#### **ARCHITECTURAL COATINGS, INC. (DAR SITE ID #103)**<sup>1</sup>

Address:	538 Johnson Avenue, Brooklyn, New York 11237
Tax Lot Parcel(s):	Brooklyn Block 2994, Lot 11
Latitude:	40.708318
Longitude:	-73.926234
Regulatory Programs/	
Numbers/Codes:	USEPA ID No. NYR000168104 and NYR000143248, USEPA
	FRS No. 110039572548, PBS No. 2-108693
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 COPCs from the upland portions of the Architectural Coatings, Inc., site (site), to Newtown Creek is summarized in this section and Table 1 and supported in the following sections.

#### **Overland Transport**

The site is located approximately 910 feet from English Kills, a tributary to Newtown Creek. This is not a complete historical or current pathway.

#### **Bank Erosion**

The site is not adjacent to Newtown Creek or associated waterways. This is not a complete historical or current pathway.

#### Groundwater

The site is located approximately 910 feet from Newtown Creek and associated waterways. Groundwater quality information for the site was not identified in documents available for

<sup>&</sup>lt;sup>1</sup> Remedial site The Print House (DAR Site ID #22) historically and currently occupies this site, as further described in Section 4 of this site summary.

review. There is insufficient evidence to make a historical or current pathway determination.

#### **Overwater** Activities

This site is not adjacent to Newtown Creek or associated waterways. Information regarding overwater activities was not identified in documents available for review. This is not a complete historical or current pathway.

#### Stormwater/Wastewater Systems

The site is within the Newtown Creek Water Pollution Control Plant (WPCP) sewershed. Stormwater and wastewater discharges from the site flow into a combined municipal sewer system. When the combined flows exceed the system's capacity, untreated combined sewer overflows (CSOs) are discharged to English Kills through Outfall NC-015 (NYCDEP 2007). The New York City Department of Environmental Protection (NYCDEP) issued an industrial wastewater discharge (IWD) permit to the site in 2002. The permit was renewed in 2007 and 2010 (NYCDEP 2002a, 2002c, 2005). Discharge monitoring data was not identified in documents available for review. The site is listed on New York City's Significant Noncompliance List for the period of July 1, 2009 to June 30, 2010 (NYCDEP 2011). Discharge to the sewer/CSO is a potentially complete historical pathway. There is insufficient evidence to make a current pathway determination.

Information regarding on-site stormwater infrastructure and management was not identified in documents available for review. There is insufficient evidence to make a historical or current pathway determination for direct discharge of stormwater and wastewater.

#### Air Releases

Information regarding site air discharges was not identified in documents available for review. There is insufficient evidence to make a historical or current pathway determination.

# 2 PROJECT STATUS

Information regarding on-site environmental investigations was not identified in documents available for review. A New York State Department of Environmental Conservation (NYSDEC) Site Code was not found for this site.

# **3** SITE OWNERSHIP HISTORY

Respondent Member:

🗌 Yes 🔀 No

Owner	Years	Occupant	Types of Operations
Vacant	1907	Vacant	Vacant
Englander Spring Bed Company	circa 1933 – 1954	Englander Spring Bed Company	Manufacture of steel-spring mattresses
Goldberger Doll Manufacturing	1954 – 1983	Goldberger Doll Manufacturing Company	Manufacture of dolls and other toys
Company	1983 – 1997	Unknown	Unknown
	1997 – 2002	Unknown	Unknown
Brocho V Hatzlocho Corporation	2002 – 2011	Architectural Coatings, Inc.	Production of coated aluminum architectural pieces
	2002 – present	The Print House	Printing and binding

# **4 PROPERTY DESCRIPTION**

The site occupies approximately 1.27 acres<sup>2</sup> in Brooklyn, New York, and is located approximately 910 feet east of English Kills. The site is approximately 10 to 15 feet above mean sea level, and the entire site is covered by buildings and impervious surfaces, as shown on Figure 1. Remedial site The Print House (DAR Site ID #22) historically and currently occupies a portion of the site and shares the same address as the former site occupant, Architectural Coatings, Inc.

The site and surrounding properties are zoned for manufacturing (NYCDCP 2011). The area between the site and English Kills consists entirely of buildings and impervious surface area,

<sup>&</sup>lt;sup>2</sup> Acreage is an approximation of the site tax parcel using geographic information system data.

with elevation levels decreasing from the site to the waterway. Remedial sites Enequist Chemical Co., Inc. (DAR Site ID #8) and Waste Management of NY – 123 Varick Avenue (DAR Site ID #46) are located west of the site, as shown in Figure 1.

# 5 CURRENT SITE USE

Since 2002, the site has been occupied by remedial site The Print House (DAR Site ID #22), a printing and binding company with laminating, embossing, stamping, and die cutting services (The Print House 2011; EDR 2010).

# 6 SITE USE HISTORY

In 1907, the site was vacant (Sanborn 1907). By 1933, the Englander Spring Bed Company (Englander), a steel-spring mattresses and box springs manufacturer, occupied the site (Sanborn 1933). Records did not indicate when Englander vacated the site; however, in 1954, Goldberger Doll Manufacturing Company (Goldberger) acquired the site (Goldberger 1997). Goldberger manufactured dolls and other toys until sometime around 1983 (Holzmacher 1982). During much of that time and the period when Englander operated, the property abutted the Long Island Rail Road freight yards to the south.

In 2002, Architectural Coating, Inc., began operations at the site. In applying for an IWD permit, operations were described as "the cleaning, etching, phosphating and powder coating of aluminum pieces" (Yan 2002). The company employed electroplating as part of the finishing process (NYCDEP 2002b). Records did not indicate when Architectural Coatings, Inc., terminated operations at the site; however, the company dissolved as a registered New York corporation in April 2011 (NYSOS 2011).

# 7 CURRENT AND HISTORICAL AREAS OF CONCERN AND COPCS

The current understanding of the historical and current potential upland and overwater areas of concern at the site is summarized in Table 1. The following sections provide brief discussion of the potential sources and COPCs at the site requiring additional discussion.

Potential areas of concern at the site include areas in which printing, binding practices, electroplating, and coated aluminum manufacturing practices and operations (including aluminum cleaning, etching, phosphating, and powder coating) occurred. Additional areas of concern include equipment and products used in steel-spring mattress and doll manufacturing practices and operations; products and chemicals used in laminating, embossing, and stamping; and an aboveground storage tank (AST). COPCs associated with these areas of concern include petroleum hydrocarbons (including No. 2 fuel oil), metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and chlorinated VOCs.

# 7.1 Uplands

The site is a registered petroleum bulk storage (PBS) facility (PBS No. 2-108693; NYSDEC 2012). An 11,000-gallon steel/carbon steel/iron AST, installed in 1999, is located at the site. The AST contains No. 2 fuel oil (NYSDEC 2012).

The site has been classified as a Resource Conservation and Recovery Act (RCRA) small quantity generator (SQG), large quantity generator (LQG), and conditionally exempt small quantity generator (CESQG) in 2006, 2007, and 2009, respectively (EDR 2010; NYSDEC 2012). Information regarding wastes produced was not identified in documents available for review.

# 7.2 Overwater Activities

This site is not adjacent to Newtown Creek or associated waterways. Information regarding overwater activities was not identified in documents available for review.

# 7.3 Spills

Information regarding on-site spills was not identified in documents available for review.

# 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 towards the creek. With increased distance from the creek, groundwater will flow towards 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 Bank Samples Soil-Vapor Investigation

	🔄 Yes 🔀 No
Yes No	🔀 Not Applicable
	🗌 Yes 🔀 No

Information regarding on-site soil investigations was not identified in documents available for review.

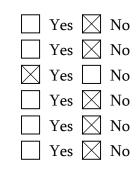
## 9.2 Groundwater

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 regarding on-site groundwater investigations was not identified in documents available for review.

## 9.3 Surface Water

Surface Water Investigation SPDES Permit (Current or Past) Industrial Wastewater Discharge Permit (Current or Past) Stormwater Data Catch Basin Solids Data Wastewater Data



# 9.3.1 Stormwater and Wastewater Systems

The site is within the Newtown Creek WPCP sewershed. Stormwater and wastewater discharges from the site flow into a combined municipal sewer system. When the combined flows exceed the system's capacity, untreated CSOs are discharged to English Kills through Outfall NC-015 (NYCDEP 2007). Information regarding on-site stormwater infrastructure and management was not identified in documents available for review.

# 9.3.2 Industrial Wastewater Discharge Permits

NYCDEP issued an IWD permit to the site in 2002. The permit was renewed in 2007 and 2010 as shown in the following table:

Permit Number	Start Date	<b>Expiration Date</b>
02-P3029-1 (NYCDEP 2002a)	3/1/02	8/31/02
02-P3029-2 (NYCDEP 2002c)	8/16/02	8/15/07
05-P3029-1 (NYCDEP 2005)	5/5/05	5/4/10

Note:

NYCDEP – New York City Department of Environmental Protection

IWD Permit No. 02-P3029-1, IWD Permit No. 02-P3029-2, and IWD Permit No. 05-P3029-1 specified two discharge locations, E1 and M1 (NYCDEP 2002a, 2002c, 2005). These locations and the conditions of the most recent permit are described in the following table:

Permit Type	Permit Number	Start Date	Outfalls <sup>1</sup>	Volume	Frequency-Parameters
Industrial Wastewater Discharge Permit	05-P3029-1	05/05/05	<b>Discharge Point E1:</b> A 2-inch-diameter effluent pipe, located 24 inches above the ground floor level from a 24-inch by 17-inch by 31-inch tank, situated 35 inches from the interior wall facing Stewart Avenue, and 12 inches from the interior wall facing Ingraham Street	Unknown	The process wastewater discharge from point E1 is covered by the Federal Metal Finishing Point Source Category, 40 CFR part 433, and shall not exceed these categorical standards: Federal Categorical Standards (40 CFR § 433.17 (a))
					Pollutant         Daily Maximum (mg/L)         Maximum Average (mg/L)           Cadmium         0.11         0.07           Chromium (Total)         2.77         1.71           Copper         3.38         2.07           Lead         0.69         0.43           Nickel         3.98         2.38           Silver         0.43         0.24           Zinc         2.61         1.48           Cyanide (Total)         1.20         0.65           Total Toxic Organics         2.13            (TTO) <sup>2</sup>

Permit Type	Permit Number	Start Date	Outfalls <sup>1</sup>	Volume		Frequency-Paramet	ers					
			<b>Discharge Point M1:</b> A 10-inch-diameter basement housetrap, suspended 72 inches above the		The discharge from point M1 shall not exceed the following New York City Sewer Use Limits:							
			basement floor level, situated 27 inches from the interior wall facing Varick Avenue, and 26 inches from the exterior			Sewer Use Limits (15 RCNY Chapter 19) Pollutant Permissible Daily Average						
			wall facing Johnson Avenue.		, ondtant	Maximum Concentration For Any Given Time (mg/L)	Daily Average Maximum Concentration (mg/L)					
					рН	5.0-11.0 Standard Units						
					Cadmium	2.0	0.69					
					Chromium (Hexavalent)	5.0						
					Copper	5.0						
					Lead	2.0						
					Mercury	0.05						
					Nickel	3.0						
					Zinc	5.0						
					Cyanide (Amenable to Chlorination)	0.2						
					Non-Polar Material	50.0						

Notes:

1 – This site is within the sewershed of CSO Outfall NC-015, which is located at the southeast end of English Kills.

2 – Defined in 40 CFR § 433. 11 (e) as the sum of all quantifiable values greater than 0.01 milligrams per liter of the 111 toxic organic compounds listed in the IWD permit. Toxic organic compounds are comprised of two subcategories: volatile organic compounds and semi-volatile organic compounds. There are different sampling methods for each subcategory (see Part I, Sect. B. Monitoring Requirements).

CFR – Code of Federal Regulations mg/L – milligram per liter RCNY – Rules of the City of New York TTO – total toxic organics Architectural Coatings, Inc. is listed on New York City's Significant Noncompliance<sup>3</sup> List for the period of July 1, 2009 to June 30, 2010 (NYCDEP 2011). The site was found to be in "significant noncompliance with applicable pretreatment standards and other requirements" as published by NYCDEP in accordance with Title 40 Part 403.8(f) (2) (viii) of the Code of Federal Regulations and Title 15, Section 19-10 (g) of the Rules of the City of New York (NYCDEP 2011).

An on-site compliance evaluation inspection was conducted at the site on June 29, 2010 (USEPA 2011). No violations or compliance issues were found.

## 9.3.3 Surface Water Summary

Information regarding on-site stormwater infrastructure and management was not identified in documents available for review. Stormwater and wastewater discharges from the site flow into a combined municipal sewer system, which may overflow to English Kills through Outfall NC-015 (NYCDEP 2007). NYCDEP issued an IWD permit to the site in 2002. The permit was renewed in 2007 and 2010 (NYCDEP 2002a, 2002c, 2005). Discharge monitoring data was not identified in documents available for review. The site is listed on New York City's Significant Noncompliance List for the period of July 1, 2009 to June 30, 2010 (NYCDEP 2011).

#### 9.4 Sediment

Creek Sediment Data

🗌 Yes 📃 No 🔀 Not Applicable

Information related to sediment investigations were not identified in documents available for review.

#### 9.5 Air

Air Permit Air Data 
 Yes
 No

 Yes
 No

<sup>3</sup> Significant noncompliance is defined in 40 CFR 403.8 (f) (2) (viii) (NYCDEP 2011).

Information related to air emissions was not found identified in documents available for review.

# 10 REMEDIATION HISTORY (INTERIM REMEDIAL MEASURES AND OTHER CLEANUPS)

Information related to on-site remedial activities was not found in reviewed documents.

## **11 BIBLIOGRAPHY/INFORMATION SOURCES**

- Buxton et al. (Buxton, H.T., Soren, J., Posner, A., and Shernoff, P.K.), 1981. *Reconnaissance of the Groundwater Resources of Kings and Queens Counties, New York.*U.S. Department of the Interior, U.S. Geological Survey. Open-File Report 81-1186. 1981.
- EDR (Environmental Data Resources, Inc.), 2010. EDR DataMap<sup>™</sup> Environmental Atlas<sup>™</sup> for "Newton Creek Queens, New York." November 4, 2010.
- Goldberger, 1997. Indenture between Goldberger Doll Manufacturing Co. and Brocho v Hatzlocho Corp. 1997.
- Holzmacher (Holzmacher, McLendon and Murrell, P.C.), 1982. Brooklyn-Queens Aquifer Management Feasibility Study. Submitted to the New York District, Corps of Engineers. May 1982.
- Misut and Monti (Misut, P.E., and Monti, J. Jr.), 1999. Simulation of Ground-Water Flow and Pumpage in Kings and Queens Counties, Long Island, New York. U.S. Geological Survey. Water-Resources Investigations Report 98-4071. 1999.
- NYCDCP (New York City Department of City Planning), 2011. Zoning. Accessed December 9, 2011. Available from: http://www.nyc.gov/html/dcp/html/subcats/zoning.shtml
- NYCDEP (New York City Department of Environmental Protection), 2002a. *Industrial Wastewater Discharge Permit. Permit No. 02-P3029-1*. Architectural Coatings, Inc. March 1, 2002.

- NYCDEP, 2002b. Schematic drawing of Architectural Coatings processes and layout regarding Permit 3029 submitted to New York Department of Environmental Protection. July 29, 2002.
- NYCDEP, 2002c. *Industrial Wastewater Discharge Permit. Permit No. 02-P3029-2*. Architectural Coatings, Inc. August 16, 2002.
- NYCDEP, 2005. *Industrial Wastewater Discharge Permit. Permit No. 05-P3029-1*. Architectural Coatings. May 5, 2005.
- NYCDEP, 2007. Landside Modeling Report, Sewershed Characteristics and Model Calibration. City-Wide Long Term CSO Control Planning Project. Newtown Creek WPCP Service Area. Draft. New York City Department of Environmental Protection, Bureau of Engineering Design and Construction. July 2007
- NYCDEP, 2011. Significant Noncompliance List. Accessed on November 9, 2011. Available from: http://www.nyc.gov/html/dep/html/wastewater/snclist.shtml.
- NYSDEC (New York State Department of Environmental Conservation), 2012. Environmental Remediation Databases. Accessed March 26, 2012. Available from: http://www.dec.ny.gov/cfmx/extapps/derexternal/
- NYSOS (New York Secretary of State), 2011. Architectural Coatings, Inc. Online registry of corporations operating in the State of New York. New York Secretary of State. 2011. Available from:

http://www.secstates.com/NY\_New\_York\_Secretary\_of\_State\_Corporation\_Search/

- The Print House. Accessed in 2011. Available from: http://www.tphny.com
- Sanborn (Sanborn Map Company), 1907. *Insurance Maps of the Borough of Brooklyn, City of New York*. Volume 9: Sheet 47 1907.
- Sanborn, 1933. Insurance Maps of the Borough of Brooklyn, City of New York. Volume 9: Sheet 47. 1933.
- Soren and Simmons (Soren, J. and Simmons, D.L.), 1987. Thickness and Hydrogeology of Aquifers and Confining Units Below the Upper Glacial Aquifer on Long Island, New York. U.S. Geological Survey. Water-Resources Investigations Report 86-4175. Scale 1:125,000.

- USEPA (U.S. Environmental Protection Agency), 2011. USEPA Envirofacts Database. Accessed November 30, 2011. Available from: http://www.epa.gov/enviro/index.html
- Yan, L.T., 2002. Regarding: Architectural Coatings. Email to: Leslie Lipton. January 29, 2002.

## **12 ATTACHMENTS**

#### **Figures**

Figure 1 Site Vicinity Map: Architectural Coatings, Inc.

## Tables

Table 1Potential Areas of Concern and Transport Pathways Assessment

#### Table 1

#### Potential Areas of Concern and Transport Pathways Assessment – Architectural Coatings, Inc.

Potential Areas of Concern	P	Media	a Imp	acte	d				COPCs											Potential Complete Pathw					vay	
Description of Areas of Concern	Surface Soil	Subsurface Soil	Groundwater	Catch Basin Solids	Creek Sediment	Gasoline-Range	Diesel – Range Hd	Heavier – Range	Petroleum Related (e.g., BTEX)	AOCs	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
Equipment and products used in former steel-spring mattress and doll manufacturing	?	?	?	?	?	?	?	?	?	V	v	v	?	?	?	v	?	?	?		?		?	?		?
Electroplating and coated aluminum manufacturing practices and operations (including aluminum cleaning, etching, phosphating and powder coating operations and waste handling)	?	?	?	?	?	?	?	?	?	~	v	V	~	?	?	V	?	?	?		?		?	?		?
AST (fuel oil)	?	?	?	?	?	?	V	?	?	?	?	?	?	?	?	?	?	?	?		?		?	?		?
Printing and binding practices and operations	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		?		?	?		?

Notes:

v – 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 xylenes

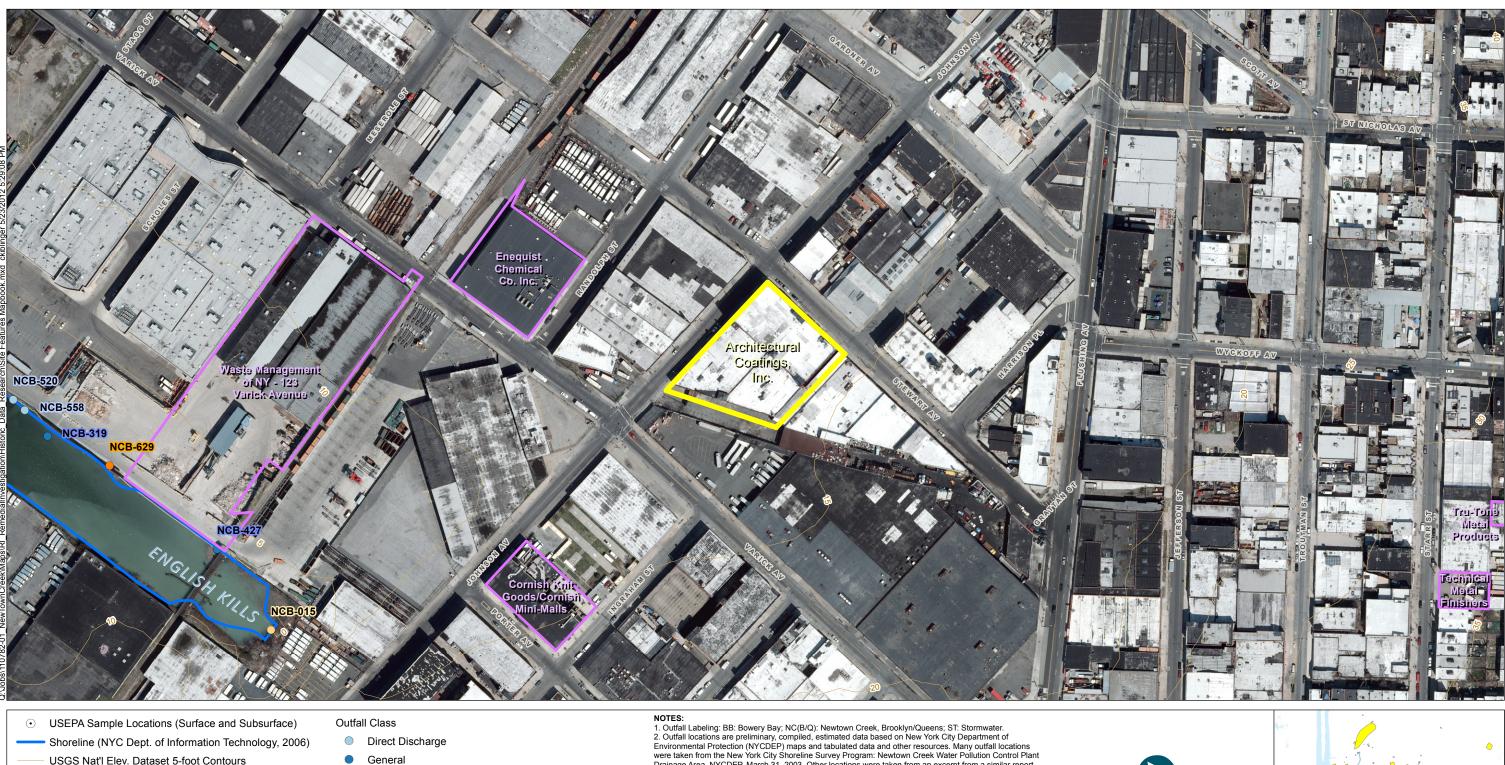
COPC – constituents of potential concern

CSO – combined sewer overflow

PAH – polycyclic aromatic hydrocarbon

PCB – polychlorinated biphenyl SVOC – semi-volatile organic compound

TPH – total petroleum hydrocarbon VOC – volatile organic compound



- - USGS Nat'l Elev. Dataset 5-foot Contours
- Selected Site Property Boundary
- Neighboring Site Property Boundary

- $\bigcirc$ Highway Drain
- Major Stormwater Outfall
- SPDES
- Storm Drain

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

- and er field verification.
   Aerial Photos: New York State Division of Homeland Security and Emergency Services, 2010.
   Site Boundaries are based on New York City parcels data.
   Coarse topographic contours are derived from U.S. Geological Survey 10-meter data.



Feet

200

300

400

Figure 1 Site Vicinty Map Draft Upland Site Summary: Architectural Coatings, Inc. Newtown Creek RI/FS