NYCT CROSSTOWN ANNEX FACILITY (DAR SITE ID #20)

Address:	65 Commercial Street (55 Commercial Street) Brooklyn New York, 11222
Tax Lot Parcel:	Brooklyn Block 2472, Lot 425
Latitude:	40.737634
Longitude:	-73.957737
Regulatory Programs/ Numbers/Codes:	AFS No. 36047P001M, New York Facility Information System 2-6101-00234, USEPA ID No. NYD980642326, NYSDEC Spill No. 9011113, NYSDEC Site ID 208696, PBS No. 2-190306
Analytical Data Status:	☐ Electronic Data Available ☐ Hardcopies only ☒ No Data Available

1 SUMMARY OF CONSTITUENTS OF POTENTIAL CONCERN (COPCs) TRANSPORT PATHWAYS TO THE CREEK

The current understanding of the transport mechanisms of contaminants from the upland portions of the New York City Transit (NYCT) Authority Crosstown Annex Facility site (site) to Newtown Creek is summarized in this section and Table 1 and supported in following sections.

Overland Transport

The site is located adjacent to Newtown Creek. Topography at the site slopes to the north toward Newtown Creek. No specific evidence of overland transport was identified in the available site records. There is insufficient evidence to make a historical or current pathway determination.

Bank Erosion

The site is located adjacent to Newtown Creek. No specific evidence of bank erosion was identified in the available site records. There is insufficient evidence to make a historical or current pathway determination.

Groundwater

Groundwater quality information for this site was not identified in documents available for review. The site is located adjacent to Newtown Creek. There is insufficient evidence to make a historical or current pathway determination.

Overwater Activities

The site is adjacent to Newtown Creek. There is no information on overwater activities at the site in available site records. There is insufficient evidence to make a historical or current pathway determination.

Stormwater/Wastewater Systems

This site is within the Newtown Creek Water Pollution Control Plant (WPCP) sewershed. Wastewater and stormwater is discharged to Newtown Creek through both direct discharge and the combined sewer Outfall NCB-023 (NYCDEP 2007). There is insufficient evidence to make a historical or current sewer/combined sewer overflow (CSO) pathway determination.

Historically, a yard drainage system had three outlets to a private sewer, which led to Newtown Creek, and two outlets leading to a private sewer that drained to the city sewer. The building drained to a private sewer, which drained to Newtown Creek (NYCTA 1959). There is insufficient evidence to make a historical or current pathway determination for direct discharge of stormwater and wastewater.

Air Releases

On May 2, 2001, the site applied for an Article 19 Air State Facility (ASF) permit for the installation of an additional coating booth for the surface coating of NYCT buses at the site (NYSDEC 2011). No air permits or other information related to air releases was found in available site documents. There is insufficient evidence to make a historical or current pathway determination.

2 PROJECT STATUS

No available documents containing environmental investigations were identified for this site.

3 SITE OWNERSHIP HISTORY

Respondent Member: ☐ Yes ☒ No

Owner	Years	Occupant	Types of Operations
Unknown	ca. 1887 – unknown	Havemeyer Sugar Refining Company	Sugar refining
Unknown	ca. 1905 – unknown	Greenpoint Refinery	Unknown
Unknown	ca. 1916 – unknown	West Street Improvement Company	Unknown
Unknown	ca. 1942 – unknown	Brooklyn and Queens Transit Corporation	Trolley car storage and washing
Unknown	ca. 1959 – 10/11	New York City Transit Authority	Bus maintenance

Note:
ca. – circa

4 PROPERTY DESCRIPTION

The site occupies approximately 2.9 acres adjacent to Newtown Creek. The confluence of Newtown Creek and the East River is located approximately 1,500 feet southeast of the northeastern site boundary (see Figure 1). Topography at the site slopes to the northeast, toward Newtown Creek. Aerial photographs of the site indicate that the site is paved and has four buildings. A 2010 aerial photograph of the site is provided in Figure 1.

The site is adjoined by Newtown Creek to the north and Commercial Street to the south. Former NuHart Plastic Manufacturing (DAR Site ID #29) is located 300 feet south of the site. The area is zoned residential.

5 CURRENT SITE USE

Little information is available for the site. The site may be used as a paint shop and road service operations (NYSDEC 2011). Aerial photographs show the paved area of the site being used for bus parking or storage.

6 SITE USE HISTORY

Situated on Newtown Creek, the Havemeyer Sugar Refining Company occupied this site as early as 1887, at which time the facility covered this address and several adjoining addresses. Within the facility, there stood a sugar melting warehouse, a syrup storage warehouse, eight coal bunkers, granulators, refinery pans, pumps, bone dust storage house, and steam sheds (Sanborn 1887).

By 1905, the Greenpoint Refinery, a company of unknown operations, succeeded the sugar refinery on the site. It also covered this address and adjoining addresses with kilns, coal bunkers, and bone black kilns. The American Sugar Refining Company owned several storage warehouse facilities at the back of the lot (Sanborn 1905). A decade later, West Street Improvement Company occupied the space and adjoining addresses, but the company's operations were unknown. West Street had office space, surrounded by an open lot, two storage tanks, and storage warehouses (Sanborn 1916). By 1942, the Brooklyn and Queens Transit Corporation operated a trolley car storage and washing facility (Sanborn 1942).

7 CURRENT AND HISTORICAL AREAS OF CONCERN AND COPCs

The following sections provide a brief discussion of the potential sources and COPCs at the site requiring additional discussion.

7.1 Uplands

In 1959, NYCT used the site for washing buses. The yard drainage system had three outlets to a private sewer, which led to Newtown Creek and two outlets leading to a private sewer that drained to the city sewer. The building drained to a private sewer, which drained to Newtown Creek (NYCTA 1959). By 2001, the site had three paint coating booths for painting NYCT buses. Each booth had two spray guns that used solvent-based paints. Booth exhaust passed through a fabric filter (NYSDEC 2001).

The site has been classified as a hazardous waste generator since at least 1988 (EDR 2010). Currently, the site is classified as a large quantity generator (LQG; USEPA 2011). Hazardous wastes, including flammable liquids and solids and waste paint material, have been generated

at the site since at least 1988 and 1990, respectively. A summary of available hazardous waste generator annual reports for the site is provided in the following table:

Report Year	Waste Description	Waste Code	Quantity (tons)
1986	Waste Petroleum Naptha	D001	41
1988	Waste Solid NOS	F003	1
	Waste Liquid NOS	F005	5
	Waste Flammable Liquid NOS	F002	2
	Waste Liquid NOS	D006	8
1989	Flammable Liquid NOS	D001	2.5
	Waste Solid NOS	C433	0.5
	Flammable Liquid NOS	F005	8.9
	Waste Solid NOS	F003	1.6
	Flammable Liquid NOS	F002	1.8
	Waste Paint Material NOS	F003	0.7
1990	Waste Paint Related Material (flammable)	F003, F005, D001	0.7
	Waste Paint Related Material (flammable)	D001, F003, F005	30.5
1991	Waste Paint Related Material (flammable)	F003, F005, D001	0.8
	Waste Paint Related Material, Painting Operations (flammable)	F002, F003, F005	27
	Waste Paint Related Material, Painting Process	F003, F005	0.8
	Waste Paint Related Material (flammable)	D001, F003, F005	27
1992	Waste Paint Related Material, Painting process	F003, F005	27.8
	Waste Paint Related Material, Painting Operations (flammable)	F002, F003, F005	26.5
	Waste Paint Related Material, Painting Process	F003, F005	0.5
1997	Waste Flammable Liquids, Solids, Xylene/Toluene	D001, F003, F005	34.9
1999	Waste Flammable Liquid/Solid, Xylene/Toluene	D001, F003, F005	8.6
2000	Paint Waste – Sludge/Solid	D001, F003, F005	0.4
	Paint Waste	D001	6.9
	Paint Thinner Waste	D001, F003, F005	0.9
2001	NR (non-wastewater)	NA	9.71
2002	NR (non-wastewater)	NA	9.87
2003	NR (non-wastewater)	NA	12.59
2004	NR (non-wastewater)	NA	12.06
2006	NR (non-wastewater)	NA	9.15
2007	NR (non-wastewater)	NA	7.9
2008	NR (non-wastewater)	NA	3.51

Notes:
NA – not applicableNOS – not otherwise specified
NR – not regulated

There are also several steel/carbon steel underground storage tanks (USTs) and aboveground storage tanks (ASTs) present on site (EDR 2010), as listed in the following table:

Tank Type	Tank No.	Tank ID	Product Stored	Capacity (gallons)	Status	Date Installed	Date Closed	Test Date	Tank Leak Detection
UST	001	6772	Diesel	5,000	Closed – In Place	12/01/47	03/01/91	01/01/91	None
UST	002	6773	Diesel	5,000	Closed – In Place	12/01/47	03/01/91	01/01/91	None
UST	003	6774	Diesel	5,000	Closed – In Place	12/01/47	03/01/91	01/01/91	None
UST	004	6775	Unknown	1,120	Closed – In Place	12/01/47	02/01/91	01/01/91	None
AST	005	6776	Petroleum product	550	Closed – In Place	12/01/47	01/01/91	NR	Unknown
UST	006	6777	Unknown	550	Closed – In Place	12/01/47	01/01/91	01/01/91	None
AST	007	6778	Unknown	1,100	Closed – Removed	12/01/47	01/01/86	NR	Unknown
UST	011	225211	NR	NR	Closed – In Place	NR	09/05/08	NR	None
UST	012	225212	NR	NR	Closed – In Place	NR	09/05/08	NR	None
UST	013	225213	NR	NR	Closed – In Place	NR	09/05/08	NR	None

Notes:
AST – aboveground storage tank
NOS – not otherwise specified
NR – not regulated
UST – underground storage tank

Potential historical and current contaminant sources at the site include vehicle washing, paint booth, waste petroleum, waste paint, paint thinner waste, and storage of petroleum products (including diesel). The COPCs for these sources include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbon (TPH), and polycyclic aromatic hydrocarbons (PAHs).

7.2 Overwater Activities

Reviewed records did not indicate current or historical overwater activities at the site.

7.3 Spills

On January 18, 1991, a spill occurred (NYSDEC ID No. 9011113) due to tank failure and was reported to the New York State Department of Environmental Conservation (NYSDEC). The spill was classified as a "known release with minimal potential for fire or hazard." The NYSDEC memorandum reports that in one underground concrete vault containing three 5,000-gallon tanks, 25 inches of water and oil was discovered with 2 inches of oil resting atop the water. A second vault containing one 1,120-gallon tank of lubrication oil and two 500-gallon tanks containing waste oil was found in the same condition. Corrective action was taken and the spill was declared closed on January 30, 2004. The only resources affected were reported to be on land, with the water declared unaffected. A penalty was not recommended (EDR 2010).

8 PHYSICAL SITE SETTING

Site-specific hydrogeologic information was not identified in documents available for review. The geologic setting for Newtown Creek consists of impermeable Precambrian and Paleozoic crystalline bedrock, overlain by the Upper Cretaceous Raritan formation, Magothy formation and Matawan Group (undifferentiated), unconsolidated Pleistocene deposits and upper Pleistocene glacial deposits and Holocene shore, beach salt-marsh deposits, and alluvium, along with local occurrences of artificial fill (Buxton et al. 1981; Soren and Simmons 1987). The primary areas of groundwater discharge are Newtown Creek and its tributaries and the East River (Misut and Monti 1999). In the vicinity of Newtown Creek, groundwater flow in the Upper Glacial aquifer is generally north and south toward the creek. With increased distance from the creek, groundwater will flow toward the nearest surface water body to discharge (Misut and Monti 1999). Incidences of perched groundwater may occur above the Upper Glacial Aquifer in some areas, particularly in formerly low-lying areas that have been filled. Groundwater flow at a specific property may differ from the regional pattern due to pumping for groundwater treatment or dewatering activities (Misut and Monti 1999), the presence of buried utilities, or other preferential pathways.

9 NATURE AND EXTENT (CURRENT UNDERSTANDING OF ENVIRONMENTAL CONDITIONS)

9.1 Soil

Soil Investigations	☐	Yes	☒	No		
Bank Samples	☐	Yes	☒	No	☐	Not Applicable
Soil-Vapor Investigations	☐	Yes	☒	No		

Information related to soil investigations was not found in reviewed documents.

9.2 Groundwater

Groundwater Investigations	☐	Yes	☒	No		
NAPL Presence (Historical and Current)	☐	Yes	☒	No		
Dissolved COPC Plumes	☐	Yes	☒	No		
Visual Seep Sample Data	☐	Yes	☒	No	☐	Not Applicable

Information related to groundwater investigations was not found in reviewed documents.

9.3 Surface Water

Surface Water Investigation	☐	Yes	☒	No		
SPDES Permit (Current or Past)	☐	Yes	☒	No		
Industrial Wastewater Discharge Permit (Current or Past)	☐	Yes	☒	No		
Stormwater Data	☐	Yes	☒	No		
Catch Basin Solids Data	☐	Yes	☒	No		
Wastewater Data	☐	Yes	☒	No		

9.3.1 Stormwater and Wastewater Systems

This site is within the Newtown Creek WPCP sewershed. Wastewater and stormwater is discharged to Newtown Creek through both direct discharge and the combined sewer Outfall NCB-023 (NYCDEP 2007). Historically, a yard drainage system had three outlets to a private sewer, which led to Newtown Creek, and two outlets leading to a private sewer that drained to the city sewer. The building drained to a private sewer, which drained to

Newtown Creek (NYCTA 1959). There is insufficient evidence to make a historical or current pathway determination for direct discharge of stormwater and wastewater.

9.4 Sediment

Creek Sediment Data ☐ Yes ☒ No ☐ Not Applicable

Sediment investigation information was not found in reviewed documents.

9.5 Air

Air Permit ☐ Yes ☒ No

Air Data ☐ Yes ☒ No

On May 2, 2001, the site applied for an Article 19 ASF permit for the installation of an additional coating booth for the surface coating of NYCT buses at the site (NYSDEC 2011). No air permits or other information related to air releases was found in available site documents.

10 REMEDIATION HISTORY (INTERIM REMEDIAL MEASURES AND OTHER CLEANUPS)

Information related to remediation was not found in reviewed documents.

11 BIBLIOGRAPHY/INFORMATION SOURCES

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USEPA, 2012. USEPA Envirofacts Database. Accessed January 3, 2012. Available from: http://oaspub.epa.gov/enviro/afs_reports.detail_plt_view?p_state_county_compliance_src=36047P001M&p_plant_id=

12 ATTACHMENTS

Figures

Figure 1 Site Vicinity Map: NYCT Crosstown Annex Facility

Tables

Table 1 Potential Areas of Concern and Transport Pathways Assessment

Table 1

Potential Areas of Concern and Transport Pathways Assessment – NYCT Crosstown Annex Facility

Potential Areas of Concern	Media Impacted					COPCs														Potential Complete Pathway						
						TPH			VOCs																		
Description of Areas of Concern	Surface Soil	Subsurface Soil	Groundwater	Catch Basin Solids	Creek Sediment	Gasoline-Range	Diesel – Range	Heavier – Range	Petroleum Related (e.g., BTEX)	VOCs	Chlorinated VOCs	SVOCs	PAHs	Phthalates	Phenolics	Metals	PCBs	Herbicides and Pesticides	Dioxins/Furans	Overland Transport	Groundwater	Direct Discharge – Overwater	Direct Discharge – Storm/Wastewater	Discharge to Sewer/CSO	Bank Erosion	Air Releases
Yard drainage system	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	--	√	√	?	?
Building Drainage	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	--	√	?	?	?
USTs/ASTs	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Bus Painting Booths	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Spill	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	--	?	?	?	--

Notes:
√ – COPCs are/were present in areas of concern having a current or historical pathway that is determined to be complete or potentially complete.
? – There is not enough information to determine if COPC is/was present in area of concern or if pathway is complete.
-- – Current or historical pathway has been investigated and shown to be not present or incomplete.

AST – aboveground storage tank
BTEX – benzene, toluene, ethylbenzene, and xylene
COPC – constituent of potential concern
CSO – combined sewer overflow PAH – polycyclic aromatic hydrocarbon
PCB – polychlorinated biphenyl
SVOC – semi-volatile organic compound
TPH – total petroleum hydrocarbon
UST – underground storage tank
VOC – volatile organic compound

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- USEPA Sample Locations (Surface and Subsurface)
- Shoreline (NYC Dept. of Information Technology, 2006)
- USGS Nat'l Elev. Dataset 5-foot Contours
- Selected Site Property Boundary
- Neighboring Site Property Boundary

Outfall Class

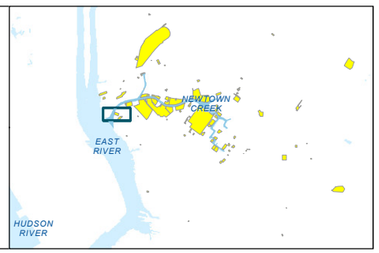
- Direct Discharge
- General
- Highway Drain
- Major Stormwater Outfall
- SPDES
- Storm Drain

NOTES:

1. Outfall Labeling: BB: Bowery Bay; NC(B/Q): Newtown Creek, Brooklyn/Queens; ST: Stormwater.
2. Outfall locations are preliminary, compiled, estimated data based on New York City Department of Environmental Protection (NYCDEP) maps and tabulated data and other resources. Many outfall locations were taken from the New York City Shoreline Survey Program: Newtown Creek Water Pollution Control Plant Drainage Area, NYCDEP, March 31, 2003. Other locations were taken from an excerpt from a similar report from 2008 (the complete report was not included in files available for review). Finally, some outfall locations were inherited from previous Anchor QEA and Newtown Creek Project work. Latitudinal and longitudinal data provided in the 2003 and 2008 NYCDEP reports were rounded to the nearest second. This resulted in potential outfall location discrepancies of up to approximately 200 feet. All outfall locations are currently under field verification.
3. Aerial Photos: New York State Division of Homeland Security and Emergency Services, 2010.
4. Site Boundaries are based on New York City parcels data.
5. Coarse topographic contours are derived from U.S. Geological Survey 10-meter data.

Feet

0 100 200 300 400



ANCHOR QEA

DRAFT

Figure 1
Site Vicinty Map
Draft Upland Site Summary: NYCT Crosstown Annex Facility
Newtown Creek RI/FS