Mr. Dana Aunkst
United States Environmental Protection Agency
Director – Land, Chemicals and Redevelopment Division (3LD00)
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Date: December 1, 2021
Our Ref: 30004026
Subject: *Self-Implementing Cleanup Notification for PCB Remediation Waste – Revision 1 (FINAL)*
Former Philadelphia Coke Co. Facility
PADEP eFACTS PF No. 831308
EPA ID #PAD000427906
4501 Richmond Street
Philadelphia, Philadelphia County, Pennsylvania

Dear Mr. Aunkst,

On behalf of the Philadelphia Coke Co., Inc. (PCC), Arcadis U.S., Inc. (Arcadis) is submitting this self-implementing cleanup notification for planned remedial activities to address polychlorinated biphenyl (PCB) remediation waste at the former Philadelphia Coke Plant located in the Bridesburg borough of Philadelphia, Pennsylvania (the Site). This letter also presents an alternative decontamination procedure approval request for decontamination of construction equipment to be used during implementation of the remedial activities. This notification is being submitted to the United States Environmental Protection Agency (EPA) in accordance with the Toxic Substances Control Act (TSCA) regulations presented in Title 40 of the Code of Federal Regulations (CFR) Part 761.61(a). A signed Certification Statement containing information required under 40 CFR 761.61(a)(3)(E) is included as Attachment 1 to this letter.

Analytical results for PCBs in soil samples collected at the Site were presented in a *TSCA PCB Evaluation Summary* submitted to the EPA's Resource Conservation and Control Act (RCRA) project manager, Kevin Bilash, on May 12, 2021. The submittal evaluated whether PCBs identified at the Site by previous environmental investigation are regulated under TSCA and was supported by data tables, figures, and historical aerial photographs. The summary concluded that PCBs identified in soil samples collected at the Site are related to pre-April 1978 release(s) and the observed PCB concentrations are therefore not regulated under TSCA.

In a July 8, 2021 response letter from the EPA to Arcadis, EPA agreed with the conclusions of the *TSCA PCB Evaluation Summary*, except for a portion of the Site in the southeast corner referred to as the "Historical Tar Plains / Fill Area" because soil containing PCBs in this area is located in backfill that was placed during the RCRA closure activities conducted in the 1980s to the early 1990s (discussed in Section I.B. below). Accordingly, EPA requested that PCC submit a self-implementing cleanup notification for PCB remediation waste in this limited area. Therefore, this notification addresses the PCB impacts in the Historical Tar Plains / Fill Area. The EPA response letter indicates that PCB impacts in the areas outside the Historical Tar Plains / Fill Area should be addressed in conjunction with the cleanup activities being performed under the One Cleanup Program. The *TSCA*

PCB Evaluation Summary and follow-up correspondence between Arcadis and EPA are provided in Attachment 2 to this letter.

The Site is being remediated in accordance with Pennsylvania's Land Recycling and Environmental Remediation Standards Act (Act 2), and its enabling regulations, 25 PA Code, Chapter 250. The proposed cleanup activities and Site redevelopment are described in the Remedial Investigation Report and Cleanup Plan (RIR/CP) submitted to the Pennsylvania Department of Environmental Protection (PADEP) and the EPA's RCRA project manager on July 15, 2021. In addition, the cleanup approach and proposed redevelopment was presented to PADEP staff and EPA's RCRA project manager during a March 8, 2021 meeting between PCC, the prospective site developers, PADEP, and the EPA.

Cleanup activities in the limited area covered by this notification will be conducted simultaneously with the Pennsylvania Act 2 site-wide cleanup action proposed in the RIR/CP. Cleanup activities will be integrated with Site development plans, once finalized. Conceptual development plans are currently being prepared and include commercial warehouse buildings, parking lots, access roads, driveways, and various landscape features, as shown in Attachment 3.

Relevant background information, a summary of PCB characterization results, and a description of the proposed PCB cleanup activities are presented below.

I. Background Information

A. Site Location

The Site is located at 4501 Richmond Street between Orthodox Street and Buckius Street and is adjacent to the Delaware River. The Site is approximately 63 acres in size and is currently unoccupied. The Site is overgrown with vegetation and only remnants of the former operating structures, foundations, and concrete pads remain. All former structures at the Site have been demolished to ground level, and the Site is currently vacant. A mix of residential, industrial, and commercial uses surround the Site. The Site location is shown as Figure 1.

B. Site and Regulatory History

The Site was used as a manufactured gas plant in the mid-1920s and coking facility from 1929 to 1982. Coal and Coke Storage Areas were located in the northern portion of the Site. The main Coking Operations Area was located in the center of the Site and consisted of the coke ovens, a byproducts building, tar storage, and oxide boxes. The Site also included an iron oxide waste area and tar plains. A fuel oil blending facility operated on the eastern 2.5 acres of the Site from approximately 1969 through 1989. The Fuel Blending Area consisted mainly of aboveground storage tanks and below ground piping. All Site operations concluded in 1989.

PCBs were not a raw material, product, or byproduct of either MGP or coking operations. Although historical facility mapping shows an electrical substation building in the west-central portion of the Site, aerial photos do not show electrical equipment outside of the building. There are no known or suspected releases from equipment inside the electrical substation building.

RCRA closure actions were conducted at the Site from 1988 to 1993 to address source area contamination located at specific RCRA Hazardous Waste Management Units (HWMUs) and Solid Waste Management Units (SWMUs), as follows:

- HWMUs – Approximately 9,400 tons of soil contaminated with decanter tank tar sludge from coking operations (RCRA Waste Code K087), spent iron oxide from the coal carbonization process (RCRA Waste Code D003), and benzene from production (RCRA Waste Code D018) associated with six HWMUs (tar storage tanks, waste liquor pit, tar plains, tar decanters, iron oxide boxes and pile, and seal pot) were excavated and transported for offsite disposal as hazardous waste.
- SWMUs – Approximately 29,400 tons of coke breeze, coal tar-impacted soil, and paving material from four SWMUs (trash pile, clean oxide, wood trays, and process piping) were excavated and transported for offsite disposal as a non-hazardous waste.

The Certificate of Completion for RCRA Site Closure was issued on December 28, 1994. No outstanding closure responsibilities associated with the RCRA Corrective Action remain.

In addition to the above RCRA Site Closure activities, separate cleanup activities were initiated in 1992 to address oily residues encountered in the Fuel Blending Area. These activities included the excavation and disposal of potential fuel oil sources consisting of subsurface piping and oil residues from the basement of the former pump house. A bioremediation project was conducted for almost two years and reported moderate success in reducing hydrocarbon concentrations in the surface soils (0 to 3 feet below ground surface [bgs]), but only limited success with the deeper contamination. The project was discontinued in late 1993. The above-grade Fuel Blending Area facilities were dismantled and removed in early 1998.

Lastly, seven underground storage tanks (USTs) were removed from the Site in 1992. The UST closures were approved in June 1992 by the agency preceding PADEP. Each UST excavation was backfilled with clean fill.

The Site has not been occupied since the conclusion of the RCRA Site Closure. Other than the Site investigations discussed herein and in the RIR, no other Site activities or operations besides routine mowing and perimeter chain-link fence maintenance have been conducted since the RCRA Closure was certified in 1994.

In 2013, EPA-certified Environmental Indicator Forms were completed and indicated that both human exposures and impacted groundwater migration are under control at the Site. Any further work needed will be performed to satisfy the requirements of PADEP Act 2 and TSCA.

II. Environmental Investigation Summary

A multi-phase Remedial Investigation (RI) was undertaken to assess the nature and extent of Site-related environmental impacts and evaluate the risks posed to human health and the environment by those impacts. The RI was performed in two major phases: (1) the Initial RI activities from 2003 through 2006; and (2) the Supplemental RI activities in 2018 and 2019. As part of the RI, soil, soil gas, and groundwater investigations were performed to characterize remaining residuals. Over the course of these investigations, 46 monitoring wells were installed, 197 test pits were excavated, 179 soil borings were drilled, 21 soil gas samples were collected, and hundreds of samples of environmental media were analyzed. The existing Site layout and RI sampling locations are shown on Figure 2. In total, approximately 97 groundwater and 117 soil samples were analyzed for PCBs.

PCBs were not detected in groundwater above the laboratory reporting limit (ranging from 0.25 parts per billion [ppb] to 0.36 ppb). Samples were collected from 41 monitoring wells distributed across the Site (including the

groundwater monitoring well downgradient from the Historical Tar Plains / Fill Area [PCMW-10S]). Therefore, groundwater investigation results are not further discussed in this letter.

As part of the RI activities, soil samples were collected from 89 sampling locations distributed across the Site and analyzed for PCBs. Surface soil samples were collected from the top 2 inches (below the sod layer, if present) of a 1-square-foot surface area, and subsurface soil samples were collected from select depths bgs at soil boring and test pit locations. PCB analyses were performed by an Environmental Laboratory Accreditation Program-certified laboratory using EPA SW-846 Method 8082. PCBs were not identified in any of the samples at concentrations greater than 50 parts per million (ppm). PCBs were detected at concentrations greater than 1 ppm in only 11 of the 89 sampling locations (four in the Historical Tar Plains / Fill Area as discussed in the subsection below). The soil sampling locations where PCBs have been identified at concentrations greater than 1 ppm are shown on Figure 3. The soil analytical results for total PCBs are presented in Table 1. As presented in the *TSCA PCB Evaluation Summary*, PCBs identified in soil samples collected at the Site are related to pre-April 1978 release(s) and the concentrations are therefore not regulated under TSCA, except for a portion of the Site in the southeast corner referred to as the Historical Tar Plains / Fill Area. A more detailed summary of the PCB analytical results for the soil samples collected outside the Historical Tar Plains / Fill Area is presented in the TSCA PCB Evaluation Summary. The PCB analytical results for soil samples collected from the Historical Tar Plains / Fill Area are summarized below.

PCBs have been identified at a concentration greater than 1 ppm in 4 of 17 soil samples collected from the Historical Tar Plains / Fill Area (samples PSSTP-08A, PSSTP-09A, PSSTP-19A, and PCTP-61). PCB analytical results for soil samples collected from this area are presented in Table II below:

Table II – PCB Concentrations in the Historical Tar Plains / Fill Area

Location ID	Sample Depth (ft bgs)	Date Collected	Total PCBs (ppm)
PCTP-61	0.5	9/8/05	**1.3** [0.54]
	7.5	9/8/05	<0.027
PCTP-62	0.5	9/8/05	0.58
	10.5	9/8/05	<0.042
PCTP-63	0.5	9/8/05	0.23
	10.5	9/8/05	<0.035
PCTP-80	8	9/12/05	0.31
PSSTP-07A	1-2	3/11/03	0.18
	8-9	3/11/03	<0.021
PSSTP-07R	0.5-2	4/18/19	<0.04 [0.0610]
	8-9	4/18/19	<0.037
PSSTP-08A	1-2	3/11/03	0.12
	6-7	3/11/03	**1.2**
PSSTP-09A	1-2	3/12/03	0.05
	6-7	3/12/03	**8.9**
PSSTP-19A	1-2	3/12/03	0.23
	7-8	3/12/03	**1.1**

Notes:

1. < indicates PCBs were not detected at a concentration above the reported detection limit.
2. Brackets indicate the reported concentration of a duplicate sample.
3. Bold results are greater than 1 ppm.

Soil and debris were removed from this area to an average depth of approximately 11 feet during RCRA closure between 1982 and 1988. Approval to backfill was provided in 1989 by the agency preceding PADEP. The Initial RI samples from this area that contained PCBs at concentrations greater than 1 ppm were collected within backfill placed as part of the RCRA excavations. The random areal distribution and depths of soil impacted with low-level PCBs across this area are not indicative of a historical point source release, but rather low-level impacts in fill material. Of the four samples over 1 ppm, three are just slightly over the standard, ranging from 1.1 to 1.3 ppm, and only one sample is of surface soils (PCTP-61(0.5)).

Per TSCA, soil containing PCBs at concentrations greater than 1 ppm but less than or equal to 10 ppm may remain in a “high occupancy area” provided that it is covered with a cap in accordance with the regulation in 40 CFR 761.61(a)(4)(i)(A). Portions of the Site may be occupied by workers at a frequency greater than 6.7 hours per week. Therefore, the Site will be remediated in accordance with EPA’s definition of a “high occupancy area” as presented in 40 CFR 761.3, which would allow for residential use. However, due to residual impacts (other than PCBs) remaining onsite, the Site will be restricted to non-residential use.

III. Proposed Self-Implementing Cleanup Activities

The cleanup activities proposed for the Site will provide conditions that are protective of human health for high-occupancy site use. The objectives with respect to the remediation of PCB-impacted soil are, to the extent practicable, to: (1) prevent ingestion/direct contact with impacted surface and subsurface soil; (2) prevent the migration of PCBs that would result in exceedances of the 0.5 part per billion (ppb) EPA unrestricted cleanup level for water; and (3) prevent impacted soil migration to surface water. As previously indicated, groundwater at the Site is not impacted by PCBs.

The primary cleanup activities covered under this notification include: (1) installing engineered caps(s) above the remaining soil that contains PCBs at concentrations greater than 1 ppm; and (2) establishing institutional controls in the form of an environmental covenant with deed restrictions/notifications to establish certain limitations and protocols for future site operations based on the impacts that will remain at the completion of the cleanup activities. Due to the presence of other residual impacts remaining onsite (including but not limited to PCBs), the proposed cap will be Sitewide. Site development and capping will be performed in accordance with an Erosion and Sedimentation Control (E&SC) Plan.

The proposed cap may include concrete floor slabs/foundations for new buildings; asphalt pavement and/or concrete for driveways, parking areas, and sidewalks; and/or 2-feet of clean soil (e.g., in landscaped areas) to eliminate potential direct contact with soil containing PCBs. Details on the proposed capping are presented in Section III.A.2. The cleanup activities proposed for the Site also address: (1) Site COCs in surface and subsurface soil; and (2) vapor intrusion (VI) concerns for future buildings onsite using engineering controls (i.e., via use of a vapor barrier specifically designed, manufactured and installed for use in VOC mitigation). VI mitigation is unrelated to the PCB self-implementing cleanup notification and is therefore not further discussed further herein.

An environmental covenant with deed restrictions/notifications meeting the requirements of 40 CFR 761.61(a)(8) will be incorporated as an institutional control. Due to the presence of residual impacts other than PCBs remaining onsite, Site use will be restricted to non-residential to limit potential future receptors, and groundwater use will be prohibited to eliminate potential future groundwater exposure pathways. In addition, institutional controls will stipulate inspection, periodic maintenance/repair activities, and reporting requirements for the caps, as appropriate. Details on the proposed institutional controls are provided in Section III.C.

The proposed redevelopment and installation of engineering controls are scheduled to begin in 2022, subject to PADEP and EPA approval of the RICP. The subsection below discusses the primary elements of the selected cleanup action as related to PCB soil impacts.

A. Detailed Description of Cleanup Action for Soil

The selected cleanup action for soils containing PCBs in the Historical Tar Plains / Fill Area at concentrations greater than 1 ppm and less than 10 ppm is capping with either concrete, asphalt, or two feet of clean fill.

Although unlikely, any soil that needs to be excavated from the Historical Tar Plains / Fill Area because of grade adjustment, utility installation, or foundation work will be relocated, consolidated, and capped within the Historical Tar Plains / Fill Area. Soil originating from the Historical Tar Plains / Fill Area will not be relocated outside the limits of this area for consolidation. If soil needs to be removed from the Site (e.g., from the area of PSSTP-01A, for geotechnical reasons), it will be characterized and disposed of at a facility permitted to accept the material. The anticipated disposal facility to be used for PCB-impacted soil from the Site (if any) is Clean Earth of North Jersey located on 115 Jacobus Avenue in South Kearney, New Jersey. An alternate registered RCRA Subtitle D landfill may be used depending on landfill availability for the material quantity/timing or market factors. The name of the alternative landfill (if proposed) will be provided to EPA before being used. Any soil leaving the Site will be characterized for PCBs. Based on analytical data, geotechnical data, and current redevelopment plans, soil in the Historical Tar Plains / Fill Area will not need to be excavated.

During implementation of the cleanup work (and any Site redevelopment if applicable) specific environmental controls, decontamination, health and safety requirements, and soil management, handling, and disposal requirements will be followed. Work conducted on the Site will be in accordance with the procedures defined in the RIR/CP, this notification, and a site-specific HASP.

The proposed cleanup actions and associated construction requirements for the Historical Tar Plains / Fill Area are summarized below.

1. Earthwork and Soil Management

At the start of construction, the Site will be surveyed and staked/marked to identify the Historical Tar Plains / Fill Area covered under this notification. In addition, sampling location PCTP-61 will be surveyed and marked because PCBs were detected in surface soil at this location at a concentration greater than 1 ppm. If feasible, fill will be added to this area during redevelopment in such a way that equipment will not contact soil containing PCBs greater than 1 ppm (i.e., surface soil impacts at PCTP-61 will be covered without disturbing existing soil). Any potential ground-intrusive activities that may disturb, or have the potential to disturb, impacted soil will be monitored.

Site grading or excavation activities within marked areas will be documented to identify the relocation of any impacted soils. Soil onsite can be reused as fill in areas that will be covered as part of site redevelopment. Impacted soil that is excavated will be managed in accordance with the PADEP Guidelines for E&SC. At a minimum, the E&SC measures will include silt fencing, compost filter socks, and/or hay bales that will be installed in appropriate locations in and around the remedial work area to minimize potential transportation of surface soil via wind and/or surface water, to areas outside of the limits of disturbance. If staged, impacted soil will be placed on polyethylene sheeting (minimum 6 mil thickness) adjacent to the excavation area and kept covered with appropriately anchored tarps when inactive. Small quantities of waste, along with drums of used PPE and similar

small debris type items, may be stored in labeled United States Department of Transportation-specification containers before onsite reuse or offsite disposal.

If soil is not suitable from a geotechnical perspective for use as subsurface fill and removed from the site, it will be:

- Characterized in accordance with the disposal facility's requirements.
- Transported by a permitted waste hauler contracted to transport waste materials to the certified waste disposal facility in accordance with appropriate local, State, and Federal regulations.
- Documented in a waste manifest containing a summary of transport tonnage and disposal destination. The waste manifest will be maintained onsite and submitted to PADEP in the Final Report.

For any materials disposed offsite, disposal quantities and associated documentation will be presented in the Final Report. This documentation will include waste profiles, test results, facility acceptance letters, manifests, bills of lading, and facility receipts.

2. Capping System Details and Deviations from TSCA

Based on current redevelopment plans, approximately half of the Historical Tar Plains / Fill Area will be covered by asphalt parking lots and the other half will be covered by landscaping. The asphalt parking lot will be 6 inches thick and conform to 40 CFR 761.61(a)(7). However, the 24-inch soil cover will not meet the permeability, sieve, liquid limit, and plasticity index parameters in 40 CFR 761.75(b)(1)(ii) through (b)(1)(v). The soil cover will consist of two feet of clean fill, including landscaping topsoil, in the greenspace and other landscaped areas. The soil cover will be underlain by a geotextile fabric to serve as a visual demarcation between the clean fill cap and the existing impacted soil. The limits of the various soil cover (cap) components will be documented. A Post-Remediation Care Plan (part of the institutional controls) will be developed for long-term care and maintenance of the final cap(s).

The alternative capping system is considered protective of human health for the following reasons:

1. Groundwater at the Site is not impacted by PCBs, and the Site has been vacant and open to stormwater infiltration since the completion of the RCRA cleanup action in 1993.
2. The random areal distribution and depths of soil impacted with low-level PCBs in the Historical Tar Plains / Fill Area are not indicative of a historical point source release. In fact, three of the four samples over 1 ppm in this area are just slightly in excess of 1 ppm (i.e., 1.1 to 1.3 ppm) and the fourth sample is under 10 ppm.
3. The environmental covenant and deed restriction will prohibit groundwater use at the Site in the future.
4. A stormwater management system consisting of storm sewer catch basins, manholes, and subgrade piping will be designed to minimize infiltration through residual impacted soil and to convey storm water run-off from the Site.
5. The proposed soil cover is more than double the thickness required under 40 CFR 761.61(a)(7), and it will be underlain by a demarcation layer.

B. Equipment Decontamination

Under the provisions of 40 CFR 761.79(h), PCC is requesting to decontaminate PCB remediation equipment using a self-implementing procedure other than prescribed in 40 CFR 761.79(c)(2). If any equipment contacts soil containing PCBs greater than 1 ppm (e.g., surface soil at or near sampling location PCTP-61), the surfaces of that equipment which were in contact with the soil will be cleaned using an industrial strength detergent or non-ionic surfactant solution (e.g., Alconox Detergent 8, Aqua-Cleen®) applied via high-pressure water spray/steam cleaner and brushing to remove adhered debris. The equipment surfaces will then be triple-rinsed and visually inspected following rinsing. If the visual inspection indicates that waste materials remain, the equipment will be re-cleaned and re-inspected. The cleaning will be performed in a decontamination area. The decontamination procedures deviate from the procedures in 40 CFR 761.79(c)(2) and Subpart S because a wash cycle with an organic solvent will not be used. Accordingly, a field demonstration test will be conducted to document that the decontamination method is sufficiently rigorous to reduce PCB concentrations on equipment surfaces. After a successful field demonstration test, as described below, wipe samples will not be collected from each equipment item that is decontaminated.

As part of the field demonstration, standard PCB wipe samples (10-centimeter [cm] by 10-cm, as defined in 40 CFR 761.123) will be collected following decontamination of equipment used to handle PCB impacted soil. In general accordance with 40 CFR 761.302 (Subpart P), a minimum of three wipe samples will be collected from each individual decontaminated construction equipment that contacted PCB impacted soil (e.g., if one excavator and one loader are decontaminated, six wipe samples will be collected). If the equipment surface area appears to be greater than 30 square meters (323 square feet), a fourth wipe sample will be collected. Sample locations will focus on areas that contacted PCB soils (e.g., excavator bucket, excavator/bulldozer tracks, bulldozer blade) and for these areas, the sample locations will be determined following the random number generator method presented in 40 CFR 761.308. These samples will be submitted for laboratory analysis for PCBs using USEPA SW-846 Method 8082. If PCBs are detected in the wipe samples at concentrations equal to or exceeding 10 micrograms per 100 square centimeters, the decontamination approach will be re-evaluated, and modifications implemented. If the demonstration samples indicate that the decontamination methods are adequate, then the detergent, pressure washing/brushing, and triple rinse approach will be used for the duration of the project. A summary of the field demonstration test will be provided to the EPA (TSCA and RCRA points of contact) in e-mail correspondence that includes: (1) a list of the equipment sampled; (2) a summary of decontamination procedures and wipe sampling protocol; and (3) the wipe sample results. The results of the field demonstration test will also be included in the Final Report submitted to PADEP and the EPA's RCRA project manager.

Equipment and materials (e.g., excavators, loaders, dump trucks, hand-tools) that contact impacted soil will be decontaminated before handling clean materials and before being demobilized from the Site. Liquid materials, such as decontamination water (and other residual material collected during equipment decontamination) will be containerized and transported to an industrial wastewater treatment facility for treatment/discharge. Solid waste material generated during equipment decontamination will be consolidated underneath the capping system or collected, characterized, and disposed of at a facility permitted to accept the material.

C. Institutional Controls

Institutional controls consisting of an environmental covenant, deed restriction, deed notification and post-remediation care plan will be developed to address residual impacts remaining after the completion of the redevelopment activities. The environmental covenant will: (1) restrict future use to non-residential purposes due

to residual impacts onsite other than PCBs; (2) identify the presence of constituents remaining in subsurface soil (below the cap) and in groundwater at the Site; (3) prohibit the use of groundwater at the Site; and (4) require compliance with the Post-Remediation Care Plan. In accordance with 40 CFR 761.61(a)(8), a notation on the deed will indicate that: (1) the land has been used for PCB remediation waste disposal; (2) a cap is in-place and must be maintained in compliance with the Post-Remediation Care Plan; and (3) PCB concentrations greater than 1 ppm and less than 10 ppm remain onsite below the cap. A certification, signed by the property owner, will indicate that the deed notification has been recorded in accordance with 40 CFR 761.61(a)(8)(i)(A). Once signed, the certification will be submitted to the EPA Regional Administrator.

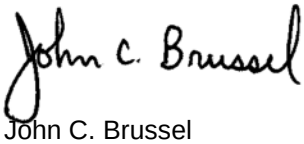
The Post-Remediation Care Plan will: (1) address possible future disturbances of certain soil (to minimize intrusive subsurface activities without appropriate controls and measures); (2) identify known locations of constituents in soil at the Site; (3) set forth the inspection and maintenance activities for capping materials; (4) document and record where and when the inspection and maintenance of engineering controls are being conducted; and (5) report inspection/maintenance results to the PADEP as provided in the environmental covenant.

IV. Summary / Conclusions

The remedial approach for the Historical Tar Plains/Fill Area is consistent with the regulatory requirements for addressing historical PCB releases under the self-implementing PCB remediation waste option contained in 40 CFR 761.61(a), except for the deviations noted above. Considering the existing and future site conditions and the low levels of impact, the proposed self-implementing cleanup and institutional controls will be protective of human health and meet the cleanup objectives for high-occupancy use. We request that the EPA review this notification and respond with any comments or questions.

On behalf of the PCC, Arcadis appreciates your efforts in reviewing this self-implementing cleanup notification and alternate decontamination approval request. Please do not hesitate to contact me at 315.671.9441 or by email at John.Brussel@arcadis.com if you have any questions or need additional information.

Sincerely,
Arcadis U.S., Inc.



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Enclosures:

Table 1 – Soil Analytical Results for Total PCBs
Figure 1 – Site Location Map
Figure 2 – Remedial Investigation Sampling Locations
Figure 3 – Total PCB Concentrations >1 PPM
Attachment 1 – Certification Statement
Attachment 2 – TSCA PCB Evaluation Summary and Follow-up Correspondence
Attachment 3 – Site Redevelopment Plan

Table

Table 1
Soil Analytical Results – Total PCBs (mg/kg)

National Grid Former Philadelphia Coke Plant
Philadelphia, Pennsylvania

Location ID:	Sample Depth (ft):	Date Collected:	Total PCBs
MW-102	12-13	5/16/18	<0.058
MW-103	6-7	5/16/18	0.2
	15-16	5/16/18	<0.043
PCSB-26	0.5	7/26/05	<0.028
	6	7/26/05	<0.036
	8	7/26/05	<0.036
PCSB-26R	0.5-2	4/19/19	<0.038
PCSB-27	0.5	7/26/05	<0.029
	1.5	7/26/05	<0.028
	10.5	7/26/05	<0.042
PCSB-28	0.5	7/26/05	<0.03
	2	7/26/05	<0.027
	15	7/26/05	<0.047
PCSB-29	0.5	7/26/05	<0.028
	2	7/26/05	<0.027
	11.5	7/26/05	<0.037
PCSB-30	0.5	7/26/05	<0.028
	2	7/26/05	<0.038
	15	7/26/05	<0.048
PCSB-30R	0.5-2	4/19/19	<0.042
PCSB-31	0.5	7/28/05	<0.035
PCSB-32	0.5	7/28/05	<0.033
PCSB-33	0.5	7/28/05	<0.031
PCSB-34	0.5	7/27/05	0.084
	5	7/27/05	<0.037
	16.5	7/27/05	<0.04
PCSB-35	0.5	8/2/05	0.066
PCSB-36	0.5	7/27/05	0.18
	4	7/27/05	<0.03
	16	7/27/05	<0.036
PCSB-37	0.5	8/3/05	1
PCSB-38	0.5	7/27/05	0.11
	3.5	7/27/05	<0.028
	9.5	7/27/05	<0.044
PCSB-39	0.5	7/27/05	<0.032
PCSB-40	0.5	7/28/05	0.053
PCSB-41	0.5	7/28/05	0.43
PCSB-41R	0.5-2	4/22/19	<0.039
PCSB-42	0.5	8/1/05	0.051 [<0.026]
PCSB-43	0.5	8/1/05	0.16
PCSB-44	0.5	8/3/05	0.12
PCSB-45	0.5	8/3/05	0.13 [0.13]
PCSB-46	0.5	7/27/05	0.046
PCSB-47	0.5	8/3/05	0.34
PCSB-48	0.5	8/3/05	<0.026
PCSB-49	0.5	8/3/05	0.053
PCSB-50	0.5	8/3/05	0.14
PCSB-51	0.5	8/3/05	0.12
PCSB-52	0.5	8/2/05	0.12
PCSB-54	0.5	8/3/05	0.32
PCSB-55	0.5	8/3/05	0.069
PCSB-56	0.5	8/15/05	**1.7**
PCSB-57	0.5	8/15/05	0.11
PCSB-58	0.5	8/15/05	0.13
PCSB-59	0.5	8/15/05	0.21
PCSB-60	0.5	8/15/05	0.5 [0.25]
PCTP-61	0.5	9/8/05	**1.3** [0.54]
	7.5	9/8/05	<0.027
PCTP-62	0.5	9/8/05	0.58
	10.5	9/8/05	<0.042
PCTP-63	0.5	9/8/05	0.23
	10.5	9/8/05	<0.035
PCTP-64	0.5	9/8/05	0.36
	7	9/8/05	<0.03
PCTP-65	0.5	9/8/05	<0.028
	7.5	9/8/05	<0.033
PCTP-66	0.5	9/8/05	<0.017
	7.5	9/8/05	<0.037
PCTP-66R	0-0.5	4/24/19	0.249 [0.336]
	0.5-2	4/24/19	<0.035
	8-10	4/24/19	<0.052

Location ID:	Sample Depth (ft):	Date Collected:	Total PCBs
PCTP-66R-HC	0-2	4/4/19	0.369
	2-4	4/4/19	<0.16
PCTP-67	0.5	9/12/05	0.25 [0.2]
	8	9/12/05	<0.037
PCTP-68	0.5	9/9/05	<0.018
	6	9/9/05	**1.85**
PCTP-69	0.5	9/9/05	**1.3**
	17.5	9/9/05	<0.029
PCTP-70	0.5	9/9/05	<0.028
	18	9/9/05	<0.027
PCTP-71	0.5	9/9/05	0.21
	17.5	9/9/05	<0.027
PCTP-72	0.5	9/9/05	0.3
	12	9/9/05	<0.032
PCTP-73	0.5	9/9/05	**7.9**
	9.5	9/9/05	0.85
PCTP-73R	0-0.5	4/10/19	0.932
PCTP-74	0.5	9/9/05	<0.027
	12.5	9/9/05	<0.025
PCTP-75	0.5	9/9/05	0.055
	11	9/9/05	<0.019
PCTP-76	0.5	9/12/05	0.37
	6.5	9/12/05	0.7
PCTP-77	0.5	9/12/05	0.443
	10.5	9/12/05	<0.038
PCTP-78	0.5	9/12/05	<0.027
	9.5	9/12/05	<0.034
PCTP-79	0.5	9/12/05	0.27
	10	9/12/05	<0.033
PCTP-80	8	9/12/05	0.31
PSSTP-01A	1-2	3/11/03	0.08
	5-6	3/11/03	**13**
PSSTP-01R	5-6	4/10/19	**1.51**
PSSTP-02A	1-2	3/11/03	0.43
	5-6	3/11/03	**1.14**
PSSTP-03A	1-2	3/11/03	0.214
	8-9	3/11/03	0.106
PSSTP-04A	1-2	3/11/03	0.61
	8-9	3/11/03	0.47
PSSTP-04R	1-2	4/11/19	**1.27**
	7-8	4/11/19	<0.12
	8-9	4/11/19	<0.043
	16-17	4/11/19	<0.038
PSSTP-05A	1-2	3/11/03	0.83
	5-6	3/11/03	<0.02
PSSTP-06A	1-2	3/11/03	0.11
	5-6	3/11/03	<0.021
PSSTP-07A	1-2	3/11/03	0.18
	8-9	3/11/03	<0.021
PSSTP-07R	0.5-2	4/18/19	<0.04 [0.0610]
	8-9	4/18/19	<0.037
PSSTP-08A	1-2	3/11/03	0.12
	6-7	3/11/03	**1.2**
PSSTP-09A	1-2	3/12/03	0.05
	6-7	3/12/03	**8.9**
PSSTP-10A	1-2	3/12/03	<0.019
	8-9	3/12/03	<0.028
PSSTP-10R	1-2	4/16/19	<0.037
	8-9	4/16/19	<0.04
PSSTP-11A	1-2	3/12/03	<0.019
	8-9	3/12/03	<0.021
PSSTP-12A	1-2	3/12/03	0.418
	7-8	3/12/03	<0.023
PSSTP-13A	1-2	3/12/03	<0.019
	7-8	3/12/03	<0.023
PSSTP-14A	1-2	3/12/03	<0.024
	7-8	3/12/03	<0.024
PSSTP-15A	1-2	3/12/03	0.096
	8-9	3/12/03	<0.019
PSSTP-16A	1-2	3/12/03	0.63
	5-6	3/12/03	<0.023

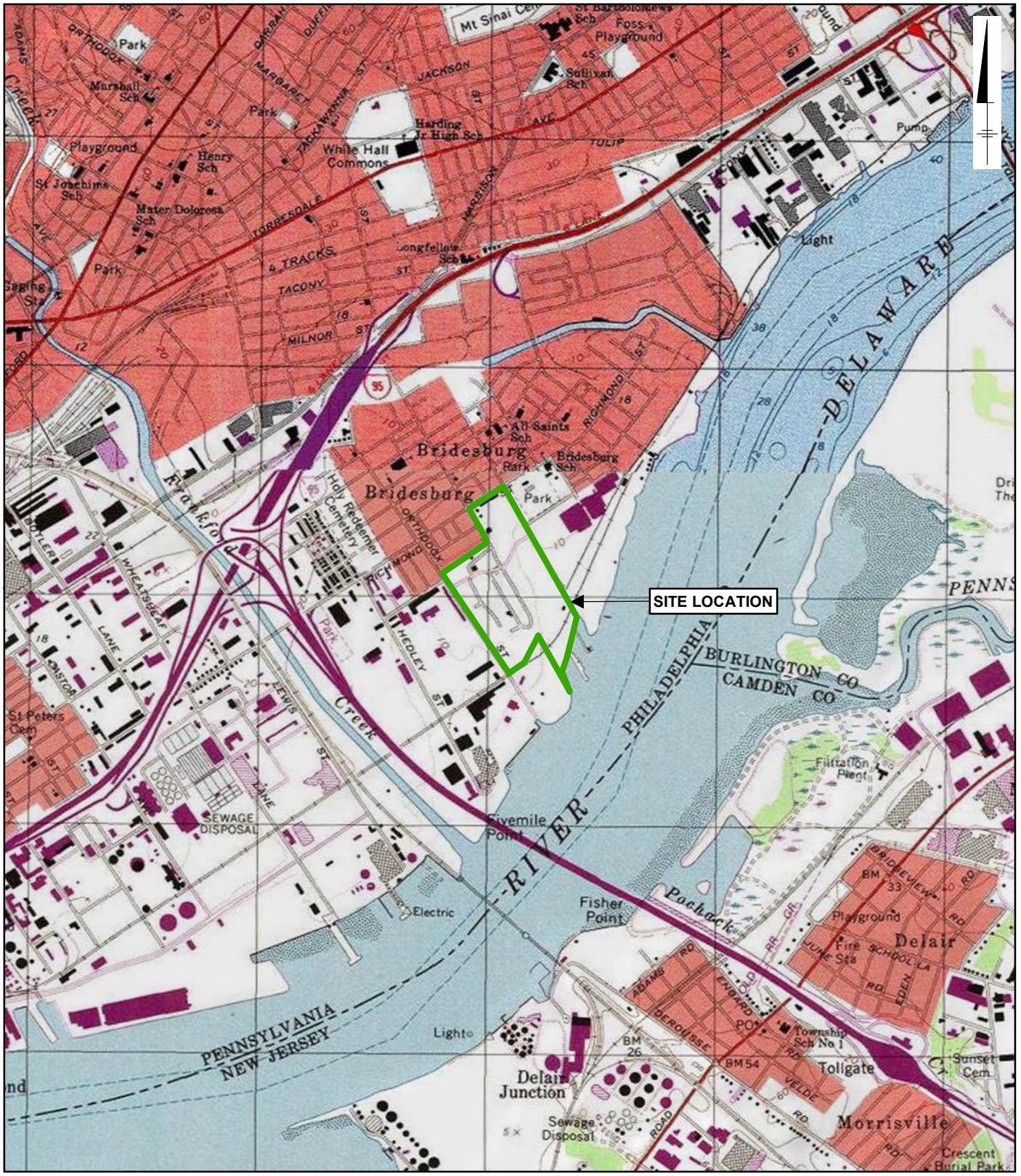
Table 1
Soil Analytical Results – Total PCBs (mg/kg)

National Grid Former Philadelphia Coke Plant
Philadelphia, Pennsylvania

Location ID:	Sample Depth (ft):	Date Collected:	Total PCBs
PSSTP-17A	1-2	3/12/03	0.25
	8-9	3/12/03	0.073
PSSTP-18A	1-2	3/12/03	0.12
	6-7	3/12/03	<0.021
PSSTP-19A	1-2	3/12/03	0.23
	7-8	3/12/03	**1.08**
PSSTP-20A	1-2	3/13/03	0.11
	8-9	3/13/03	<0.019
PSSTP-21A	1-2	3/13/03	0.25
	8-9	3/13/03	<0.03
PSSTP-22A	1-2	3/13/03	<0.019
	6-7	3/13/03	<0.027
PSSTP-22R	0.5-2	4/24/19	<0.037
PSSTP-23A	1-2	3/13/03	<0.02
	7-8	3/13/03	<0.019
PSSTP-24A	1-2	3/13/03	<0.02
	7-8	3/13/03	<0.029
PSSTP-25A	1-2	3/13/03	0.081
	7-8	3/13/03	<0.023
PSSTP-26A	1-2	3/13/03	0.092
	7-8	3/13/03	<0.023
PSSTP-27A	1-2	3/13/03	0.2
	5-6	3/13/03	<0.023
PSSTP-28A	1-2	3/13/03	<0.019
	5-6	3/13/03	<0.022
PSSTP-29A	1-2	3/13/03	0.077
	5-6	3/13/03	<0.019
PSSTP-30A	1-2	3/13/03	<0.023
	5-6	3/13/03	<0.022
S-138	0-0.5	4/5/19	0.159
	0.5-2	4/5/19	0.426
S-139	0-0.5	4/10/19	0.406
	0.5-2	4/10/19	0.171
S-140	0-0.5	4/10/19	0.0256
	0.5-2	4/10/19	<0.038

Notes:
1. Samples prior to 2019 were collected by Paulus, Sokolowski, and Sartor Engineering, PC on the dates indicated. Samples in 2019 were collected by Arcadis on the dates indicated.
2. Sample depth is reported in feet below ground surface.
3. 2003 and 2005 samples were analyzed by Hampton-Clarke, Veritech Laboratories of Fairfield, New Jersey.
4. 2019 samples were analyzed by SGS North America Incorporated Laboratories of Dayton, New Jersey.
5. Samples were submitted for laboratory analysis for Polychlorinated biphenyls (PCBs) using USEPA SW-846 Method 8082.
6. < = constituent not detected at a concentration above the reported detection limit. These results are also reported in gray.
7. Concentrations reported in milligrams per kilogram (mg/kg) or parts per million (ppm).
8. Brackets indicate the reported concentration of a duplicate sample.
9. Data from 2019 have undergone a Tier II validation. Data prior to 2019 have not been validated.

Figures



NOTE:

1. USGS TOPOGRAPHIC MAP PROVIDED BY ESRI.

0 2,000 4,000 Feet

GRAPHIC SCALE

NATIONAL GRID
FORMER PHILADELPHIA COKE PLANT
PHILADELPHIA, PENNSYLVANIA
SELF-IMPLEMENTING PCB CLEANUP NOTIFICATION

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

City: Syr Div/Group: IM/DV Created By: K. Sinsabaugh Last Saved By: AKENS
National Grid Philly Coke (B0036790.0000.00001)
T:_ENV\NationalGrid\PhiladelphiaCoke\2021\SelfImplementingPCBCleanup\Fig1_SiteLocationMap.mxd 8/20/2021 9:35:18 AM

CASIMIR STREET
RICHMOND STREET
LEFEVRE STREET
WILMOT STREET
OVERINGTON STREET
ALLEN STREET
PLUM STREET
GARDEN STREET
BUCKIUS STREET (OPEN 50' WIDE)
BUCKIUS STREET (NOT OPEN)
DELAWARE RIVER
Philadelphia Beltway ROW
Utility Corridor
BATH STREET
ORTHODOX STREET
CASPER STREET

LEGEND:

- ARCADIS SOIL BORING LOCATION (2019)
- ARCADIS TEST PIT LOCATION (2019)
- PSS ENVIRONMENTAL SOIL BORINGS (2005)
- PSS ENVIRONMENTAL HYDROPUNCHES (2005)
- PSS ENVIRONMENTAL TEST PITS (2005)
- PSS ENVIRONMENTAL TEST PITS (2003)
- EEI GEOTECHNICAL TEST PITS (2005)
- ARCADIS GROUNDWATER MONITORING WELL LOCATION (2018-2019)
- PSS ENVIRONMENTAL GROUNDWATER MONITORING WELLS (2005)
- MISSING/DESTROYED PSS ENVIRONMENTAL GROUNDWATER MONITORING WELLS
- RCRA CLOSURE GROUNDWATER MONITORING WELL (1992 AND EARLIER)
- EEI GEOTECHNICAL SOIL BORINGS (2005)
- PSS SOIL VAPOR SAMPLING LOCATIONS (2006)
- FORMER RCRA EXCAVATION
- FORMER STRUCTURE/OPERATION
- SITE BOUNDARY
- SHORELINE

NOTE:

1. BASE MAP OBTAINED FROM FIGURE PREPARED BY PAULUS SOKOLOSKI AND SARTOR ENGINEERING, PC, TITLED "GENERAL SITE PLAN", DRAWING 2A, DATED APRIL 9, 2007 AT A SCALE OF 1"=250'.

0 250 500 Feet
GRAPHIC SCALE

NATIONAL GRID
FORMER PHILADELPHIA COKE PLANT
PHILADELPHIA, PENNSYLVANIA
SELF-IMPLEMENTING PCB CLEANUP NOTIFICATION

REMEDIAL INVESTIGATION SAMPLING LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

City: Syr Div/Group: IM/DV Created By: K. Sinsabaugh Last Saved By: AKENS
National Grid Philly Coke (B0036790.0000.00001)
T:_ENV\NationalGrid\PhiladelphiaCoke\2021\SelfImplementingPCBCleanup\Fig2_Investigationsamplelocs.mxd 8/20/2021 2:10:43 PM

PSSTP-01A 3/11/03	
Sample Depth (ft)	Total PCBs
1-2	0.08
5-6	**13**

PSSTP-01R 4/10/19	
Sample Depth (ft)	Total PCBs
5-6	**1.51**

PSSTP-02A 3/11/03	
Sample Depth (ft)	Total PCBs
1-2	0.43
5-6	**1.14**

PCTP-73 9/9/05	
Sample Depth (ft)	Total PCBs
0.5	**7.9**
9.5	0.85

PCTP-73R 4/10/19	
Sample Depth (ft)	Total PCBs
0-0.5	0.932

PSSTP-04A 3/11/03	
Sample Depth (ft)	Total PCBs
1-2	0.61
8-9	0.47

PSSTP-04A 4/11/19	
Sample Depth (ft)	Total PCBs
1-2	**1.27**
7-8	<0.12
8-9	<0.043
16-17	<0.038

PCSB-56 8/15/05	
Sample Depth (ft)	Total PCBs
0.5	**1.7**

PCTP-69 9/9/05	
Sample Depth (ft)	Total PCBs
0.5	**1.3**
17.5	<0.029

PCTP-68 9/9/05	
Sample Depth (ft)	Total PCBs
0.5	<0.018
6	**1.85**

PSSTP-08A 3/11/03	
Sample Depth (ft)	Total PCBs
1-2	0.12
6-7	**1.2**

PCTP-61 9/8/05	
Sample Depth (ft)	Total PCBs
0.5	**1.3** [0.54]
7.5	<0.027

PSSTP-19A 3/12/03	
Sample Depth (ft)	Total PCBs
1-2	0.23
7-8	**1.08**

PSSTP-09A 3/12/03	
Sample Depth (ft)	Total PCBs
1-2	0.05
6-7	**8.9**

LEGEND:

- HISTORICAL TAR PLAINS/FILL AREA
- (S-101) SOIL BORING LOCATION (2019)
- (S-120) 2019 TEST PIT LOCATION (2019)
- (PCSB-04) PSS ENVIRONMENTAL SOIL BORINGS (2005)
- (PSSTP-23) PSS ENVIRONMENTAL TEST PITS (2003)
- (PCTP-01) PSS ENVIRONMENTAL TEST PITS (2005)
- RCRA EXCAVATION
- FORMER STRUCTURE/OPERATION
- SITE BOUNDARY
- SHORELINE

NOTES:

1. BASE MAP OBTAINED FROM FIGURE PREPARED BY PAULUS SOKOLOSKI AND SARTOR ENGINEERING, PC, TITLED “GENERAL SITE PLAN”, DRAWING 2A, DATED APRIL 9, 2007 AT A SCALE OF 1”=250’.

2. FIGURE ONLY SHOWS SAMPLE LOCATIONS WHERE SOIL SAMPLES WERE COLLECTED FOR LABORATORY ANALYSIS OF POLYCHLORINATED BIPHENYLS (PCBs).

3. DATABOXES ONLY SHOWN AT LOCATIONS WHERE PCB CONCENTRATIONS IN A SOIL SAMPLE EXCEEDED 1 PPM.

4. < = CONSTITUENT NOT DETECTED AT A CONCENTRATION ABOVE THE REPORTED DETECTION LIMIT.

5. CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAMS (mg/Kg) OR PARTS PER MILLION (ppm).

6. SHADING INDICATES A TOTAL PCB CONCENTRATION GREATER THAN 10 PPM.

7. BOLD FONT INDICATES A TOTAL PCB CONCENTRATION GREATER THAN 1 PPM.

8. BRACKETS INDICATE THE REPORTED CONCENTRATION OF A DUPLICATE SAMPLE.

0 250 500 Feet

GRAPHIC SCALE

NATIONAL GRID
FORMER PHILADELPHIA COKE PLANT
PHILADELPHIA, PENNSYLVANIA
SELF-IMPLEMENTING PCB CLEANUP NOTIFICATION

TOTAL PCB CONCENTRATIONS >1 PPM

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

City: Syr Div/Group: IM/DV Created By: K. Sinsabaugh Last Saved By: AKENS
National Grid Philly Coke (B0036790.0000.00001)
T:_ENV\NationalGrid\PhiladelphiaCoke\2021\SelfImplementingPCBCleanup\Fig3_TotPCBconc.mxd 8/20/2021 2:22:46 PM

Attachment 1

Certification Statement

Attachment 1

Certification Statement

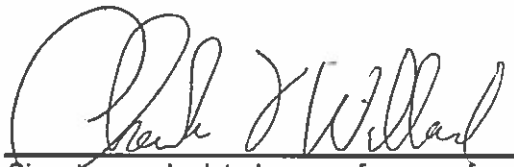
Owner: Philadelphia Coke Co., Inc. (PCC)
Party Conducting Cleanup: National Grid
Project: Former Philadelphia Coke Co. Facility – Philadelphia, Pennsylvania

All sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the polychlorinated biphenyl (PCB) contamination at the Philadelphia Coke Site located at 4501 Richmond Street in Philadelphia, Pennsylvania, are on file at the location designated in the certificate, and are available for USEPA inspection.

Files are available at the following location:

Arcadis
One Lincoln Center
110 West Fayette Street, Suite 300
Syracuse, New York 13202
Contact: John C. Brussel

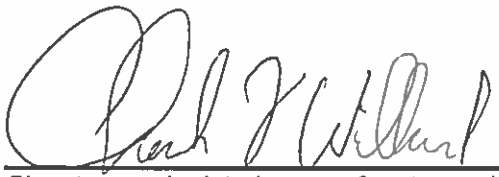
Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.



12/1/2021

Signature and printed name of owner of property — Date

Charles F. Willard
President – Philadelphia Coke Co., Inc.



12/1/2021

Signature and printed name of party conducting cleanup — Date

Charles F. Willard
President – Philadelphia Coke Co., Inc.

Attachment 2

TSCA PCB Evaluation Summary and Follow-up Correspondence

TSCA PCB EVALUATION SUMMARY

TSCA PCB Evaluation Summary
Remedial Investigation
Philadelphia Coke Co., Inc. Site
Philadelphia, Pennsylvania

This document evaluates whether polychlorinated biphenyls (PCBs) identified in soil at the Philadelphia Coke Co., Inc. site (the Site) by previous environmental investigations are regulated under the Toxic Substances Control Act (TSCA) presented in Title 40 of the Code of Federal Regulation (40 CFR) Part 761. As explained below, PCBs identified in soil samples collected at the Site are related to pre-April 1978 release(s) and the concentrations are therefore not regulated under TSCA.

A brief history of the TSCA regulations and historical Site use are presented below, followed by a soil sampling summary and evaluation of the PCB soil analytical data.

TSCA Regulations Summary and Site History

PCBs were commercially manufactured in the United States from approximately 1930 until 1979, when their production was banned under the TSCA regulations found in 40 CFR Part 761. As defined in 40 CFR Part 761.3, soil that contains PCBs (based on in-place sampling prior to excavation) at a concentration less than 50 parts per million (ppm) as the result of a release that occurred before the effective date of the TSCA regulations (April 1978) is not regulated under TSCA.

Site operations began in the 1920s with a manufactured gas plant (MGP) producing gas for the City of Philadelphia for heating or lighting. Metallurgical coke production replaced the MGP operation and continued until 1982, encompassing all but the easternmost section of the Site (i.e., 2.5 acres east of the existing utility corridor). PCBs were not a raw material, product, or byproduct of either MGP or coking operations. Although historical facility mapping shows an electrical substation building in the west-central portion of the Site, aerial photos do not show electrical equipment outside of the building. There are no known or suspected releases from equipment inside the electrical substation building. All but the easternmost section of the Site has not been used since 1982. This means that there was only a four-year period of operations where PCB releases at most of the Site could be regulated under TSCA.

Fuel blending operations were performed in the easternmost section of the Site for a 20-year period from 1969 to 1989 and consisted of storing/blending #2 and #6 fuel oils brought to the Site by barge and subsequently distributing the oil locally by tanker truck. The fuel blending operation, like the MGP and coking operations, did not use or produce PCBs.

PCB Soil Sampling Summary

As part of previous Remedial Investigations at the Site, a total of 177 soil samples have been collected from 89 sampling locations distributed across the Site and analyzed for PCBs. The analytical results are summarized as follows:

- PCBs were not identified in any of the samples at concentrations greater than 50 ppm.
- PCBs concentrations identified in the samples are well-below Pennsylvania Department of Environmental Protection (PADEP) medium-specific concentrations for soil (i.e., 20 ppm to 770 ppm, depending on Aroclor).
- The highest total PCB concentration detected was 13 ppm (in a sample collected at the northwestern corner of the Site near the intersection of Richmond Street and Buckius Street). This was the only location where PCBs were detected at a concentration greater than 10 ppm.

- PCBs were detected at concentrations greater than 1 ppm in only 11 of the 89 sampling locations.

The Site layout and soil sampling locations where PCBs have been identified at concentrations greater than 1 ppm are shown on Figure 1. The soil analytical results for total PCBs are presented in Table 1. PCB soil analytical results greater than 1 ppm and corresponding sampling locations/depths are summarized in Table 2 along with an evaluation of the data, consistent with that presented below.

PCB Soil Data Evaluation

The PCB soil analytical data are evaluated by area of the Site; as explained below, it is highly unlikely that PCBs at the Site are related to a post-1978 release.

- ***Northern Portion of Site (Historical Coal and Coke Storage Areas):*** As shown on Figure 1, PCBs have been identified at concentrations >1 ppm in four sampling locations in this area (PSSTP-01/01R, PSSTP-02, PCTP-73/73R, and PSSTP-04/04R). These locations are within the footprint of former coal and coke piles that are visible on aerial photographs starting in 1929 until at least 1981 (refer to Attachment 1 for the aerial photographs). Aerial photographs show that the coke storage area footprint covered sampling locations PSSTP-02 and PCTP-73/73R as early as 1929. Aerial photographs by the 1950s show that the coke storage area footprint had expanded westward to the edge of a building located on Richmond Street (extending over sampling location PSSTP-01/01R) and the coal storage area footprint had expanded eastward to the existing utility corridor (extending over sampling location PSSTP-04/04R). It is highly unlikely that PCBs in the coal and coke storage areas could be related to a post-1978 release given that the last available aerial photograph before the end of coke production (which is dated 1981) shows site conditions consistent with earlier photos, in which the coal and coke piles consistently covered these sampling locations. Given that the coal and coke piles covered the areas where PCBs were detected for several years after 1978, these dectections are not TSCA-regulated. PCBs in this area are likely related to historic fill but not Site-related releases post-1978.
- ***Eastern Part of Site Near Philadelphia Beltway Railroad:*** PCBs have been identified at a concentration >1 ppm in only one sampling location in this area of the Site (PCSB-56). This sampling location is between the existing railroad tracks and a utility corridor, outside the former dikes surrounding the two southernmost tanks of the former fuel blending area. PCBs were not detected above 1 ppm in soil samples collected from nearby sampling locations within the former fuel blending area, indicating that PCBs at location PCSB-56 are isolated. Fuel blending operations immediately adjacent to this part of the Site continued until 1989 using #2 and #6 fuel oils (there is no documentation of PCB oil use in this area). Aerial photographs taken between the mid-1960s and 1981 show no development in the immediate vicinity of PCSB-56, and the southernmost tanks of the fuel blending area appear to have been removed by 1988. PCBs in this area are likely related to historic fill or nearby railroad operations but not Site-related releases post-1978.
- ***Southeast Corner of Site – Historical Tar Plains/Fill Area:*** PCBs have been identified at a concentration >1 ppm in four sampling locations in this area of the Site (PSSTP-08, PSSTP-09, PSSTP-19, and PCTP-61). Soil and debris were removed from this area to an average depth of approximately 11 feet during excavation as part of Resource Conservation and Recycling Act (RCRA) closure between 1982 and 1988. Approval to backfill was provided in 1989 by the agency preceding PADEP. The samples from this area that contained PCBs at concentrations >1 ppm were collected during the 2005/2006 Remedial Investigation at depths of 6-7 feet, which would be within the area where fill was placed to backfill the excavations. Therefore, PCBs in this area are attributed to regrading of historic fill at the site to remove the depressions formed by the RCRA soil excavations.

The random and low levels of PCBs identified in soil across this area (and the Site as a whole), both spatially and at various depths, are also indicative of historic fill grading and not a historic point-source release.

West-Central Portion of Site – Near Former Facilities and Buildings: PCBs have been identified at a concentration >1 ppm in two sampling locations in this area of the Site (PCTP-68 and PCTP-69), as indicated below.

- *PCTP-68:* PCBs were detected at a concentration of 1.9 ppm in a subsurface soil sample collected at a depth of 6 feet below ground surface at sampling location PCTP-68, within a concrete driveway approximately 50 feet southwest of a former electrical substation building that housed electrical equipment indoors. However, PCBs were not detected above laboratory detection limits in surface soil at this location or other surface soil sampling locations around this area. The data suggest that PCBs at this location were unrelated to a release from the ground surface in this area. Since development in this area occurred before 1978, the limited PCB presence in the subsurface would also have occurred before 1978.
- *PCTP-69:* PCBs were detected at a concentration of 1.3 ppm in surface soil at sampling location PCTP-68, which is below a former concrete pad associated with a scale house that was constructed before 1978. Since this area was capped with concrete before 1978, the limited PCB presence in the subsurface would also have occurred before 1978.

PCBs in this area are likely related to historic fill but not Site-related releases post-1978.

Table 1
Soil Analytical Results for Total PCBs (mg/kg)

Former Philadelphia Coke Co. Inc. Site
Philadelphia, Pennsylvania

Location ID:	Sample Depth (ft):	Date Collected:	Total PCBs
MW-102	12-13	5/16/18	<0.058
MW-103	6-7	5/16/18	0.2
	15-16	5/16/18	<0.043
PCSB-26	0.5	7/26/05	<0.028
	6	7/26/05	<0.036
	8	7/26/05	<0.036
PCSB-26R	0.5-2	4/19/19	<0.038
PCSB-27	0.5	7/26/05	<0.029
	1.5	7/26/05	<0.028
	10.5	7/26/05	<0.042
PCSB-28	0.5	7/26/05	<0.03
	2	7/26/05	<0.027
	15	7/26/05	<0.047
PCSB-29	0.5	7/26/05	<0.028
	2	7/26/05	<0.027
	11.5	7/26/05	<0.037
PCSB-30	0.5	7/26/05	<0.028
	2	7/26/05	<0.038
	15	7/26/05	<0.048
PCSB-30R	0.5-2	4/19/19	<0.042
PCSB-31	0.5	7/28/05	<0.035
PCSB-32	0.5	7/28/05	<0.033
PCSB-33	0.5	7/28/05	<0.031
PCSB-34	0.5	7/27/05	0.084
	5	7/27/05	<0.037
	16.5	7/27/05	<0.04
PCSB-35	0.5	8/2/05	0.066
PCSB-36	0.5	7/27/05	0.18
	4	7/27/05	<0.03
	16	7/27/05	<0.036
PCSB-37	0.5	8/3/05	1
PCSB-38	0.5	7/27/05	0.11
	3.5	7/27/05	<0.028
	9.5	7/27/05	<0.044
PCSB-39	0.5	7/27/05	<0.032
PCSB-40	0.5	7/28/05	0.053
PCSB-41	0.5	7/28/05	0.43
PCSB-41R	0.5-2	4/22/19	<0.039
PCSB-42	0.5	8/1/05	0.051 [<0.026]
PCSB-43	0.5	8/1/05	0.16
PCSB-44	0.5	8/3/05	0.12
PCSB-45	0.5	8/3/05	0.13 [0.13]
PCSB-46	0.5	7/27/05	0.046
PCSB-47	0.5	8/3/05	0.34
PCSB-48	0.5	8/3/05	<0.026
PCSB-49	0.5	8/3/05	0.053
PCSB-50	0.5	8/3/05	0.14
PCSB-51	0.5	8/3/05	0.12
PCSB-52	0.5	8/2/05	0.12
PCSB-54	0.5	8/3/05	0.32
PCSB-55	0.5	8/3/05	0.069
PCSB-56	0.5	8/15/05	**1.7**
PCSB-57	0.5	8/15/05	0.11
PCSB-58	0.5	8/15/05	0.13

Location ID:	Sample Depth (ft):	Date Collected:	Total PCBs
PCSB-59	0.5	8/15/05	0.21
PCSB-60	0.5	8/15/05	0.5 [0.25]
PCTP-61	0.5	9/8/05	**1.3** [0.54]
	7.5	9/8/05	<0.027
PCTP-62	0.5	9/8/05	0.58
	10.5	9/8/05	<0.042
PCTP-63	0.5	9/8/05	0.23
	10.5	9/8/05	<0.035
PCTP-64	0.5	9/8/05	0.36
	7	9/8/05	<0.03
PCTP-65	0.5	9/8/05	<0.028
	7.5	9/8/05	<0.033
PCTP-66	0.5	9/8/05	<0.017
	7.5	9/8/05	<0.037
PCTP-66R	0-0.5	4/24/19	0.249 [0.336]
	0.5-2	4/24/19	<0.035
	8-10	4/24/19	<0.052
PCTP-66R-HC	0-2	4/4/19	0.369
	2-4	4/4/19	<0.16
PCTP-67	0.5	9/12/05	0.25 [0.2]
	8	9/12/05	<0.037
PCTP-68	0.5	9/9/05	<0.018
	6	9/9/05	**1.85**
PCTP-69	0.5	9/9/05	**1.3**
	17.5	9/9/05	<0.029
PCTP-70	0.5	9/9/05	<0.028
	18	9/9/05	<0.027
PCTP-71	0.5	9/9/05	0.21
	17.5	9/9/05	<0.027
PCTP-72	0.5	9/9/05	0.3
	12	9/9/05	<0.032
PCTP-73	0.5	9/9/05	**7.9**
	9.5	9/9/05	0.85
PCTP-73R	0-0.5	4/10/19	0.932
PCTP-74	0.5	9/9/05	<0.027
	12.5	9/9/05	<0.025
PCTP-75	0.5	9/9/05	0.055
	11	9/9/05	<0.019
PCTP-76	0.5	9/12/05	0.37
	6.5	9/12/05	0.7
PCTP-77	0.5	9/12/05	0.443
	10.5	9/12/05	<0.038
PCTP-78	0.5	9/12/05	<0.027
	9.5	9/12/05	<0.034
PCTP-79	0.5	9/12/05	0.27
	10	9/12/05	<0.033
PCTP-80	8	9/12/05	0.31
PSSTP-01A	1-2	3/11/03	0.08
	5-6	3/11/03	**13**
PSSTP-01R	5-6	4/10/19	**1.51**
PSSTP-02A	1-2	3/11/03	0.43
	5-6	3/11/03	**1.14**
PSSTP-03A	1-2	3/11/03	0.214
	8-9	3/11/03	0.106

Table 1
Soil Analytical Results for Total PCBs (mg/kg)

Former Philadelphia Coke Co. Inc. Site
Philadelphia, Pennsylvania

Location ID:	Sample Depth (ft):	Date Collected:	Total PCBs
PSSTP-04A	1-2	3/11/03	0.61
	8-9	3/11/03	0.47
PSSTP-04R	1-2	4/11/19	**1.27**
	7-8	4/11/19	<0.12
	8-9	4/11/19	<0.043
	16-17	4/11/19	<0.038
PSSTP-05A	1-2	3/11/03	0.83
	5-6	3/11/03	<0.02
PSSTP-06A	1-2	3/11/03	0.11
	5-6	3/11/03	<0.021
PSSTP-07A	1-2	3/11/03	0.18
	8-9	3/11/03	<0.021
PSSTP-07R	0.5-2	4/18/19	<0.04 [0.0610]
	8-9	4/18/19	<0.037
PSSTP-08A	1-2	3/11/03	0.12
	6-7	3/11/03	**1.2**
PSSTP-09A	1-2	3/12/03	0.05
	6-7	3/12/03	**8.9**
PSSTP-10A	1-2	3/12/03	<0.019
	8-9	3/12/03	<0.028
PSSTP-10R	1-2	4/16/19	<0.037
	8-9	4/16/19	<0.04
PSSTP-11A	1-2	3/12/03	<0.019
	8-9	3/12/03	<0.021
PSSTP-12A	1-2	3/12/03	0.418
	7-8	3/12/03	<0.023
PSSTP-13A	1-2	3/12/03	<0.019
	7-8	3/12/03	<0.023
PSSTP-14A	1-2	3/12/03	<0.024
	7-8	3/12/03	<0.024
PSSTP-15A	1-2	3/12/03	0.096
	8-9	3/12/03	<0.019
PSSTP-16A	1-2	3/12/03	0.63
	5-6	3/12/03	<0.023

Location ID:	Sample Depth (ft):	Date Collected:	Total PCBs
PSSTP-17A	1-2	3/12/03	0.25
	8-9	3/12/03	0.073
PSSTP-18A	1-2	3/12/03	0.12
	6-7	3/12/03	<0.021
PSSTP-19A	1-2	3/12/03	0.23
	7-8	3/12/03	**1.08**
PSSTP-20A	1-2	3/13/03	0.11
	8-9	3/13/03	<0.019
PSSTP-21A	1-2	3/13/03	0.25
	8-9	3/13/03	<0.03
PSSTP-22A	1-2	3/13/03	<0.019
	6-7	3/13/03	<0.027
PSSTP-22R	0.5-2	4/24/19	<0.037
PSSTP-23A	1-2	3/13/03	<0.02
	7-8	3/13/03	<0.019
PSSTP-24A	1-2	3/13/03	<0.02
	7-8	3/13/03	<0.029
PSSTP-25A	1-2	3/13/03	0.081
	7-8	3/13/03	<0.023
PSSTP-26A	1-2	3/13/03	0.092
	7-8	3/13/03	<0.023
PSSTP-27A	1-2	3/13/03	0.2
	5-6	3/13/03	<0.023
PSSTP-28A	1-2	3/13/03	<0.019
	5-6	3/13/03	<0.022
PSSTP-29A	1-2	3/13/03	0.077
	5-6	3/13/03	<0.019
PSSTP-30A	1-2	3/13/03	<0.023
	5-6	3/13/03	<0.022
S-138	0-0.5	4/5/19	0.159
	0.5-2	4/5/19	0.426
S-139	0-0.5	4/10/19	0.406
	0.5-2	4/10/19	0.171
S-140	0-0.5	4/10/19	0.0256
	0.5-2	4/10/19	<0.038

Notes:

1. Samples prior to 2019 were collected by Paulus, Sokolowski, and Sartor Engineering, PC on the dates indicated. Samples in 2019 were collected by Arcadis on the dates indicated.
2. Sample depth is reported in feet below ground surface.
3. 2003 and 2005 samples were analyzed by Hampton-Clarke, Veritech Laboratories of Fairfield, New Jersey.
4. 2019 samples were analyzed by SGS North America Incorporated Laboratories of Dayton, New Jersey.
5. Samples were analzed for polychlorinated biphenyls (PCBs) using USEPA SW-846 Method 8082.
6. < = No PCB Aroclors detected at a concentration above the reported detection limit. These results are also reported in gray.
7. Concentrations reported in milligrams per kilogram (mg/kg) or parts per million (ppm).
8. Brackets indicate the reported concentration of a duplicate sample.
9. Data from 2019 have undergone a Tier II validation. Data prior to 2019 have not been validated.

Table 2
Evaluation of TSCA PCB Regulations Applicability

Former Philadelphia Coke Co., Inc. Site
Philadelphia, Pennsylvania

Sample Locations with PCBs >1 ppm	General Area	Sample Date	Sample Depth (feet)	Total PCBs (ppm)	Location-Specific Rationale that TSCA Does Not Apply
Northern Portion of Site - Historical Coal and Coke Storage Areas *(these sampling locations are all along/near the northern property boundary that extends along Buckius Street)*					
PSSTP-01	~200 feet east of Richmond Street	3/11/03	1-2	0.08	Polychlorinated biphenyls (PCBs) were commercially manufactured in the United States from approximately 1930 until 1979, when their production was banned under the Toxic Substances Control Act (TSCA) regulations found in Title 40 of the Code of Federal Regulation (40CFR) Part 761. PCBs are not a byproduct of coking operations. As defined in 40 CFR Part 761.3, soil that contains PCBs (based on in-place sampling prior to excavation) at a concentration less than 50 parts per million (ppm) as the result of a release that occurred prior to the effective date of the TSCA regulations (1978) is not regulated under TSCA. PCBs were not identified in soil within this area (and the overall Site) at concentrations greater than 50 ppm. PCB concentrations in soil within this area are relatively low (generally around 1 ppm or less) with one result >10 ppm. The PCB concentrations in soil in this area are well-below those outlined in Pennsylvania Department of Environmental Protection (PADEP) medium-specific concentrations for soil. In general, low-level PCBs are widespread, but random, in soil across this area and found at various depths. This is not indicative of a historic point-source release, but may be related to grading of historic fill. PCBs have been identified at concentrations >1 ppm in four sampling locations in this area. These locations are within the footprint of former coal piles that are visible on aerial photographs from 1929 until at least 1981. Aerial photographs show that the coke storage area footprint covered sampling locations PSSTP-02 and PCTP-73/73R as early as 1929. Aerial photographs by the 1950s show that the coke storage area footprint had expanded westward to the edge of a building located on Richmond Street (extending over sampling location PSSTP-01/01R) and the coal storage area footprint had expanded eastward to the existing utility corridor (extending over sampling location PSSTP-04/04R). It is highly unlikely that PCBs in the coal and coke storage areas would be related to a post-1978 release given that the last aerial photograph before the end of coke production (which is dated 1981) shows site conditions consistent with earlier photos in which the coal and coke piles consistently covered these sampling locations. Given that the coal and coke piles covered the areas where PCBs were detected for sevral years after 1978, these detections are not TSCA regulated.
			5-6	13	
PSSTP-01R		4/10/19	5-6	1.51	
PSSTP-02	~650 feet east of Richmond Street	3/11/03	1-2	0.43	
			5-6	1.14	
PCTP-73	~800 feet east of Richmond Street	9/9/05	0.5	7.9	
			9.5	0.85	
PCTP-73R		4/10/19	0-0.5	0.932	
PSSTP-04	~1,550 feet east of Richmond Street	3/11/03	1-2	0.61	
			8-9	0.47	
PSSTP-04R		4/11/19	1-2	1.27	
			7/8/2021	< 0.12	
			8-9	< 0.043	
			16-17	< 0.038	
Eastern Part of Site Near Philadelphia Beltway Railroad					
PCSB-56	~30 feet west of railroad	8/15/2005	0.5	1.7	Soil boring PCSB-56 was drilled between the existing railroad tracks and a utility corridor, outside the former dikes surrounding the two southernmost tanks of the former fuel blending area. PCBs were not detected above 1 ppm in soil samples collected from nearby sampling locations within the former fuel blending area, indicating that PCBs at location PCSB-56 are isolated. Fuel blending operations immediately adjacent to this part of the site continued until 1989 and used No. 2 and No. 6 fuel oil brought in by barge (no documentation of PCB oil use in this area). Aerial photographs taken between the mid-1960s and 1981 show no development in the immediate vicinity of PCSB-56, and the southernmost tanks of the fuel blending area appear to have been removed by 1988. PCBs in this area are likely related to historical fill or nearby railroad operations, but not Site-related releases post 1978.

Table 2
Evaluation of TSCA PCB Regulations Applicability

Former Philadelphia Coke Co., Inc. Site
Philadelphia, Pennsylvania

Sample Locations with PCBs >1 ppm	General Area	Sample Date	Sample Depth (feet)	Total PCBs (ppm)	Location-Specific Rationale that TSCA Does Not Apply
Southeast Corner of Site - Historical Tar Plains/Fill Area					
PSSTP-19	~230 feet west of utility corridor	3/12/03	1-2	0.23	These four former test pits were excavated within the historical tar plains/fill area. Soil and debris were removed from this area to an average depth of approximately 11 feet during excavation as part of Resource Conservation and Recycling Act (RCRA) closure between 1982 and 1988. Approval to backfill was provided in 1989 by the agency preceding PADEP. The samples from this area that contained PCBs at concentrations >1 ppm were collected during the 2005/2006 Remedial Investigation at depths of 6-7 feet, which would be within or near the bottom of the fill placed to backfill the excavations. Therefore, PCBs in this area are attributed to regrading of historic fill at the site to remove the depressions formed by the RCRA soil excavations. The random and low levels of PCBs identified in soil across this area (and the site as a whole), both spatially and at various depths, are also indicative of historic fill grading and not a historic point-source release.
			7-8	1.08	
PSSTP-08	~185 feet west of southeast corner of site	3/11/03	1-2	0.12	
			6-7	1.2	
PSSTP-09	~250 feet west of southeast corner of site	3/12/03	1-2	0.05	
			6-7	8.9	
PCTP-61	~450 feet west of southeast corner of site	9/8/05	0.5	1.3 [0.54]	
			7.5	< 0.027	
West-Central Portion of Site - Near Former Facilities and Buildings					
PCTP-68	~145 feet northeast of the LeFevre & Garden Street intersection	9/9/05	0.5	<0.018	PCBs have been identified at a concentration >1 ppm in two sampling locations in this area of the Site (PCTP-68 and PCTP-69), as indicated below. - *PCTP-68:* PCBs were detected at a concentration of 1.9 ppm in a subsurface soil sample collected at a depth of 6 feet below ground surface at sampling location PCTP-68, adjacent to a former electrical substation building that housed electrical equipment indoors. However, PCBs were not detected above laboratory detection limits in surface soil at this location or other surface soil sampling locations around this area. The data suggest that PCBs at this location were unrelated to a release from the ground surface in this area. Since development in this area occurred before 1978, the limited PCB presence in the subsurface would also have occurred before 1978. - *PCTP-69:* PCBs were detected at a concentration of 1.3 ppm in surface soil at sampling location PCTP-68, which is below a former concrete pad associated with a scale house that was constructed before 1978. Since this area was capped with concrete before 1978, the limited PCB presence in the subsurface would also have occurred before 1978. PCBs in this area are likely related to historical fill but not Site-related releases post-1978.
			6	1.85	
PCTP-69	~350 feet east of the LeFevre & Garden Street intersection	9/9/05	0.5	1.3	
			17.5	< 0.029	

PSSTP-01
(1-2)' 0.08 ppm
(5-6)' 13 ppm

PSSTP-01R
(5-6)' 1.51 ppm

PSSTP-02
(1-2)' 0.43 ppm

PCTP-73
(0.5)' 7.9 ppm
(9.5)' 0.85 ppm

PCTP-73R
(0-0.5)' 0.932 ppm

PCTP-69
(0.5)' 1.3 ppm
(5-6)' <0.029 ppm

PCTP-68
(0.5)' <0.018 ppm
(6)' 1.85 ppm

PSSTP-04
(1-2)' 0.61 ppm
(8-9)' 0.47 ppm

PSSTP-04R
(1-2)' 1.27 ppm
(7-8)' <0.12 ppm
(8-9)' <0.043 ppm
(16-17)' <0.038 ppm

PSSTP-19
(1-2)' 0.23 ppm
(6-7)' 1.08 ppm

PCSB-56
(0.5)' 1.7 ppm

PSSTP-08
(1-2)' 0.12 ppm
(6-7)' 1.2 ppm

PSSTP-09
(1-2)' 0.05 ppm
(6-7)' 8.9 ppm

PCTP-61
(0.5)' 1.3 [0.54] ppm
(7.5)' <0.027 ppm

CASIMIR STREET
RICHMOND STREET
LEFEVRE STREET
WILMOT STREET
OVERINGTON STREET
ALLEN STREET
GARDEN STREET
PLUM STREET
BATH STREET
ORTHODOX STREET
CASPER STREET
BUCKIUS STREET (OPEN 50' WIDE)
BUCKIUS STREET (NOT OPEN)
DELAWARE RIVER
Utility Corridor
Philadelphia Beltway ROW

Yellow highlighting indicates that one or more soil samples from this sampling location were analyzed for polychlorinated biphenyls (PCBs).

LEGEND:

- (S-101) 2019 SOIL BORING LOCATION (2019)
- (S-120) 2019 TEST PIT LOCATION (2019)
- (PCSB-04) PSS ENVIRONMENTAL SOIL BORINGS (2005)
- (PSSTP-23) PSS ENVIRONMENTAL TEST PITS (2003)
- (PCTP-01) PSS ENVIRONMENTAL TEST PITS (2005)
- (TP-46) EEI GEOTECHNICAL TEST PITS (2005)
- (PC-B6) EEI GEOTECHNICAL SOIL BORINGS (2005)
- RCRA EXCAVATION
- FORMER STRUCTURE/OPERATION
- SITE BOUNDARY
- SHORELINE

NOTES:

1. BASE MAP OBTAINED FROM FIGURE PREPARED BY PAULUS SOKOLOSKI AND SARTOR ENGINEERING, PC, TITLED "GENERAL SITE PLAN", DRAWING 2A, DATED APRIL 9, 2007 AT A SCALE OF 1"=250'.
2. FIGURE ONLY SHOWS SAMPLE LOCATIONS WHERE SOIL SAMPLES WERE COLLECTED FOR LABORATORY ANALYSIS.

0 250 500 Feet
GRAPHIC SCALE

NATIONAL GRID
FORMER PHILADELPHIA COKE PLANT
PHILADELPHIA, PENNSYLVANIA
RI REPORT

TOTAL PCB CONCENTRATIONS > 1 PPM

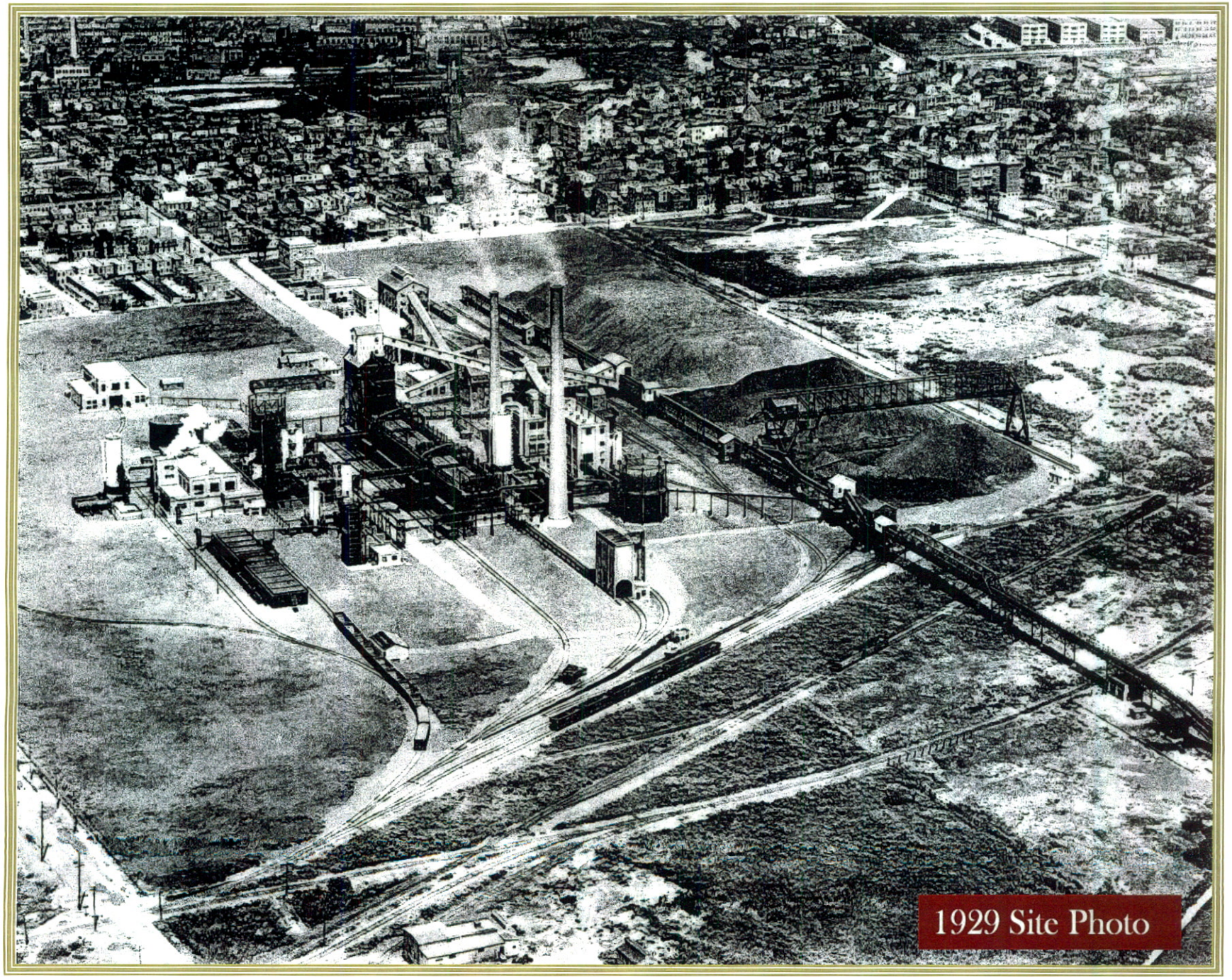
ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

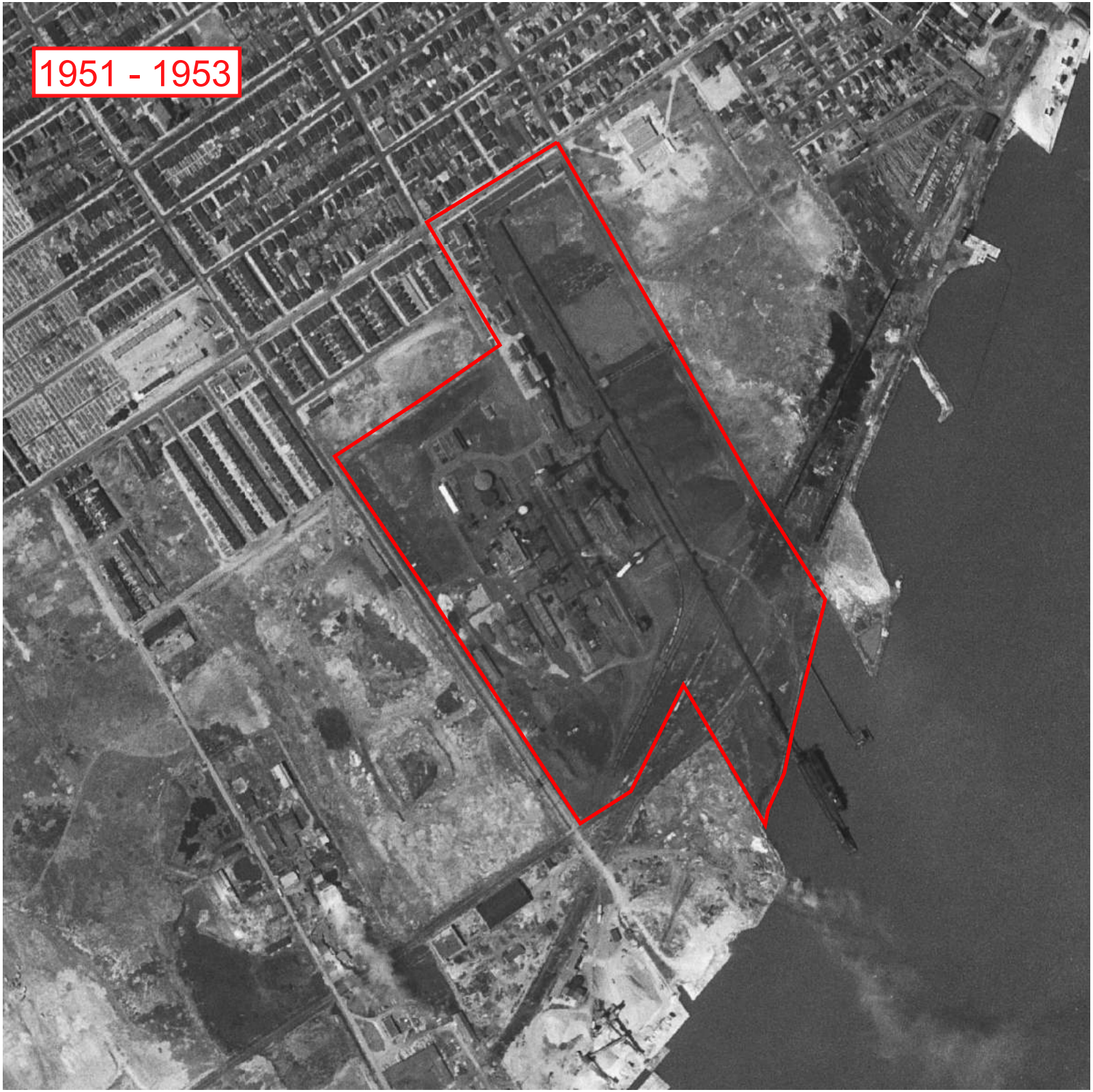
City: Syr Div/Group: IM/DV Created By: K. Sinsabaugh Last Saved By: akens
National Grid Philly Coke (B0036790.0000.00001)
Z:\GISProjects_ENV\NationalGrid\PhiladelphiaCoke\2019RI ReportFig4_analyticresults.mxd 1/21/2020 1:24:42 PM

ATTACHMENT 1

Historical Aerial Photographs

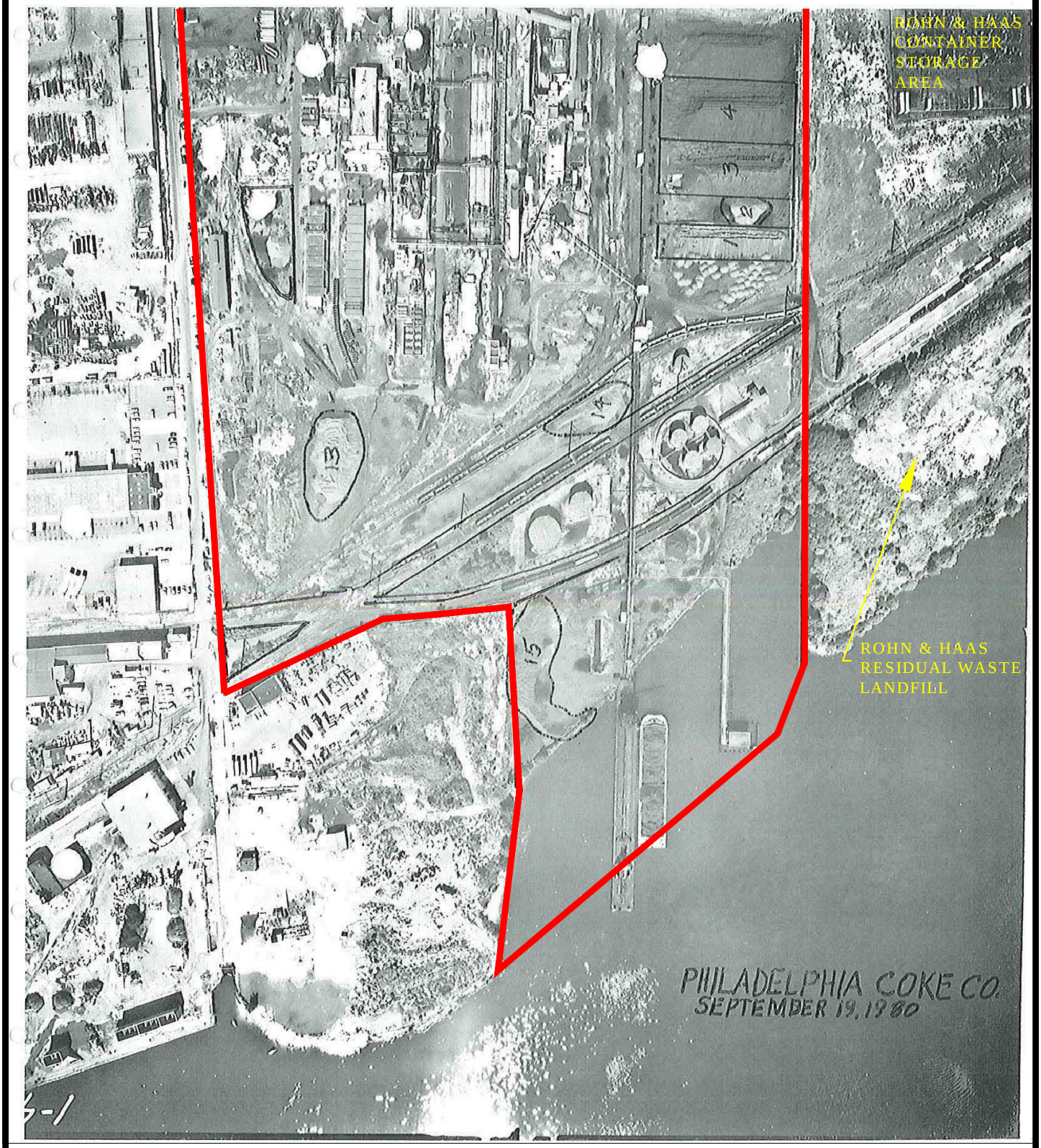

1929 Site Photo


Pre-1951


1951 - 1953


1962 - 1965


1965 - 1974



Source:
WASTE PERMIT APPLICATION
NOVENBER 18, 1980 (BASEMAP)
PADEP INSPECTION, AUGUST 1990

FIGURE 4
FACILITY LAYOUT, SOUTH AREA
PHILADELPHIA COKE COMPANY
4501 RICHMOND STREET
PHILADELPHIA, PENNSYLVANIA 19137

SCALE: NOT TO SCALE	**DATE:** NOVEMBER 2011
S.O. NO.: 120686	**FILE:** 120686-PCC-06
DSN/DWN: MM/RRR	**CHK:** SRF

Baker
Michael Baker Jr., Inc.

MICHAEL BAKER JR., INC.
MOON TOWNSHIP, PENNSYLVANIA


INQUIRY #: 4832855.5
YEAR: 1981
= 500'
N
EDR


INQUIRY #: 4832855.5
YEAR: 1988
= 500'
N
EDR


INQUIRY #: 4832855.5
YEAR: 1991
= 500'
N
EDR


1982 - 1993

EPA RESPONSE TO TSCA PCB EVALUATION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029
July 8, 2021

VIA Email

John C. Brussel, P.E.
Principal Engineer/Certified Project Manager
Arcadis of New York, Inc.
One Lincoln Center, 110 West Fayette Street, Suite 300
Syracuse, NY 13202

Re: TSCA PCB Evaluation Summary
Philadelphia Coke Co., Inc. Site

Dear Mr. Brussel,

The U.S. Environmental Protection Agency (EPA) has received and reviewed the TSCA PCB Evaluation Summary for soil at the Philadelphia Coke Site submitted via email on May 12, 2021 on behalf of National Grid. In conclusion, it was proposed that the Polychlorinated Biphenyls (PCBs) identified in soil samples collected at the Site are related to pre-1978 releases and are not regulated under the Toxic Substances Control Act (TSCA).

EPA does not agree with the conclusion that soils in the Southeastern Corner of the Site – Historic Tar Plains/Fill Area are related to pre-1978 releases. This is due to the fact that samples collected in 2005/2006 containing PCBs >1 ppm were related to backfilling activities that occurred in 1989 which constitutes a release under TSCA. Therefore, PCB releases to soils in this area are subject to TSCA regulations. EPA requests that National Grid prepare and submit a cleanup proposal in accordance with 40 C.F.R. 761.61.

EPA does agree with the conclusion that the soils in the remaining areas evaluated (Northern Portion of the Site (Historical Coke and Coal Storage Area), Eastern Part of the Site near Philadelphia Beltway Railroad, and West-Central Portion of Site – Near Former Facilities and Buildings) are related to pre-1978 releases and are not regulated under TSCA. PCB concentrations in these areas should be addressed in conjunction with the cleanup activities being performed under the One Cleanup Program.

Please contact me at (215) 814-2796 or bilash.kevin@epa.gov if you have any questions or concerns.

Sincerely,

_____

Kevin Bilash, Remedial Project Manager
Land, Chemicals and Redevelopment Division
U.S. EPA Region III

Healy, Lawrence

From: Bilash, Kevin <Bilash.Kevin@epa.gov>
Sent: Thursday, July 8, 2021 11:59 AM
To: Brussel, John
Cc: Stearns, Brian M. (Brian.Stearns@nationalgrid.com); Sheehan, Daniel P.; Healy, Lawrence
Subject: RE: Question for Kevin - For EPA Review: TSCA PCB Evaluation - Philadelphia Coke Site, 4501 Richmond Street, Philadelphia, PA (eFACTS PF No. 831308)
Attachments: EPA PCB eval response 7_8_21.pdf

Categories: Business

Good morning John,

Thank you for the follow up and patience while going through this evaluation in coordination with my TSCA contact.
I have attached EPA's response to the TSCA PCB Evaluation Summary for the Philadelphia Coke Site submitted on May 12, 2021.
As you correctly summarized, EPA agrees that PCB releases were pre-1978 except in the southeast corner.

Regarding the capping and covenant proposal in the southeast corner, I have no initial concerns and think that is an acceptable plan.
As you know though, TSCA is not the primary Act I work under and you will see in the letter a request to prepare and submit a cleanup proposal in accordance with 40 C.F.R. 761.61.
I will look into it further and discuss the proposed cleanup with my coordinator but suggest to review 40 C.F.R. 761.61 and make sure you meet the requirements.
My thoughts are mostly related to assuring you meet the "cap" requirements as they may be different than what I'd expect under RCRA or Act 2.
Thinking forward, I am ok if you submit the cleanup proposal under separate cover when you are ready to submit the Act 2 cleanup plan unless you prefer to do so earlier.
In the meantime I will let you know any comments received from discussing this with my TSCA coordinator.

If you have any questions or concerns about the letter or contents of this email, please let me know.

Thank you,
Kevin Bilash
US EPA Region III
Land, Chemicals & Redevelopment Division 3LD20
1650 Arch Street
Philadelphia, PA 19103
Tel: 215-814-2796
Fax: 215-814-3113

From: Brussel, John [mailto:John.Brussel@arcadis.com]
Sent: Thursday, July 08, 2021 9:37 AM
To: Bilash, Kevin <Bilash.Kevin@epa.gov>
Cc: Stearns, Brian M. (Brian.Stearns@nationalgrid.com) <Brian.Stearns@nationalgrid.com>; Sheehan, Daniel P. <Daniel.Sheehan@arcadis.com>; Healy, Lawrence <Lawrence.Healy@arcadis.com>
Subject: Question for Kevin - For EPA Review: TSCA PCB Evaluation - Philadelphia Coke Site, 4501 Richmond Street, Philadelphia, PA (eFACTS PF No. 831308)

Kevin,

As a follow-up to the voice-mail message I left you yesterday afternoon, we wanted to check with you on the status of the letter you mentioned during our June 16, 2021 Teams meeting regarding the TSCA PCB evaluation for the Philadelphia Coke site and EPA's position.

Per our discussions during the call, we understand EPA agrees that PCB releases were pre-1978, except in the southeast corner of the site near the former tar plains, where soil excavation was performed as part of the RCRA corrective action in the 1988-1993 timeframe.

You had mentioned that the PCBs in soil within the southeast corner could be addressed via Covenants and Restrictions, with no further excavation or capping necessary provided that this area is designated "low occupancy" (PCBs <25 ppm).

As indicated in the call and confirmed in follow-up discussion with the developer, they are planning to cap the entire southeast corner of the site (concrete, asphalt, 2-feet of clean soil) as part of their redevelopment and have an environmental covenant as part of the overall pathway elimination cleanup approach. This planned approach would allow a "high occupancy" area designation (with PCBs >1 and <10 ppm below the cap) for the southeast corner of the site and support potential future land conveyance and public uses associated with the Delaware Avenue extension and railroad relocation in this area.

Feel free to call Brian Stearns of National Grid (315.461.7892), Dan Sheehan of Arcadis (302.884.6919), or me (315.671.9441) if you have any questions or need additional information.

Thank you.

John

From: Bilash, Kevin <Bilash.Kevin@epa.gov>
Sent: Wednesday, June 16, 2021 2:07 PM
To: Brussel, John <John.Brussel@arcadis.com>
Cc: Stearns, Brian M. (Brian.Stearns@nationalgrid.com) <Brian.Stearns@nationalgrid.com>; Sheehan, Daniel P. <Daniel.Sheehan@arcadis.com>; Healy, Lawrence <Lawrence.Healy@arcadis.com>
Subject: RE: For EPA Review: TSCA PCB Evaluation - Philadelphia Coke Site, 4501 Richmond Street, Philadelphia, PA (eFACTS PF No. 831308)

Good afternoon John,

We have and I received a first round of comments from the PCB coordinator which prompted additional questions from me back to TSCA.
I expect a response from them soon, likely by the end of this week. I will then prepare the EPA response.
Let's set up a call for next week to discuss the findings prior to our official response. Currently, I have availability Tuesday AM or all day Wednesday.

Thank you,
Kevin Bilash
US EPA Region III
Land, Chemicals & Redevelopment Division 3LD20
1650 Arch Street
Philadelphia, PA 19103
Tel: 215-814-2796
Fax: 215-814-3113

From: Brussel, John [mailto:John.Brussel@arcadis.com]
Sent: Monday, June 14, 2021 11:52 AM
To: Bilash, Kevin <Bilash.Kevin@epa.gov>
Cc: Stearns, Brian M. (Brian.Stearns@nationalgrid.com) <Brian.Stearns@nationalgrid.com>; Sheehan, Daniel P. <Daniel.Sheehan@arcadis.com>; Healy, Lawrence <Lawrence.Healy@arcadis.com>
Subject: RE: For EPA Review: TSCA PCB Evaluation - Philadelphia Coke Site, 4501 Richmond Street, Philadelphia, PA (eFACTS PF No. 831308)

Kevin,

Good morning. We were wondering if you had a chance to review the TSCA PCB Evaluation summary yet.

Please let us know if you agree with the conclusions or have any questions.

Thank you.

John

From: Brussel, John
Sent: Friday, May 28, 2021 8:49 AM
To: Bilash, Kevin <Bilash.Kevin@epa.gov>
Cc: Stearns, Brian M. (Brian.Stearns@nationalgrid.com) <Brian.Stearns@nationalgrid.com>; Sheehan, Daniel P. <Daniel.Sheehan@arcadis.com>; Healy, Lawrence <Lawrence.Healy@arcadis.com>
Subject: RE: For EPA Review: TSCA PCB Evaluation - Philadelphia Coke Site, 4501 Richmond Street, Philadelphia, PA (eFACTS PF No. 831308)

Thanks for the update Kevin.

John

From: Bilash, Kevin <Bilash.Kevin@epa.gov>
Sent: Thursday, May 27, 2021 10:11 AM
To: Brussel, John <John.Brussel@arcadis.com>
Cc: Stearns, Brian M. (Brian.Stearns@nationalgrid.com) <Brian.Stearns@nationalgrid.com>; Sheehan, Daniel P. <Daniel.Sheehan@arcadis.com>; Healy, Lawrence <Lawrence.Healy@arcadis.com>
Subject: RE: For EPA Review: TSCA PCB Evaluation - Philadelphia Coke Site, 4501 Richmond Street, Philadelphia, PA (eFACTS PF No. 831308)

John,

I just wanted to let you know I am going to start reviewing this information now. I have not forgotten about it or missed your email.
Coincidentally, over the last month+ there was an internal national PCB training that just occurred that I attended so I thought it prudent to have the latest up to date info before assessing your submittal.

Thank you,
Kevin Bilash
US EPA Region III
Land, Chemicals & Redevelopment Division 3LD20
1650 Arch Street
Philadelphia, PA 19103
Tel: 215-814-2796

Fax: 215-814-3113

From: Brussel, John [mailto:John.Brussel@arcadis.com]
Sent: Wednesday, May 12, 2021 11:56 AM
To: Bilash, Kevin <Bilash.Kevin@epa.gov>
Cc: Stearns, Brian M. (Brian.Stearns@nationalgrid.com) <Brian.Stearns@nationalgrid.com>; Sheehan, Daniel P. <Daniel.Sheehan@arcadis.com>; Healy, Lawrence <Lawrence.Healy@arcadis.com>
Subject: For EPA Review: TSCA PCB Evaluation - Philadelphia Coke Site, 4501 Richmond Street, Philadelphia, PA (eFACTS PF No. 831308)

Kevin,

On behalf of National Grid and as a follow-up to the virtual meeting that you, Dan Sheehan, and I had on April 2, 2021, please find the attached "TSCA PCB Evaluation Summary" for soil at the Philadelphia Coke Site, including the tables, figure, and historical aerial photographs that we previewed during the meeting.

As explained in the summary, the PCBs identified in soil samples collected at the Site are related to pre-1978 release(s) and the concentrations are therefore not regulated under TSCA.

Please review the attached and let us know if EPA concurs with our conclusion.

Feel free to call Dan Sheehan (our PA engineer-of-record for the project) at 302.884.6919 or me at 315.671.9441 if you have any questions or need additional information.

Thank you.

John

John C. Brussel P.E.
Principal Engineer/Certified Project Manager
Arcadis of New York, Inc.
One Lincoln Center, 110 West Fayette Street, Suite 300 | Syracuse, NY | 13202 | USA
T +1 315 671 9441 | M +1 315 317 8104
www.arcadis.com

Professional Registration / PE-NY, #075208

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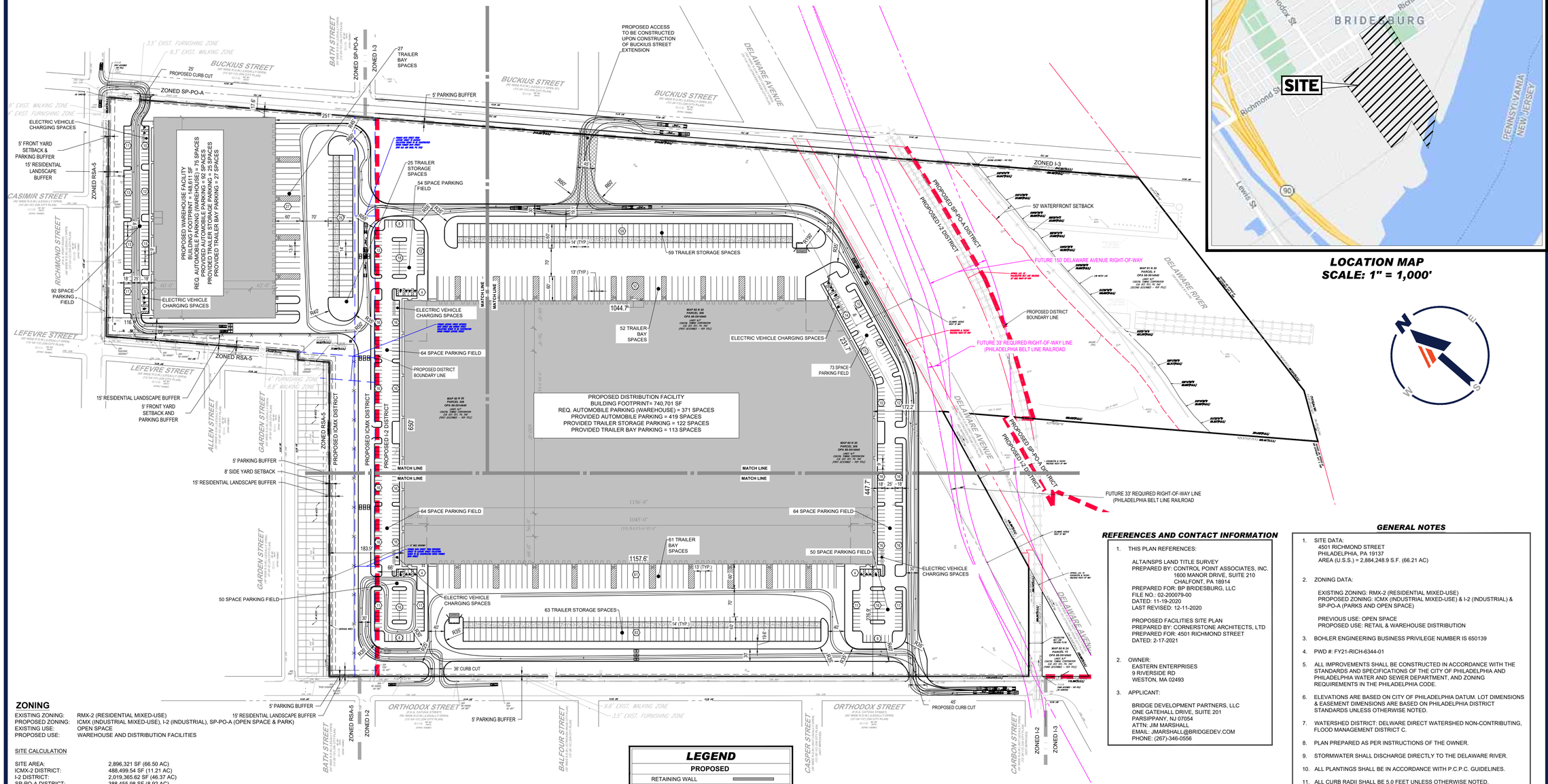
Attachment 3

Site Redevelopment Plan



LOCATION MAP
SCALE: 1" = 1,000'

ZONING

EXISTING ZONING: RMX-2 (RESIDENTIAL MIXED-USE)
PROPOSED ZONING: ICMX (INDUSTRIAL MIXED-USE), I-2 (INDUSTRIAL), SP-PO-A (OPEN SPACE & PARK)
EXISTING USE: OPEN SPACE
PROPOSED USE: WAREHOUSE AND DISTRIBUTION FACILITIES

SITE CALCULATION

SITE AREA:	2,896,321 SF (66.50 AC)
ICMX-2 DISTRICT:	488,499.54 SF (11.21 AC)
I-2 DISTRICT:	2,019,365.62 SF (46.37 AC)
SP-PO-A DISTRICT:	388,455.98 SF (8.92 AC)

ZONING DISTRICT REQUIREMENTS

	REQUIRED (ICMX)	EXISTING	PROPOSED	REQUIRED (I-2)	EXISTING	PROPOSED
MAX. OCCUPIED AREA	100%	N/A	30.42%	100%	N/A	36.68%
MIN. YARD SETBACKS						
FRONT	0*	N/A	17.6'	0*	N/A	276.9'
SIDE YARD (EA)	8*	N/A	N/A	8*	N/A	66'
REAR	8*	N/A	251'	8*	N/A	172.2'
WATERFRONT SETBACK	50'	N/A	N/A	50'	N/A	50'
LANDSCAPE BUFFER	15'	>15'	15'	15'	>15'	15'
MAX. BUILDING HEIGHT	60'	N/A	60'	60'	N/A	60'
MAX. FLOOR AREA RATIO	500%	N/A	30.42%	500%	N/A	36.68%

* WHERE A LOT ABUTS A RESIDENTIAL DISTRICT, FRONT YARDS, SIDE YARDS, AND REAR YARDS SHALL BE PROVIDED ON THE LOT ON THE SIDES ABUTTING THE RESIDENTIAL DISTRICT. THE MINIMUM REQUIREMENTS FOR THOSE YARDS SHALL BE EITHER THOSE FOR THE INDUSTRIAL DISTRICT OR THOSE FOR THE RESIDENTIAL DISTRICT ON THE ABUTTING SIDE, WHICHEVER IS LARGER

PARKING REQUIREMENTS

	REQUIRED (ICMX)	PROVIDED	REQUIRED (I-2)	PROVIDED
PARKING SPACES (WAREHOUSE & DISTRIBUTION)	1 / 2000 SF (75 SPACES)	92 SPACES	1 /2000 SF (371 SPACES)	419 SPACES
ADA PARKING SPACES	4 SPACES	4 SPACES	8 SPACES	16 SPACES
PARKING SETBACK	5' ALONG STREET FRONTAGE	5'	5' ALONG STREET FRONTAGE	5'

LEGEND — PROPOSED

RETAINING WALL
CONCRETE CURB
FLUSH CURB
FENCE
GUIDE RAIL
TREELINE
ACCESSIBLE SYMBOL
CROSSWALK
SIDEWALK
SIGN
BOLLARD
PARKING COUNT
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
ROOFDRAIN
FIRE HYDRANT
UTILITY POLE
LANDSCAPE AREA

LEGEND — EXISTING

RETAINING WALL
CONCRETE CURB
FLUSH CURB
FENCE
GUIDE RAIL
TREELINE
PROPERTY LINE
R.O.W. LINE
ADJACENT PROPERTY LINE
TITLE LINE
EASEMENT LINE
SETBACK LINE
50' WATERFRONT SETBACK
EX. RAILROAD RIGHT-OF-WAY
EX. EASEMENT
EX. DELAWARE AVENUE RIGHT-OF-WAY (STRICKEN FROM CITY PLAN)
FUTURE RIGHT-OF-WAY

LEGEND — EXISTING

CONCRETE MONUMENT/ IRON PIN
SIGN
AREA LIGHT
TREE
DRAINAGE INLET
STORM/SANITARY MANHOLE
WATER/GAS VALVES
ROOF DRAIN/CLEANOUT
FIRE HYDRANT
UTILITY POLE W/ LIGHT
UTILITY POLE

REFERENCES AND CONTACT INFORMATION

1. THIS PLAN REFERENCES:

   ALTA/NSPS LAND TITLE SURVEY
   PREPARED BY: CONTROL POINT ASSOCIATES, INC.
   1600 MANOR DRIVE, SUITE 210
   CHALFONT, PA 18914
   PREPARED FOR: BP BRIDESBURG, LLC
   FILE NO.: 02-200079-00
   DATED: 11-19-2020
   LAST REVISED: 12-11-2020

   PROPOSED FACILITIES SITE PLAN
   PREPARED BY: CORNERSTONE ARCHITECTS, LTD
   PREPARED FOR: 4501 RICHMOND STREET
   DATED: 2-17-2021

2. OWNER:
   EASTERN ENTERPRISES
   9 RIVERSIDE RD
   WESTON, MA 02493

3. APPLICANT:

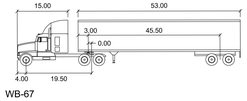
   BRIDGE DEVELOPMENT PARTNERS, LLC
   ONE GATEHALL DRIVE, SUITE 201
   PARSIPPANY, NJ 07054
   ATTN: JIM MARSHALL
   EMAIL: JMARSHALL@BRIDGEDEV.COM
   PHONE: (267)-346-0556

GENERAL NOTES

1. SITE DATA:
   4501 RICHMOND STREET
   PHILADELPHIA, PA 19137
   AREA (U.S.S.) = 2,884,248.9 S.F. (66.21 AC)
2. ZONING DATA:
   EXISTING ZONING: RMX-2 (RESIDENTIAL MIXED-USE)
   PROPOSED ZONING: ICMX (INDUSTRIAL MIXED-USE) & I-2 (INDUSTRIAL) & SP-PO-A (PARKS AND OPEN SPACE)
   PREVIOUS USE: OPEN SPACE
   PROPOSED USE: RETAIL & WAREHOUSE DISTRIBUTION
3. BOHLER ENGINEERING BUSINESS PRIVILEGE NUMBER IS 650139
4. PWD #: FY21-RICH-6344-01
5. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF PHILADELPHIA AND PHILADELPHIA WATER AND SEWER DEPARTMENT, AND ZONING REQUIREMENTS IN THE PHILADELPHIA CODE.
6. ELEVATIONS ARE BASED ON CITY OF PHILADELPHIA DATUM. LOT DIMENSIONS & EASEMENT DIMENSIONS ARE BASED ON PHILADELPHIA DISTRICT STANDARDS UNLESS OTHERWISE NOTED.
7. WATERSHED DISTRICT: DELWARE DIRECT WATERSHED NON-CONTRIBUTING, FLOOD MANAGEMENT DISTRICT C.
8. PLAN PREPARED AS PER INSTRUCTIONS OF THE OWNER.
9. STORMWATER SHALL DISCHARGE DIRECTLY TO THE DELAWARE RIVER.
10. ALL PLANTINGS SHALL BE IN ACCORDANCE WITH P.C.P.C. GUIDELINES.
11. ALL CURB RADII SHALL BE 5.0 FEET UNLESS OTHERWISE NOTED.
12. ELEVATIONS OF PROPOSED CONCRETE CURB TO BE DETERMINED BY THE CITY SURVEY DISTRICT. FACE OF CURB TO MATCH EXISTING CURB/EDGE OF PAVEMENT.
13. DEVELOPMENT TO BE SERVICED BY PUBLIC WATER AND SEWER IN ACCORDANCE WITH CITY OF PHILADELPHIA REQUIREMENTS.
14. BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) & FLOOD HAZARD ZONE AE (WITH BFE OR DEPTH).
15. TRASH PICK-UP WILL BE VIA A PRIVATE HAULER.

P

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

120 60 30 0 120
1"= 120'

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ELECTRICAL DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PROJECT NO.:	PP203056
DRAWN BY:	GB
CHECKED BY:	KM
DATE:	2/1/2021
CAD I.D.:	PP203056-SPP-2

PROJECT:

ZONING PLAN

FOR

BRIDGE ACQUISITIONS, LLC

PROPOSED DEVELOPMENT

4501 RICHMOND STREET
PHILADELPHIA, PA 19137

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317
DELAWARE LICENSE No. 18093
NEW JERSEY LICENSE No. 24GE05081400

SHEET TITLE:

OVERALL ZONING PLAN

SHEET NUMBER:

1A

ORG. DATE - 2/1/2021

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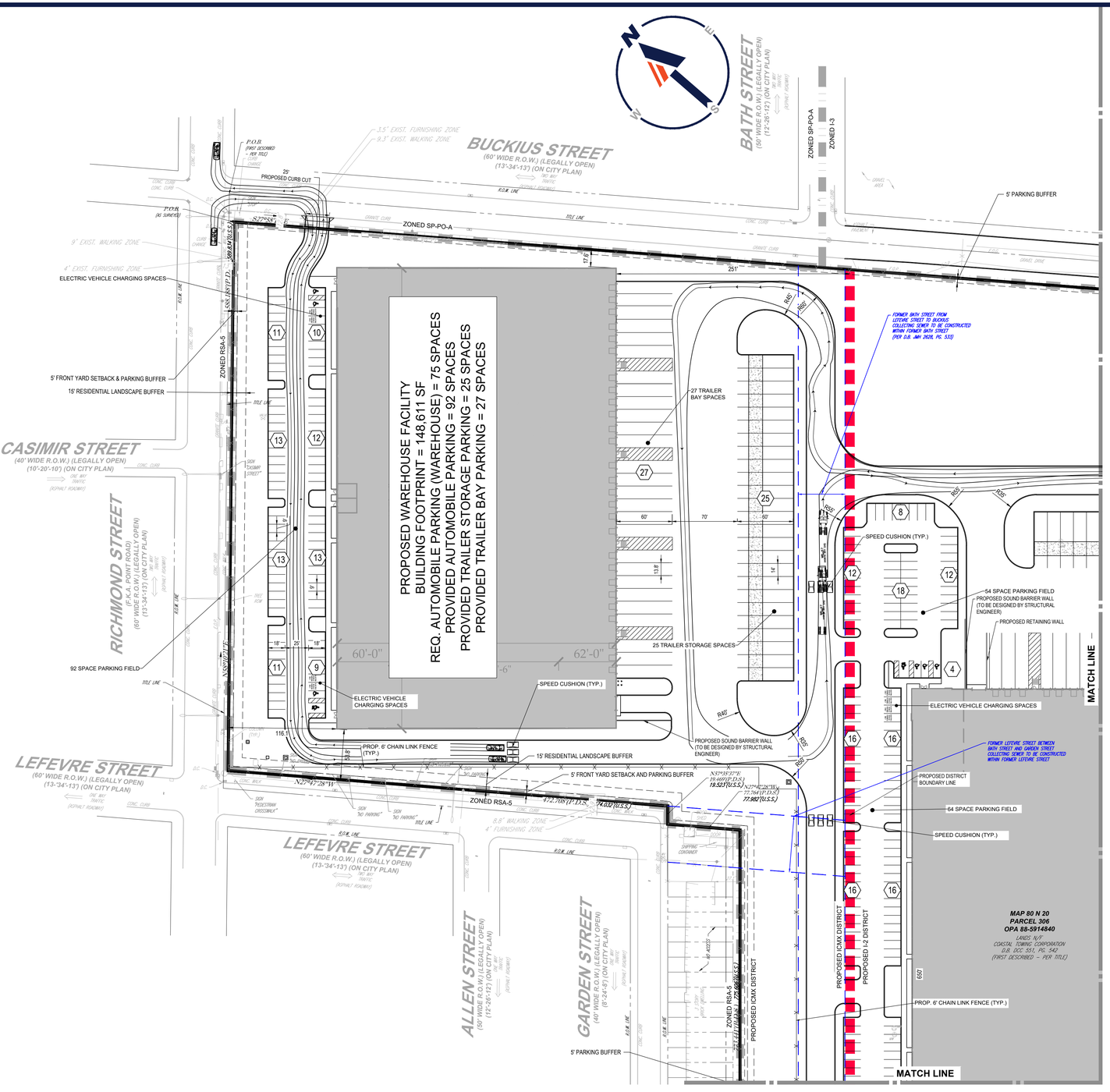

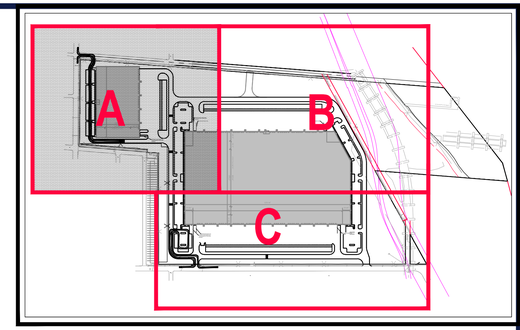

KEY MAP
SCALE: 1" = 500'

LEGEND

PROPOSED

RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	
CROSSWALK	
SIDEWALK	
SIGN	
BOLLARD	
PARKING COUNT	10
AREA LIGHT	
DRAINAGE INLET	
MANHOLE	
ENDWALL	
RIPRAP	
CLEANOUT	
ROOFDRAIN	
FIRE HYDRANT	
UTILITY POLE	
LANDSCAPE AREA	

LEGEND

EXISTING

RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
PROPERTY LINE	
R.O.W. LINE	
ADJACENT PROPERTY LINE	
TITLE LINE	
EASEMENT LINE	
SETBACK LINE	
50' WATERFRONT SETBACK	
EX. RAILROAD RIGHT-OF-WAY	
EX. EASEMENT	
EX. DELAWARE AVENUE RIGHT-OF-WAY (STRICKEN FROM CITY PLAN)	
FUTURE RIGHT-OF-WAY	

LEGEND

EXISTING

CONCRETE MONUMENT/ IRON PIN	
SIGN	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	

60 30 15 0 60
1"= 60'

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LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LIGHT AND AIR DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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DATE:	2/1/2021
CAD I.D.:	PP203056-SPP-2

PROJECT:

ZONING PLAN

FOR
BRIDGE ACQUISITIONS, LLC

PROPOSED DEVELOPMENT

4501 RICHMOND STREET
PHILADELPHIA, PA 19137

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317
DELAWARE LICENSE No. 18093
NEW JERSEY LICENSE No. 24GE050841400

SHEET TITLE:

ZONING PLAN

SHEET NUMBER:

1B

ORG. DATE - 2/1/2021

R:\PP203056\DRAWINGS\PLAN SETS\PERMITTING DOCS\REV-2 (ZONING) CHECKLIST #1\PP203056-SPP-2-----LAYOUT: 2 | B ZONING
GB
R:\PP203056\DRAWINGS\PLAN SETS\PERMITTING DOCS\REV-2 ZONING CHECKLIST #1\PP203056-SPP-2-----LAYOUT: 2 | B ZONING

LEGEND
PROPOSED

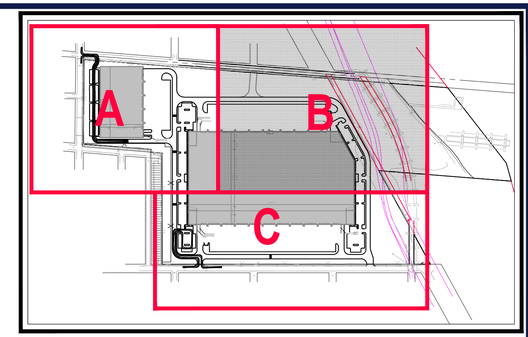
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	
CROSSWALK	
SIDEWALK	
SIGN	
BOLLARD	
PARKING COUNT	(10)
AREA LIGHT	
DRAINAGE INLET	
MANHOLE	
ENDWALL	
RIPRAP	
CLEANOUT	
ROOFDRAIN	
FIRE HYDRANT	
UTILITY POLE	
LANDSCAPE AREA	

LEGEND
EXISTING

RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
PROPERTY LINE	
R.O.W. LINE	
ADJACENT PROPERTY LINE	
TITLE LINE	
EASEMENT LINE	
SETBACK LINE	
50' WATERFRONT SETBACK	
EX. RAILROAD RIGHT-OF-WAY	
EX. EASEMENT	
EX. DELAWARE AVENUE RIGHT-OF-WAY (STROKEN FROM CITY PLAN)	
FUTURE RIGHT-OF-WAY	

LEGEND
EXISTING

CONCRETE MONUMENT/ IRON PIN	
SIGN	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	



KEY MAP
SCALE: 1" = 500'

DELAWARE AVENUE
(150' WIDE R.O.W.) (NOT LEGALLY OPEN)
(18°17'4"E 18') (STROKEN FROM CITY PLAN)

BUCKIUS STREET
(60' WIDE R.O.W.) (LEGALLY OPEN 25')
(13°34'-13') (ON CITY PLAN)

UCTED STREET

EXTENSION

FORMER 94TH STREET FROM LITZENIE STREET TO BUCKIUS COLLECTING SEWER TO BE CONSTRUCTED WITHIN FORMER 94TH STREET (PER D.B. JMH 2628, PG. 533)

FORMER LITZENIE STREET BETWEEN 94TH STREET AND GARDEN STREET COLLECTING SEWER TO BE CONSTRUCTED WITHIN FORMER LITZENIE STREET

PROPOSED DISTRICT BOUNDARY LINE

PROPOSED ICMX DISTRICT

PROPOSED I-2 DISTRICT

ZONED RSA-5
PROPOSED ICMX DISTRICT
ZONED I-3
PROPOSED I-2 DISTRICT

PROPOSED DISTRIBUTION FACILITY
BUILDING FOOTPRINT= 740,701 SF
REQ. AUTOMOBILE PARKING (WAREHOUSE) = 371 SPACES
PROVIDED AUTOMOBILE PARKING = 419 SPACES
PROVIDED TRAILER STORAGE PARKING = 122 SPACES
PROVIDED TRAILER BAY PARKING = 113 SPACES

64 SPACE PARKING FIELD
PROPOSED SOUND BARRIER WALL (TO BE DESIGNED BY STRUCTURAL ENGINEER)
PROPOSED RETAINING WALL
SPEED CUSHION (TYP.)
ELECTRIC VEHICLE CHARGING SPACES
PROP. 6' CHAIN LINK FENCE (TYP.)
PROP. TRASH ENCLOSURE
59 TRAILER STORAGE SPACES
52 TRAILER BAY SPACES
73 SPACE PARKING FIELD
7 TRAILER AY SPACES
RAGE SPACES
PROPOSED SOUND BARRIER WALL (TO BE DESIGNED BY STRUCTURAL ENGINEER)

MATCH LINE

MAP 80 N 20
PARCEL 306
OPA 88-5914840
LANDS: N/F
COASTAL TOWING CORPORATION
D.B. DCC 551, PG. 542
(FIRST DESCRIBED – PER TITLE)

P.O.B. (SECOND DESCRIBED – PER TITLE)

2144.007'(P.D.S.)

N57°35'37"E 19.469'(T.D.S.) 19.523'(U.S.S.)
N27°42'22"W 77.764'(T.D.S.) 77.982'(U.S.S.)

S15°15'47"W 84.047'(P.D.S.)
S15°13'59"W 57.000'(P.D.S.)
S19°07'26"W 59.000'(P.D.S.)
S20°23'44"E 23.000'(P.D.S.)
S22°29'12"W 37.000'(P.D.S.)
S19°57'35"W 48.500'(P.D.S.)

2540.490'(P.D.S.) 2542.603'(U.S.S.)
396.482'(P.D.S.)
660.938'(P.D.S.)
N27°49'08"W

FUTURE 150' DELAWARE AVENUE RIGHT-OF-WAY
APPROX. LOC. OF PHILADELPHIA BELT LINE RAILROAD 33' WIDE RIGHT-OF-WAY
DELAWARE AVENUE RIGHT OF WAY
KENSINGTON & TACONY RAILROAD RIGHT-OF-WAY
FUTURE 32' REQUIRED RIGHT-OF-WAY LINE (PHILADELPHIA BELT LINE RAILROAD)
50' WATERFRONT SETBACK
PROPOSED SP-POA DISTRICT
PROPOSED I-2 DISTRICT
PROPOSED DISTRICT BOUNDARY LINE

DELAWARE AVENUE
(150' WIDE R.O.W.) (NOT LEGALLY OPEN)
(18°17'4"E 18') (STRIPPED FROM CITY PLAN)
(NO IMPROVED)

60 30 15 0 60
1"= 60'

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PROJECT No.:	PP203056
DRAWN BY:	GB
CHECKED BY:	KM
DATE:	2/1/2021
CAD I.D.:	PP203056-SPP-2

PROJECT:

ZONING PLAN

FOR
BRIDGE ACQUISITIONS, LLC

PROPOSED DEVELOPMENT

4501 RICHMOND STREET
PHILADELPHIA, PA 19137

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
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C. BROWN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE075317
DELAWARE LICENSE No. 18093
NEW JERSEY LICENSE No. 24GE05681400

SHEET TITLE:

ZONING PLAN

SHEET NUMBER:

1C

ORG. DATE - 2/1/2021

R:\20\PP203056\DRAWINGS\PLAN SETS\PERMITTING DOCS\REV-2 (ZONING CHECKLIST #1)\PP203056-SPP-2-----LAYOUT_Z1-C ZONING

GB

LEGEND

PROPOSED

RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	
CROSSWALK	
SIDEWALK	
SIGN	
BOLLARD	
PARKING COUNT	10
AREA LIGHT	
DRAINAGE INLET	
MANHOLE	
ENDWALL	
RIPRAP	
CLEANOUT	
ROOFDRAIN	
FIRE HYDRANT	
UTILITY POLE	
LANDSCAPE AREA	

LEGEND

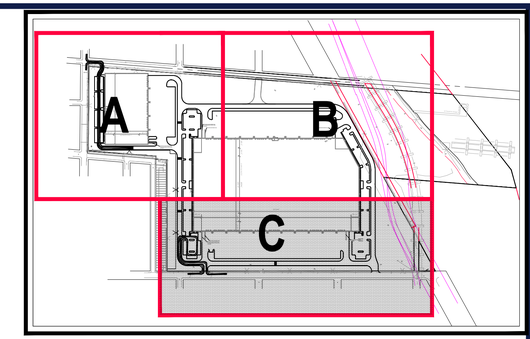
EXISTING

RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
PROPERTY LINE	
R.O.W. LINE	
ADJACENT PROPERTY LINE	
TITLE LINE	
EASEMENT LINE	
SETBACK LINE	
50' WATERFRONT SETBACK	
EX. RAILROAD RIGHT-OF-WAY	
EX. EASEMENT	
EX. DELAWARE AVENUE RIGHT-OF-WAY (STRICKEN FROM CITY PLAN)	
FUTURE RIGHT-OF-WAY	

LEGEND

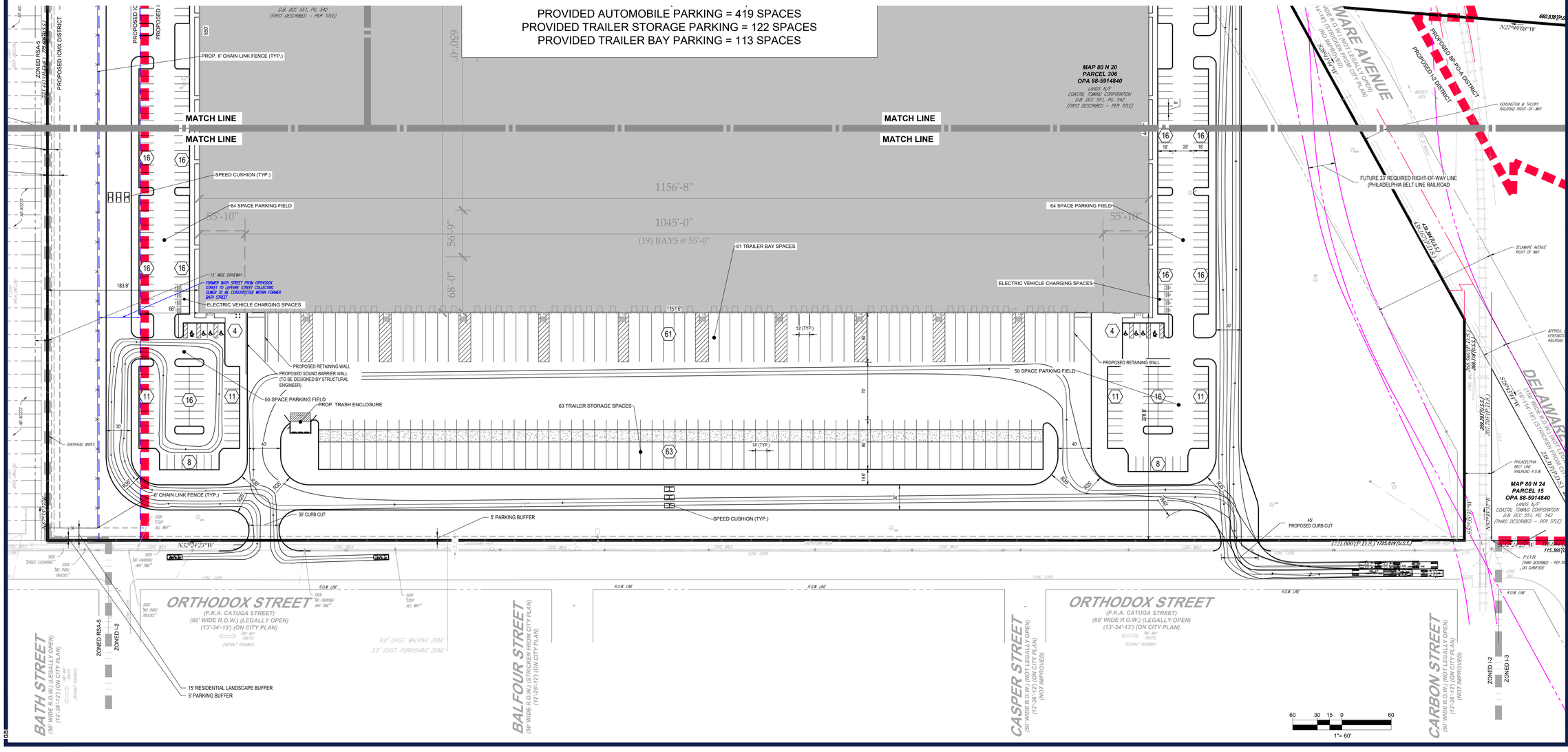
EXISTING

CONCRETE MONUMENT/ IRON PIN	
SIGN	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	



KEY MAP
SCALE: 1" = 500'

PROVIDED AUTOMOBILE PARKING = 419 SPACES
PROVIDED TRAILER STORAGE PARKING = 122 SPACES
PROVIDED TRAILER BAY PARKING = 113 SPACES



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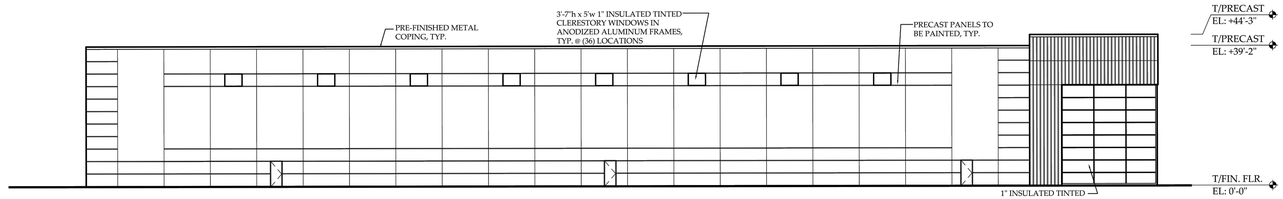
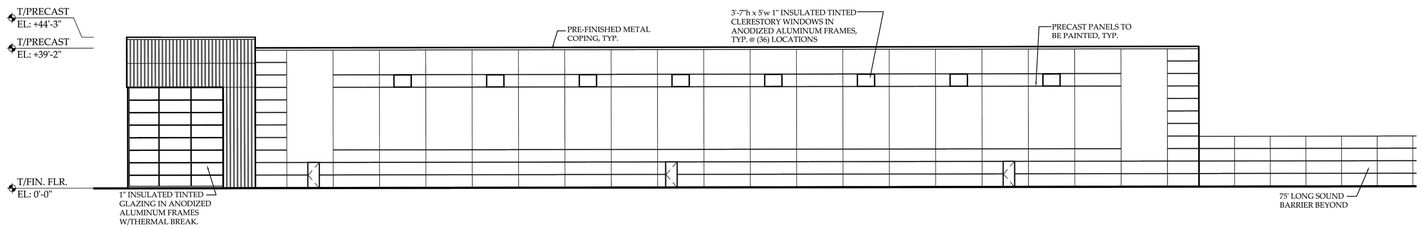
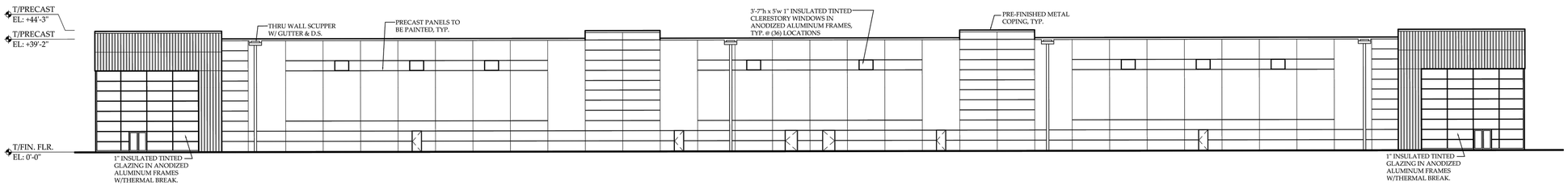


EAST ELEVATION:

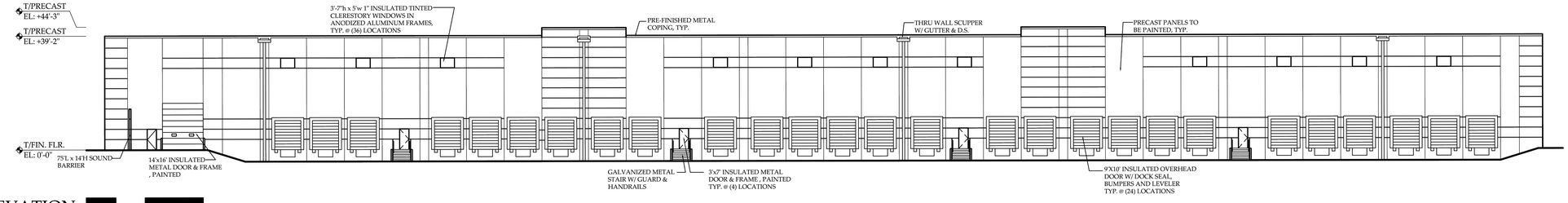


WEST ELEVATION

LOCATION MAP
SCALE: 1" = 1,000'



NORTH ELEVATION:



SOUTH ELEVATION:

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SHEET TITLE:

ELEVATION PLANS

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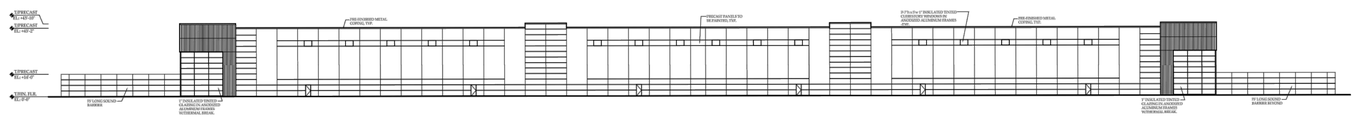
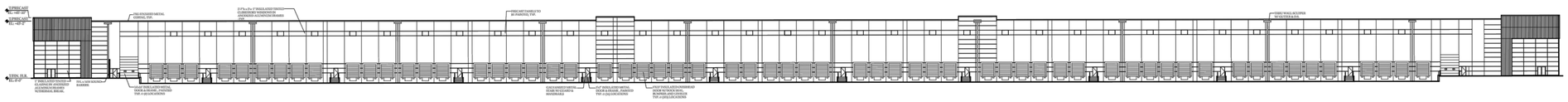
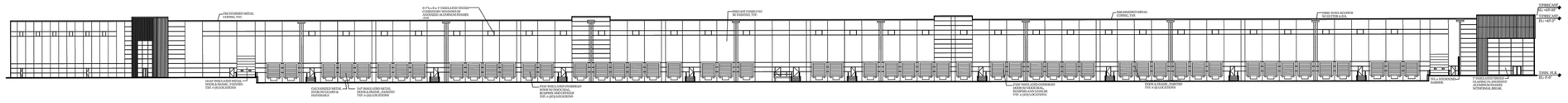


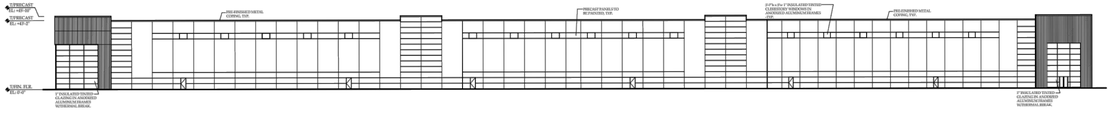
NORTH ELEVATION:
0 15 30 60 FEET



WEST ELEVATION:
0 15 30 60 FEET



EAST ELEVATION:
0 15 30 60 FEET



SOUTH ELEVATION:
0 10 20 40 FEET

LOCATION MAP
SCALE: 1" = 1,000'

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SHEET NUMBER:

2B

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