighborhoods throughout the city. In addition, a number of the discharges in this area were related to various industrial uses, which are typical of manufacturing zoning districts throughout the city.

Overall, although there are other existing sources of air pollution within the 1-mile study area, these sources do not constitute a disproportionate concentration of air emissions facilities. Many of the air discharge sources are typical of manufacturing areas throughout New York City, and the industrial uses in the area are typical of manufacturing zoning districts in New York City. Furthermore, the proposed project is located across the East River from the vast majority of these air discharge sites. Therefore, these facilities do not have the potential to result in cumulative adverse impacts on the potential environmental justice area when combined with the effects of the proposed project.

D. SUMMARY OF SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS

The technical analyses in the other attachments of this EAF analyze the potential impacts of the proposed project in combination with conditions expected in the surrounding area in the future without the proposed project, including the existing environmental burdens presented above. These analyses therefore consider the cumulative, or combined, effects of the proposed project together with the baseline condition, which includes other sources of pollution and similar facility types in the study area. This is consistent with the requirements of the NYSDEC's environmental justice policy, which notes that under existing regulations, NYSDEC must consider other sources of pollution or similar facility types in order to establish the baseline conditions against which project impacts will be assessed.

Based on a review of the technical analyses included in this EAF and supplemental studies, the proposed project is not expected to result in any significant adverse impacts. However, there is the potential for some localized adverse effects with respect to air quality and noise, but these effects do not rise to the level of significance. The effects of the proposed project with respect to these technical areas are summarized below.

AIR QUALITY

Attachment D, "Air Quality," discloses the potential for air quality impacts from the proposed project. The analysis concluded that the proposed project would not result in any significant adverse air quality impacts.

The analysis considered the emissions of carbon monoxide (CO), particulate matter with a diameter less than 10 micrometers and 2.5 micrometers (PM₁₀ and PM_{2.5}, respectively)¹, sulfur dioxide (SO₂), and nitrogen dioxide (NO₂). The proposed project would result in minimal local increases in the emission of these pollutants. The maximum pollutant concentrations from the proposed project would be below the EPA significant impact levels (SILs) and the Prevention of Significant Deterioration (PSD) Increments. The analysis concluded that the maximum concentrations from the proposed project, when added to measured background concentrations, would be below National Ambient Air Quality Standards (NAAQS). In addition, the predicted annual and daily (24-hour) PM_{2.5} increments would be below the City's updated interim

¹ A micrometer is one millionth of a meter, which is approximately 1/100 the width of a human hair.

guidance criteria. Therefore, there would be no significant adverse air quality impacts from the proposed project.

NOISE

As discussed in Attachment F, “Noise,” the proposed project result in changes to ambient noise levels near the project site. However, the proposed project would contain sufficient noise attenuation (i.e., silencers, acoustical enclosures, etc.) to ensure that noise from the proposed cogeneration facility would not result in exceedances of the New York City Noise Code or of the CEQR or NYSDEC noise impact criteria. Therefore, there would be no significant adverse noise impacts as a result of the proposed project.

E. CONCLUSIONS ON DISPROPORTIONATE PROJECT IMPACTS

The study area population is a low-income and minority community, and is a population of concern for environmental justice. As noted above, the proposed project would not result in significant adverse impacts in any of the technical analysis areas, but it does have the potential to result in localized adverse effects with respect to air quality and noise. However, as described above, these localized adverse effects would not rise to the level of significance. This conclusion includes consideration of other sources of air emissions and ambient noise that are located in the area. Therefore, the proposed project would not adversely affect the population of the study area or any other area, and a disproportionate significant adverse impact to an environmental justice community would not occur.

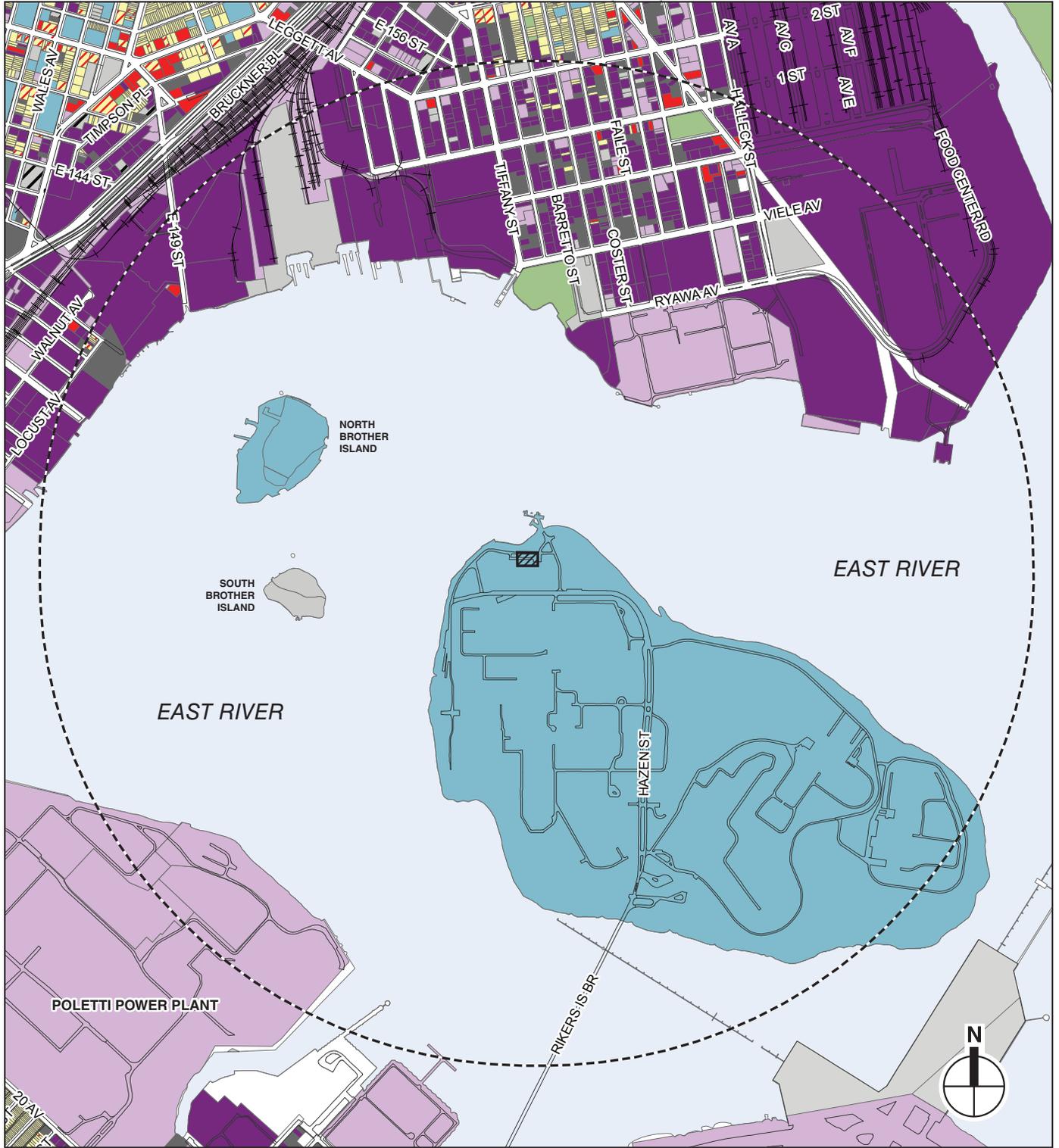
F. PUBLIC PARTICIPATION

The operation of the new cogeneration plant proposed on Rikers Island will require the modification of the facility’s existing Title V State Facility Air Permit from the New York State Department of Environmental Conservation (DEC). The permit modification being sought from DEC for the operation of the cogeneration plant requires that the permit applicant actively solicit community participation in the environmental permit review process.

As noted above, in March 2003, the DEC issued CP-29, to address Environmental Justice concerns and ensure community participation in the DEC environmental permit review process. When a proposed action for which a DEC permit is sought may affect a minority or low-income community (an “environmental justice area”), CP-29 requires applicants for the permit to actively seek public participation throughout the environmental permit review process. Public participation in the DEC environmental permit review process means a program of activities that provides opportunities for stakeholders to be informed about and involved in the review of a proposed action.

In accordance with CP-29, public participation will be executed throughout the environmental permit review process. A public participation plan has been developed and submitted to DEC for its review, in conjunction with the permit application. The key elements of the plan include the following tasks:

- **Identify Affected Area:** The preliminary outreach area for this proposed action has been assumed to lie within a 1-mile radius of the project site, where any effects from the action are most likely to be felt, as shown in Figure E-2. This area will serve as an initial component in identifying stakeholders. Particular emphasis will be placed on identifying



-  Proposed Cogeneration Plant (Approximate Location)
-  Environmental Justice Study Area Boundary One-Mile Perimeter
-  Study Area Block Groups
-  Residential
-  Residential with Commercial Below
-  Hotels
-  Commercial and Office Buildings

-  Industrial and Manufacturing
-  Transportation and Utility
-  Public Facilities and Institutions
-  Open Space and Outdoor Recreation
-  Parking Facilities
-  Vacant Land
-  Vacant Building
-  Under Construction

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SCALE

stakeholders representing the area's minority and low-income populations for outreach during the public participation process.

- **Identify Stakeholders:** The 1-mile outreach area identified above—the area where effects from the action are most likely to be felt—will be used to identify stakeholders. Stakeholders will likely include: residents/neighborhood groups; Community Boards; community leaders; local community, civic and recreational organizations; elected officials; appropriate state and local government personnel; environmental and business groups; and people/organizations who have expressed an interest in similar projects or in projects affecting the same neighborhood or community.
- **Prepare, Distribute, and Post Written Information/Establish Document Repositories:** Written information on the proposed project and the environmental permit review process will be prepared for posting and distribution to the public and other stakeholders. Project materials will be translated into Spanish to the extent possible and practical (some highly technical materials may not be provided). Materials to be prepared would include: a Project Fact Sheet; Meeting Notices; Environmental Justice Analysis (contained herein); Draft Public Participation Plan. In addition, Progress Reports will be prepared for submission to DEC, which will also be made available to the public. These materials will be posted at easily accessible document repositories, such as Community Board offices, local libraries, and government offices. In addition, this information will be distributed to the Rikers Correctional Facility library for inmate and staff review. Fliers and other project materials will be made available to the Rikers Island community (staff, visitors, and inmates) at locations determined by the Department of Correction.
- **Conduct Public Information Meeting:** A public information meeting will be held to provide information about the proposed temporary boiler replacement and permit process. Stakeholders will be invited to participate in the meeting, and NYPA and consultant team staff members will be available to receive and answer questions from the public about the project. It is anticipated that the informational meeting will be held in conjunction with a Bronx Community Board 2 meeting. Only a very small portion of Queens Community Board (CB) 1 lies within the 1-mile radius of the project site (other than Rikers Island itself), and that portion of Queens CB1 has no residential population as it is all industrial and located entirely within the existing Poletti Power Plant property. For this reason, it is not anticipated that a public information meeting in Queens would be necessary. It is envisioned that project information will be provided to Queens CB1, and a project briefing with the district manager will be held. If, after the briefing and reviewing the project information Queens CB1 requests that a public information meeting be held, such a meeting would be scheduled.

With implementation of this public participation plan, the proposed project would be consistent with the public participation requirements of CP-29. *