



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION III

STATEMENT OF BASIS

ELECTROPLATERS OF YORK INC.  
WRIGHTSVILLE, PENNSYLVANIA  
EPA ID# PAD 015139470

Prepared by  
RCRA Corrective Action Branch 2  
Land, Chemicals & Redevelopment Division  
March 2020

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## Section 1: Introduction

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The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the former Electroplaters of York Inc. facility located at 209 East Willow Street, Wrightsville, PA 17368 (Facility). EPA's review of available information indicates that there are no unaddressed releases of hazardous waste or hazardous constituents from the Facility. EPA's proposed remedy for the Facility consists of activity and use limitations with proposed remedial actions that include some flexibility as necessary to accommodate potential future site uses. This SB highlights key information relied upon by EPA in making its proposed remedy.

The Facility is subject to EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property. The Commonwealth of Pennsylvania (Commonwealth) is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth for the Corrective Action Program.

EPA is providing a 30-day public comment period on this SB and may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the comment period has ended. The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 7: Public Participation for information on how you may review the AR.

## Section 2: Facility Background

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The former Electroplaters of York (EPY) Facility is located on a 5.35-acre parcel located at 209 East Willow Street in the Borough of Wrightsville, York County, Pennsylvania. EPY is bound by Lemon Street to the north, Willow Street to the south, the Susquehanna River to the east, and Water Street to the west. The Wrightsville Borough Municipal Authority (WBMA) wastewater treatment plant borders the property to the south. The Facility includes an office building (currently used as office space by Wrightsville Borough with an address of 601 Water Street), 1-story warehouse building, small storage building, concrete surfaces (floor slabs of the previous on-site production facility), and 2 inactive production wells. A Facility location map is attached as Figure 1.

EPY was an electroplating facility that was contracted by various businesses who supplied EPY

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with prefinished metal components for custom electroplating. EPY conducted operations at the facility from 1968 until December 21, 2004. The facility experienced an industrial fire which destroyed EPY's production facility and damaged the finished work warehouse connected to the north end of the production facility building. EPY became a dissolved entity in 2004.

The site was previously occupied by the Wrightsville Hardware Company from the 1800s until the mid-1960s. EPY conducted electroplating operations at the site from 1968 until 2004. The EPY operations included plating with zinc, cadmium, chromium, nickel, brass and silver, pickling steel, and depositing electroless nickel. The facility also conducted wastewater treatment for the destruction of cyanide, chromium reduction, chemical precipitation, flocculation, coagulation, settling, and sludge dewatering, and used trichloroethene (TCE) for vapor degreasing. WBMA purchased the site circa 2006 with possible plans to redevelop the site for expanded operations and/or potentially as part of a public, riverside park. The site is currently used as office space by Wrightsville Borough as well as for some limited equipment and material storage in the warehouse building and former plant area.

### **Section 3: Summary of Environmental History**

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#### **3.1 Environmental Investigations**

On January 18, 1989, A.T. Kearney submitted a Final Environmental Priorities Initiative Preliminary Assessment (PA) for EPY to the EPA. A visual inspection was conducted to identify Solid Waste Management Units (SWMUs) and releases. Ten (10) SWMUs were identified as follows:

- SWMU 1: Acid/Alkaline Collection Tank
- SWMU 2: Neutral Waste Treatment Tanks
- SWMU 3: Sludge Holding Tank
- SWMU 4: Cyanide collection Tank
- SWMU 5: Cyanide Destruction Tank
- SWMU 6: Rolloff
- SWMU 7: Former Open Sludge Pit
- SWMU 8: Cyanide Waste Storage Area
- SWMU 9: Former TCE Storage Pad
- SWMU 10: Cyanide Destruction Collection Sump

Hazardous constituents were presumed to have been released via several identified spills from SWMUs 1 and 2. Impacted soils were removed and soil samples were collected. Additionally, groundwater samples from two onsite production wells were collected and sampled. Results indicated no contamination to groundwater but soil was contaminated with various metals including zinc, cadmium, copper, chrome, and nickel.

A Phase I Environmental Site Assessment (ESA) was conducted in January 1993 by Buchart Horn, Inc. The report concluded that available data indicated that no remediation was required,

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however, given the former use of the site, heavy metals were expected to be present in the soil including below the concrete slab of the manufacturing building.

An additional SWMU was identified during a Pennsylvania Department of Environmental Protection (PADEP) site visit in 2002. SWMU 11 consisted of a 500-gallon tank that received waste acid from the electroplating process for pH adjustment as necessary. No known releases were reported from this tank.

A Phase I ESA conducted by ECS Mid-Atlantic, LLC (ECS) with oversight by C.S. Davidson, Inc. was submitted on April 18, 2005. Further investigation due to previous releases was not recommended, however a limited Phase II subsurface investigation was recommended due to the historical use of the site.

A Limited Phase II ESA was conducted by ECS with the results presented in a report dated March 21, 2006. Based on these previous investigations, five (5) primary areas of concern (AOCs) at the site were identified for investigation as follows (corresponding to the eleven (11) SWMUs identified at the Facility):

- AOC 1 – Warehouse Building
- AOC 2 (SWMU 9) – Former TCE Storage Pad
- AOC 3 (SWMUs 2,3,5,6,8,10,11) – Former Neutral Waste Treatment Tanks
- AOC 4 (SWMU 7) – Former Open Sludge Pit
- AOC 5 (SWMUs 1,4)– Southern Portion of the Former Foundation Building

During the Limited Phase II, geophysical survey, soil boring, temporary well installation, test pit excavation, and soil and groundwater sampling activities were conducted. Soil and groundwater samples were analyzed for total petroleum hydrocarbons (USEPA Method 418.1), volatile organic compounds (VOCs) (USEPA Method 8260), priority pollutant metals (USEPA Method 6010B), cyanide (USEPA Method 9012), semi-VOCs (USEPA Method 8270) and pH. For soil, one sample exceeded the non-residential direct contact Medium-Specific Concentration (MSC) for cadmium. TCE and its breakdown products (1,2-dichloroethylene [DCE] and vinyl chloride) were detected in groundwater exceeding their MSCs near AOC 2.

A Notice of Intent to Remediate pursuant to the Land Recycling and Environmental Remediation Standards Act (Act 2) was submitted on November 7, 2011. A Remedial Investigation Report and Cleanup Plan (RIRCP) was submitted in October 2018 (Revised January 2019). The RIR was prepared with assistance from an EPA Region III Brownfields Assessment Grant received by the Wrightsville Borough to investigate historical impacts. Soil samples from more than 85 soil borings and groundwater samples from ten (5 shallow and 5 deep) monitoring wells were collected as part of the RIR to better characterize the nature and extent of contamination. The RIR documented and compared contaminant concentrations against both the residential and non-residential direct contact (DC) and soil-to-groundwater (S-GW) MSC Statewide Health Standards (SHSs) in the AOCs since at the time of its writing the future use was not confirmed. Specifically, exceedances for each AOC are as follows:

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- AOC 1 – Arsenic and lead exceed their residential MSCs in soil. Methylene chloride (residential) and acrolein (residential and non-residential) exceed their screening values for vapor intrusion at one location.
- AOC 2 – No exceedances.
- AOC 3 – TCE, benzo(a)pyrene, arsenic, cadmium, lead, and nickel exceed their residential MSCs in soil. TCE exceeds the screening values for vapor intrusion at one location.
- AOC 4 – Arsenic, cadmium, lead, and zinc exceed their residential MSCs in soil. Lead marginally exceeded the non-residential MSC at one location.
- AOC 5 – Benzo(a)pyrene, arsenic, and zinc exceeded their residential MSCs in soil.
- TCE (MW-2D, MW-5D, EPY Well#2), vinyl chloride (MW-4D and MW-5S), and dissolved chromium (MW-2D and EPY Well #2) were detected at concentrations exceeding their residential and non-residential groundwater MSCs. Vinyl chloride (MW-4D and MW-5S) also exceeded the residential screening value for vapor intrusion.

The Cleanup Plan proposed a combination of the Act statewide health and 2 site-specific standards for constituents in soil and groundwater that did not meet the MSC SHSs. Activity and use limitations with proposed remedial actions that include some flexibility as necessary to accommodate potential future site uses were proposed. Specific details are described below in Section 5: Proposed Remedy. The PADEP approved the RIRCP on January 24, 2019.

### **3.2 EPA Assessment**

EPA evaluated the RFA, ESAs, and Act 2 Reports described above to assure RCRA Corrective Action Program requirements were satisfied. In addition, EPA reviewed progress reports submitted separately in accordance with the Brownfields Assessment Grant. EPA evaluated soil and groundwater results for a non-residential scenario since the approved RIR included proposed environmental covenant language prohibiting residential development. For the COCs mentioned, EPA determined that direct contact soil standards are within EPA's acceptable Regional Screening Level (RSL) risk range for Corrective Action, and groundwater standards are equivalent to EPA's Maximum Contaminant Levels (MCLs). The areas identified in the RIRCP encompass the SWMUs identified in the 1989 EPA RFA. The highest detected concentrations for each compound that exceeded its MSC or RSL can be found on Table 1. The extent of impacts are displayed on figures 4B through 4D of the RIR for soil and figures 12, 13, and 14 for groundwater.

### **Soils**

Sample results were compared against EPA RSLs for industrial use. The concentrations of Arsenic identified across the Facility have been shown to meet the average soil concentrations across Pennsylvania. An exposure assessment and risk evaluation presented in the RIRCP confirmed the highest concentration of each compound, as listed in Table 1, falls within EPA's acceptable risk range of  $10^{-4}$  to  $10^{-6}$ . Lead exceedances in the RIRCP were presented to be in shallow soils only (0-2 ft) with a maximum concentration of 1,150 mg/kg. EPA noted two deep

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soil locations that exceeded the RSL in AOC 4, with a maximum concentration of 1,590 mg/kg, and requested these locations be identified and included in the proposed remedial actions. These highest concentrations also represent the Site-Specific Standard (SSS) based on eliminating the pathway. Potential exposure to these locations will be controlled through the activity and use limitations expected to be to record in an Environmental Covenant.

Therefore, EPA has determined that the Corrective Action risk concerns have been met and soils are not a concern at the Facility under current and probable future use.

### **Indoor Air**

EPA prefers soil vapor samples over bulk soil samples. In the RIR, bulk soil sample results were used to determine exceedances of vapor intrusion screening values. Section 5 (Preliminary Analysis of Vapor Intrusion) of EPA's OSWER Technical Guide For Assessing And Mitigating The Vapor Intrusion Pathway From Subsurface Vapor Sources To Indoor Air states "If a release of vapor-forming chemicals to the subsurface is known or suspected to have occurred at or near the site, but buildings are not present and none are reasonably anticipated in the future (e.g., the contaminated source underlies an open space, recreational area, or wildlife refuge), then further vapor intrusion assessments may not be appropriate under current conditions." As discussed in The Facility Background, current buildings include only an office that is not an AOC and the warehouse building. Possible plans to redevelop the site include a public, riverside park.

Section 5 goes on to say it "may be appropriate, however, to establish an institutional control (IC) requiring a vapor intrusion investigation or building mitigation in the future, in case land use changes." The Cleanup Plan proposed a covenant requiring a vapor intrusion assessment (involving vapor intrusion modeling, soil gas sampling, and/or indoor air sampling) if the existing warehouse building or any new buildings constructed are going to be occupied.

Therefore, EPA has determined that Corrective Action risk concerns have been met and on-site vapor intrusion into indoor air is not a concern under current and probable future use.

### **Groundwater**

Shallow and deep groundwater monitoring was performed between 2006 and 2016. Results exceed EPA's MCL within the property and approximately 300 feet of the property boundary along the Susquehanna River. The highest concentration of each compound and SSS, as listed in Table 1, falls within EPA's acceptable risk range of  $10^{-4}$  to  $10^{-6}$ .

On-site, there are no current or anticipated user of groundwater at, or downgradient of, the Facility. This aquifer has no potential to be used for water supply. The factors EPA considered to make this determination are: proximity to the river, shallow groundwater, public water service, and location (Wrightsville Borough wastewater treatment plant borders the Facility to the south).

The RIRCP presented a fate and transport groundwater model that evaluated whether concentrations in groundwater would impacts the Susquehanna River above Pennsylvania

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surface water quality standards. Results indicated that neither constituent exceeding DEP's or EPA's groundwater standards will impact the Susquehanna River above surface water quality standards.

Therefore, EPA has determined that the Corrective Action risk concerns have been met and groundwater is not a concern at the Facility under current and probable future use.

The EPA approved the RIR and Cleanup Plan with the request to include the deep Lead exceedances in the proposed remedial actions on April 14, 2019.

## **Section 4: Corrective Action Objectives**

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EPA's Corrective Action Objectives for the specific environmental media at the Facility are the following:

### **1. Groundwater**

EPA expects the final remedies to return usable groundwater to its maximum beneficial use within a timeframe that is reasonable given the particular circumstances of the project. For projects where aquifers are either currently used for water supply or have the potential to be used for water supply, EPA will use the MCLs promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 CFR Part 141.

EPA has determined that groundwater is unlikely to be used at the Facility given the site-specific factors: proximity to the river, shallow groundwater, and location (Wrightsville Borough wastewater treatment plant borders the Facility to the south). Potential exposures to groundwater are through direct contact or inhalation by industrial or construction workers during subsurface construction activities.

Therefore, EPA's Corrective Action Objective for groundwater is:

- a. Prohibit potable groundwater use at the Facility;
- b. Control direct contact and inhalation exposures through site controls where potential for vapor intrusion is identified through required pre-construction sampling.

### **2. Soil**

EPA's Corrective Action Objective for soil is:

- a. Prohibit residential use;
- b. Control direct contact exposures through site controls.

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### 3. Indoor air

EPA's Corrective Action Objective for indoor air is:

- a. Prevent inhalation exposures through pre-construction assessment or vapor mitigation in buildings where warranted.

## Section 5: Proposed Remedy

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EPA's proposed remedy requires the Facility to implement the following activity and use limitations, which the then current owner of the Property, and its tenants, agents, employees and other persons under its control, shall abide by. The proposed remedy at the site is:

- Future use of groundwater for drinking water, agricultural, irrigation or any other purposes that could result in unacceptable direct contact, inhalation, and/or ingestion exposures will be prohibited.
- Residential use will be prohibited.
- If the use of the existing warehouse building or if any new buildings are constructed, a vapor intrusion assessment (involving vapor intrusion modeling, soil gas sampling, and/or indoor air sampling) will be conducted in accordance with applicable guidance, and/or a vapor barrier will be constructed around or below any such structure as needed to prevent indoor air concentrations that exceed the applicable requirements. If a vapor barrier is necessary, it will need to be approved by EPA and PADEP.
- Soils that are within the upper 2 feet of the ground surface that are currently exposed or that may become exposed in the future as a result of grading activities, removal of existing concrete slabs or paved surfaces, or other activities, and that have constituent concentrations that exceed the Chapter 250 SHS Non-Residential Direct Contact values will be addressed by one or more of the following methods following EPA and PADEP approval: excavated and transported off-site for disposal in accordance with applicable regulations; capped in-place with a stable cover that will prevent direct contact exposure risks; or excavated and consolidated on-site and capped with a stable cover that will prevent direct contact exposure risks. The extent of any engineering controls will be surveyed to support the planned Environmental Covenant.
- Based on the elevated concentrations of dissolved chromium detected at two of the monitoring wells at the last groundwater sampling event, one or more additional rounds of groundwater sampling will be conducted as necessary to demonstrate that the dissolved chromium concentrations in groundwater are stable.

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- Periodic inspections and maintenance will be conducted to ensure that the institutional and engineering controls continue to function as intended.

EPA's preferred instrument to enforce the land and groundwater use restrictions against the current and any future land owner is an Environmental Covenant prepared under Pennsylvania's Uniform Environmental Covenants Act, 27 Pa. C.S. § 6501 et seq. (UECA). If the Facility fails to record an Environmental Covenant, EPA will use its enforcement authorities to impose the components of the proposed remedy.

## **Section 6: Evaluation of Proposed Remedy**

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This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three remedy threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

<b>Threshold Criteria</b>	<b>Evaluation</b>
1) Protect human health and the environment	EPA's proposed remedy protects human health and the environment by eliminating, reducing, or controlling potential unacceptable risks. EPA's proposed remedy for the Facility protects potentially open pathways through the implementation of the proposed combination of remedial options and activity and use limitations.
2) Achieve media cleanup objectives	The remedy proposed in this SB is based on the current and future anticipated land use at the Facility as non-residential. Appropriate soil standards have been met. The groundwater is unsuitable as a current or potential drinking water source and site-specific cleanup objectives for groundwater were met.
3) Remediating the Source of Releases	As demonstrated by multiple investigations, there are currently no continuing sources of contaminants at the facility.



Balancing Criteria	Evaluation
4) Long-term effectiveness	The current and reasonably anticipated use of the Facility is non-residential. In addition, groundwater is not used at the Facility for drinking water. Therefore, permanent activity and use limitations are preventing exposures above non-residential standards.
5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	The reduction of mobility and volume of hazardous constituents has been achieved to sufficiently demonstrate protection of human health and the environment as demonstrated by the remedial activities and data from the soil and groundwater monitoring.
6) Short-term effectiveness	EPA's proposed remedy did not identify short-term risks for construction or excavation that would pose risks to workers or occupants of the property.
7) Implementability	EPA's proposed remedy incorporates proposed land and groundwater use restrictions. EPA does not anticipate any regulatory constraints in the implementation of its proposed remedy.
8) Cost	The costs associated with this proposed remedy including maintenance and an Environmental Covenant are minimal (estimated cost of less than \$10,000 per year). Therefore, EPA's proposed remedy does not require financial assurance.
9) Community Acceptance	EPA will evaluate Community acceptance of the proposed remedy during the public comment period and will be described in the Final Decision and Response to Comments.
10) State/Support Agency Acceptance	PA is the lead agency for the remediation at this Facility under the One Cleanup Program. PADEP has reviewed and approved the Cleanup Plan, including proposed remedial activities and use restrictions for the Facility.

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Based upon EPA's evaluation and the information presented in this SB, EPA considers the releases to have been remediated appropriately and the threshold/balancing criteria to have been met achieving protection of human health and the environment.

## **Section 7: Public Participation**

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Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last 30 calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Mr. Kevin Bilash at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. Kevin Bilash at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location:

U.S. EPA Region III  
1650 Arch Street  
Philadelphia, PA 19103  
Contact: Mr. Kevin Bilash (3LD20)  
Phone: (215) 814-2796  
Fax: (215) 814-3113  
Email: [bilash.kevin@epa.gov](mailto:bilash.kevin@epa.gov)

## **Section 8: Signature**

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EPA's review of available information indicates that there are no unaddressed releases of hazardous waste or hazardous constituents from the former Electroplaters of York Inc. Facility located at 209 East Willow Street, Wrightsville, PA 17368. EPA's proposed remedy for the Facility consists of land and groundwater use restrictions with proposed remedial actions that include some flexibility as necessary to accommodate potential future site uses.

Date: 3.3.20



John A. Armstead, Director  
Land, Chemicals, and Redevelopment Division  
US EPA, Region III

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## **Index to Administrative Record**

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Final Environmental Priorities Initiative Preliminary Assessment - A.T. Kearney, January 1989

Phase I Environmental Site Assessment - Buchart Horn, Inc., January 1993

Phase I Environmental Site Assessment - ECS Mid-Atlantic, LLC and C.S. Davidson, Inc., April 18, 2005

Limited Phase II Environmental Site Assessment - ECS Mid-Atlantic, LLC, March 2006

Environmental Indicator Inspection Report – Baker, September 2010

EPA Region III Brownfield Assessment Grant Number 004096475 documents:

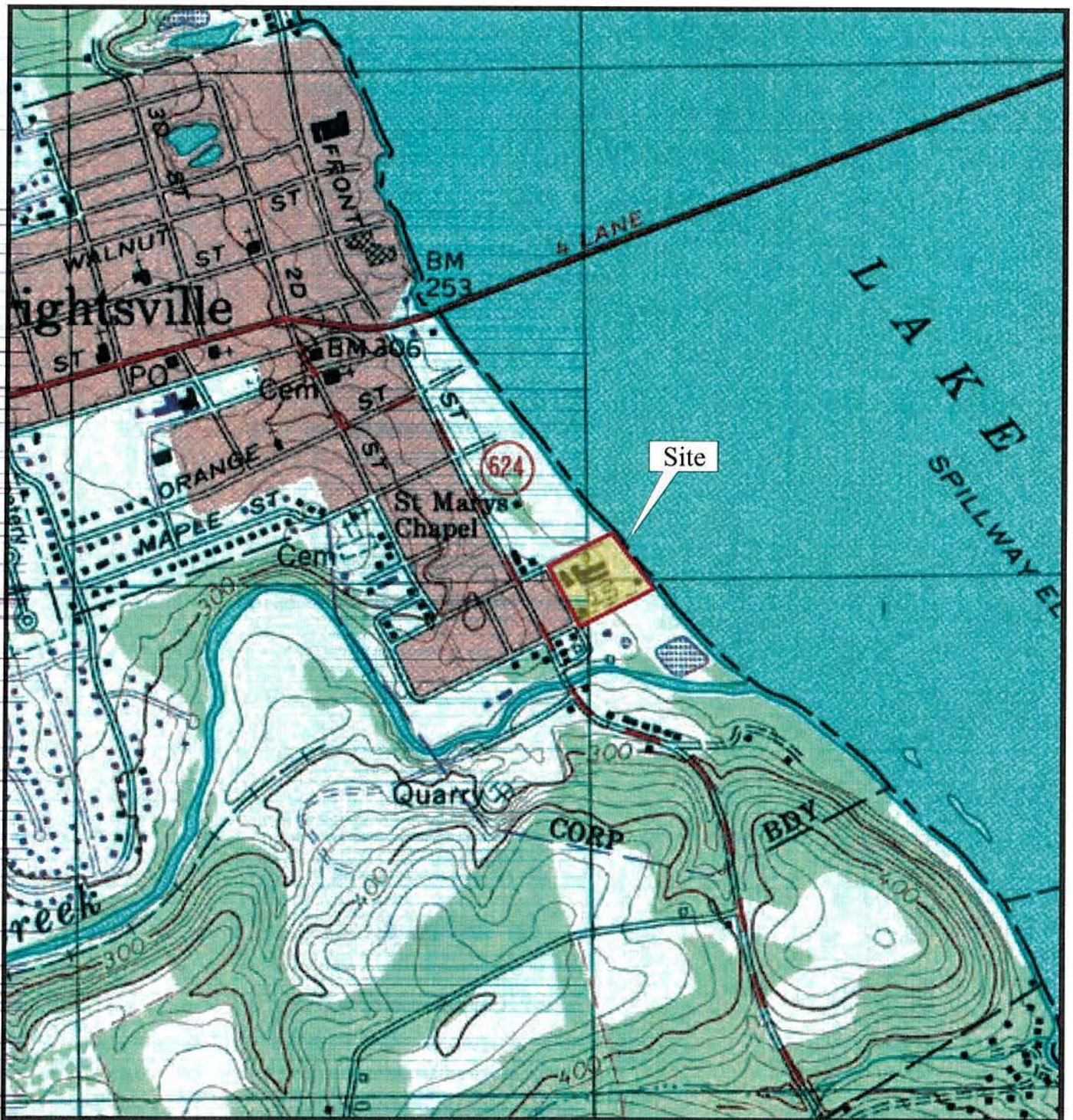
- Site-Specific Sampling and Analysis Plan – ARM Group Inc., December 2014
- Quality Assurance Project Plan – ARM Group Inc., December 2014
- Status Update – ARM Group Inc., September 2015
- Quarterly Progress Report - ARM Group Inc., Third Quarter 2016
- Revised Work Plan and Schedule - ARM Group Inc., 9/7/2016
- Quarterly Progress Report - ARM Group Inc., Fourth Quarter 2016
- Quarterly Progress Report - ARM Group Inc., First Quarter 2017
- Quarterly Progress Report - ARM Group Inc., Second Quarter 2017

Remedial Investigation Report and Cleanup Plan - ARM Group Inc., October 2018 (revised January 2019)

Table 1

Soil (mg/kg) Direct Contact			
Compound	Non-residential MSC (0-2 ft)	Nonresidential RSL (10 <sup>-6</sup> )	Highest concentration/SSS (location)
Arsenic	61	3	40.2 (AOC 3)
Cadmium	1,600	980	3115 (AOC 4)
Lead	1,000	800	1,150 [DEP]/1,590[EPA] (AOC 4)
Benzo(a)pyrene	12	0.11	1.62 (AOC 5)
Groundwater (ug/L)			
Compound	Nonresidential MSC	MCL	Highest concentration/SSS (location)
TCE	5	5	9.9 (MW-2D)
Vinyl Chloride	2	2	6.1 (MW-5S)
Chromium	100	100	140 (MW-2S, EPY Well #2)
Soil (mg/kg) - Vapor Intrusion			
Compound	Non-residential Soil MSC	Highest concentration/SSS (location)	
Acrolein	0.002	1.39 (AOC 1)	
Methylene Chloride	1.5	0.0775 (AOC 1)	
TCE	0.17	1.3 (AOC 3)	





Base Map from the USGS 7.5 Minute Topographic Quadrangle of Columbia West, Pennsylvania.



Scale 1:24,000

# Figure 1

Site Location Map

209 East Willow Street  
Borough of Wrightsville  
York County, Pennsylvania

February 2017

13401



**ARM Group Inc.**  
Earth Resource Engineers  
and Consultants