

**SECOND FIVE-YEAR REVIEW REPORT FOR
METAL BANK SUPERFUND SITE
PHILADELPHIA COUNTY, PENNSYLVANIA**



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Prepared by

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Date

Table of Contents

LIST OF ABBREVIATIONS AND ACRONYMS	3
I. INTRODUCTION.....	4
Site Background.....	4
FIVE-YEAR REVIEW SUMMARY FORM	6
II. RESPONSE ACTION SUMMARY.....	6
Basis for Taking Action	6
Response Actions.....	7
Status of Implementation	8
Systems Operations/Operation and Maintenance (O&M)	12
III. PROGRESS SINCE THE PREVIOUS REVIEW.....	12
IV. FIVE-YEAR REVIEW PROCESS.....	13
Community Notification, Community Involvement and Site Interviews	13
Data Review.....	13
Site Inspection.....	17
V. TECHNICAL ASSESSMENT	17
QUESTION A: Is the remedy functioning as intended by the decision documents?	17
QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives used at the time of the remedy selection still valid?	18
QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?	19
VI. ISSUES/RECOMMENDATIONS	19
OTHER FINDINGS.....	19
VII. PROTECTIVENESS STATEMENT.....	20
VIII. NEXT REVIEW.....	20
APPENDIX A – REFERENCE LIST	A-1
APPENDIX B – SITE CHRONOLOGY	B-1
APPENDIX C – HISTORICAL SITE MAP	C-1
APPENDIX D – PRESS NOTICE	D-1
APPENDIX E – SITE INSPECTION CHECKLIST	E-1
APPENDIX F – SITE PHOTOS	F-1
APPENDIX G – SUPPORTING GROUNDWATER, SEDIMENT, POREWATER AND LNAPL TRENCH DATA FROM RAMBOLL ENVIRON	G-1
APPENDIX H – VAPOR INTRUSION SCREENING LEVEL RISK ASSESSMENT	H-1

LIST OF ABBREVIATIONS AND ACRONYMS

AOC	Administrative Order on Consent
ARAR	Applicable or Relevant and Appropriate Requirement
BTAG	Biological Technical Assistance Group
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FYR	Five-Year Review
HQ	Hazard Quotient
IC	Institutional Control
LNAPL	Light Non-Aqueous Phase Liquid
MCL	Maximum Contaminant Level
µg/m ³	Microgram Per Cubic Meter
µg/L	Microgram Per Liter
mg/kg	Milligram Per Kilogram
NAPL	Non-Aqueous Phase Liquid
NCP	National Contingency Plan
ND	Non-Detect
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PADEP	Pennsylvania Department of Environmental Protection
PCB	Polychlorinated Biphenyl
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/ Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
RSL	Regional Screening Level
SVOC	Semi-Volatile Organic Compound
TCDD	Tetrachlorodibenzo-p-dioxin
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalency
TSCA	Toxic Substances Control Act
UST	Underground Storage Tank
UU/UE	Unlimited Use and Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR Reports such as this one. In addition, FYR Reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Metal Bank Superfund site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site consists of one operable unit (OU), which addresses soil, sediment and groundwater contamination.

EPA Remedial Project Manager (RPM) William Geiger led the FYR. Participants included EPA hydrogeologist Ayowale Ayodele, EPA Biological Technical Assistance Group (BTAG) biologist Matt Taynor, EPA toxicologist Dawn Ioven, and Hagai Nassau and Kelly MacDonald from EPA FYR contractor Skeo. The potentially responsible parties (PRPs) were notified of the initiation of the FYR. The review began on 9/11/2017.

Site Background

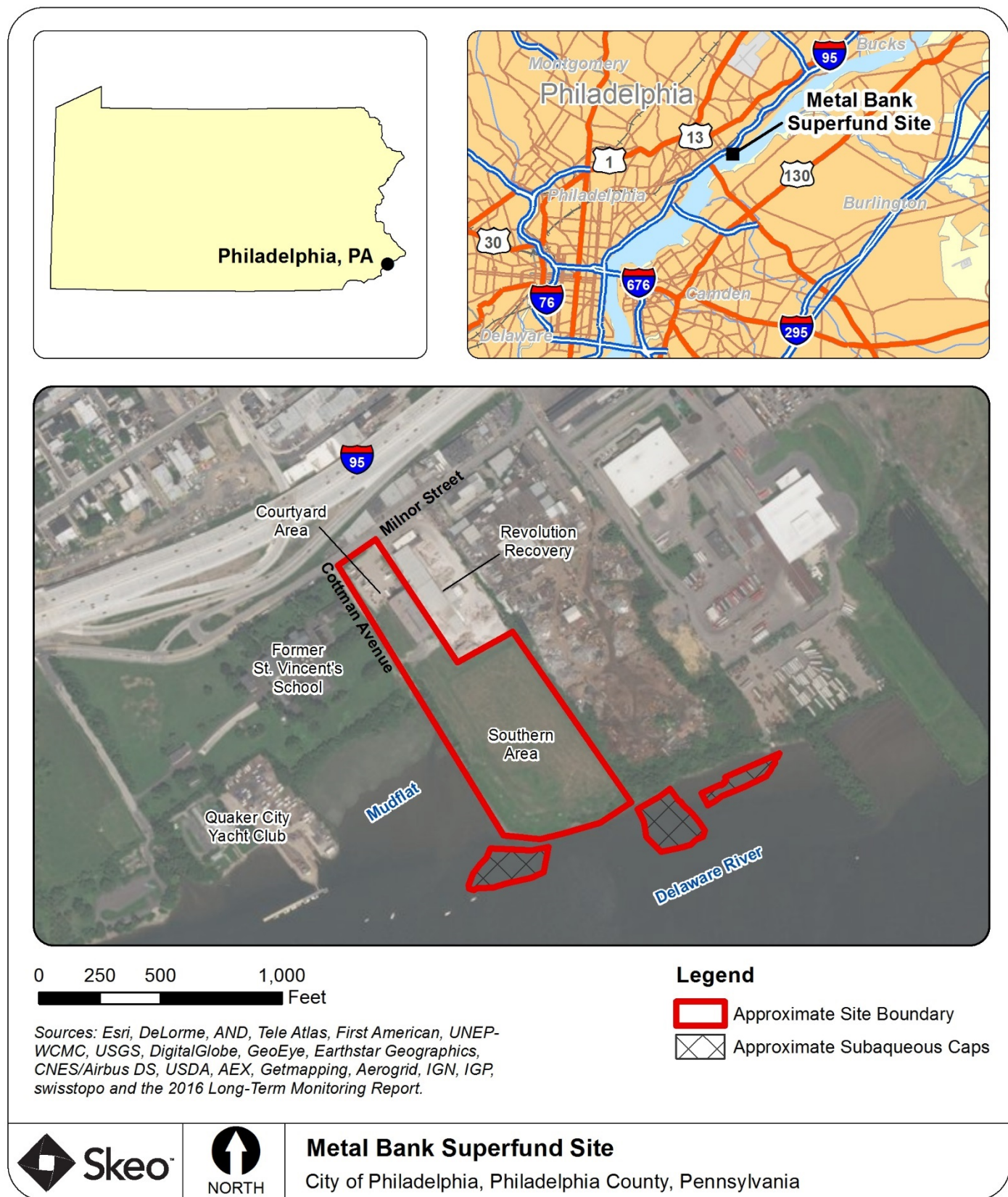
The Site is located at 7301 Milnor Street in an industrial area of Philadelphia, Pennsylvania (Figure 1); it includes a fenced 10-acre upland property along the Delaware River and portions of the Delaware River contaminated by site operations. The upland property is bordered by Cottman Avenue and a mudflat on the west; Milnor Street on the north; Revolution Recovery (a recycling company and salvage yard) on the east; and the Delaware River on the south. The former St. Vincent's School is located west across Cottman Avenue. Quaker City Yacht Club is a marina located adjacent to the mudflat farther west. A stormwater outfall owned by the City of Philadelphia at the southern end of Cottman Avenue empties into the mudflat.

The Site was formerly operated by Metal Bank of America, Inc. and others as a scrap metal and transformer salvage facility. Site operations contaminated the property and portions of the Delaware River with polychlorinated biphenyls (PCBs) and other contaminants. The upland portion of the Site includes two areas: 1) the courtyard area in the north, which consists of one vacant steel building (Building 7) and a former courtyard that is now a gravel parking/storage area; and 2) the southern area, which includes a vegetated, capped landfill that was formerly used for scrap metal recovery. Seven Three Zero One LLC purchased the site property in August 2016 and leases it to Revolution Recovery, who plan to expand their operations on to the Site by reusing Building 7 and potentially building on the southern area cap. Additionally, the City of Philadelphia plans to build a recreational waterfront trail on the Site.

An unconsolidated aquifer and a bedrock aquifer are present at the Site. Shallow groundwater in the unconsolidated aquifer at the Site flows south and discharges to the Delaware River; groundwater in the bedrock aquifer flows southeast. The Site's groundwater is designated as Class III, which is not a source of drinking water and will not likely be in the future.

Appendix A includes documents referenced in this FYR; Appendix B includes the Site's events chronology.

Figure 1: Vicinity Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Metal Bank		
EPA ID: PAD046557096		
Region: 3	State: PA	City/County: Philadelphia / Philadelphia
SITE STATUS		
NPL Status: Final		
Multiple OUs? No	Has the Site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: EPA		
Author name: William Geiger, with additional support provided by Skeo		
Author affiliation: EPA Region 3		
Review period: 9/11/2017 - 8/29/2018		
Date of site inspection: 2/5/2018		
Type of review: Statutory		
Review number: 2		
Triggering action date: 8/29/2013		
Due date (five years after triggering action date): 8/29/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

In 1972, the U.S. Coast Guard investigated oil seeps to the Delaware River and concluded that the Site was the source, ultimately finding PCBs in the oil seeps at concentrations over 800 milligrams per liter (mg/L). Several federal, state and local agencies then inspected the Site. EPA requested that Metal Bank conduct cleanup work, but Metal Bank instead chose to perform additional studies. In 1983, EPA placed the Site on the National Priorities List (NPL). PCBs were identified as the contaminants of primary concern; other contaminants of concern included polycyclic aromatic hydrocarbons, phthalates, dioxin, and cadmium.

EPA completed the human health risk assessment in 1994, which identified the following potential populations at risk from contaminant exposure, primarily to PCBs: 1) current and future off-site residents¹, 2) future on-site industrial workers, 3) future on-site construction workers, and 4) current and future recreational boaters who fish near the Metal Bank property.

¹ The potential route of exposure was assumed to be people living adjacent to the site that could be exposed through inhalation of contaminated surface soils from the Site.

National Oceanic and Atmospheric Administration (NOAA) completed the aquatic ecological risk assessment in 1994, which evaluated potential impacts to several fish species and to benthic invertebrates. One fish, the shortnose sturgeon, was designated an endangered species. Exposure of aquatic receptors to sediment and any non-aqueous phase liquid (NAPL) seeps presented unacceptable risk. The terrestrial ecological risk assessment determined that terrestrial receptors' potential exposure to sediment and groundwater (directly through seeps and springs and indirectly through contaminant transport to other media like surface water and sediment) indicated a potential risk.

Response Actions

EPA filed a civil action against Metal Bank and others under the Resource Conservation and Recovery Act (RCRA) and the Toxic Substances Control Act (TSCA) for injunctive relief and recovery of EPA's costs. EPA settled the suit with Metal Bank under a stipulation that required Metal Bank to install and operate a groundwater recovery and treatment system until all recoverable oil was removed from the property. Metal Bank operated this system until 1989.

In 1987, EPA identified several other Potentially Responsible Parties (PRPs), many of which were utility companies that sent used transformers to the Site. The PRPs formed a committee and the site owners declined to join this group. In 1991, EPA entered into an AOC with a group of ten utility companies ("Utility Group" or "PRP Group"), who had previously sold their used and discarded transformers and capacitors to Metal Bank. Under the AOC, the Utility Group agreed to perform an RI/FS at the Site.

EPA issued a Record of Decision (ROD) to document the Selected Remedy on December 31, 1997. EPA modified the remedy in three Explanations of Significant Differences (ESDs) issued on September 27 and December 15, 2000, and April 2, 2014.

In 1998, EPA issued an administrative order to the PRP Group and the Site owners to design and construct the cleanup. The site owners subsequently declared bankruptcy. In September 2002, the PRP Group submitted a remedial design, but that remedy was not implemented due to extensive litigation. As a result of settlement negotiations, EPA and the PRP Group agreed to certain modifications of the ROD and final design as reflected in the 2006 Revised Remedial Plan, attached to a 2006 Consent Decree.

The 2006 Revised Remedial Plan modified the Selected Remedy most significantly by limiting the excavation of contaminated sediments in the River and instead, required the placement of marine mattresses over other contaminated sediments in the Delaware River.

The final remedy addresses PCB-contaminated soil, sediment, surface water, and groundwater at the site, with both source controls and institutional controls. The final remedy was based on the PCB criteria of 25 ppm for on-site soils and 1 ppm for near-shore sediments. Long-term remedial performance monitoring of on-site/down-gradient groundwater, as well as shore/near-shore sediments, addresses total PCB aroclors, as well as PCB congeners, dioxins, and semi-volatile organic compounds.

The Revised Remedial Plan, which comprises the final Selected Remedy for the Site, consists of the following components:

- Excavation of courtyard area soils CY-1 and CY-2 (to a depth of two feet for hot spots and to a depth of one foot for the remainder of the courtyard), and placement of a soil cap over the courtyard area and former buildings 2, 3, 4, 5 and 6.
- Power washing and surface coating of the floor in courtyard Building 7.
- Installation of a sheet pile wall at the southwestern corner of the Site to prevent erosion of fill materials into the river.
- Removal of the underground storage tank (UST) near the southwestern corner of the Site.

- Excavation of southern area “hot spots” SA-2, SA-3 and SA-4/5, and off-site soil disposal.
- Excavation of near-shore sediments with total PCBs greater than 1 mg/kg.
- Capping with marine mattresses of other sediment areas with total PCBs greater than 1 mg/kg.²
- Pre- and post-construction monitoring.
- Implementation of institutional controls (ICs).³

Soil excavation areas CY-1, CY-2, SA-2, SA-3 and SA-4/5 are depicted on the site map in Appendix C. Soil and sediment cleanup levels are included below in Table 1.

Table 1: Soil/Sediment Contaminant Cleanup Levels

Media	Contaminant	Cleanup Goal
Sediment	Total PCBs	1 mg/kg
Southern area soil (SA-1, SA-4, and SA-4/5)	Total PCBs	25 mg/kg
Courtyard area soil (two feet from surface) (CY-1 and CY-2)	Total PCBs	10 mg/kg
<i>Note: Cleanup Goals are site-specific risk-based standards.</i> Sources: 1997 Record of Decision, 2006 Revised Remedial Plan and 2008 Revised Design Report.		

The 1997 ROD notes that due to the Class III groundwater status and the expected benefits of “hot spot” removal, no additional groundwater remediation was required.

EPA issued an ESD on April 2, 2014 to add a requirement for additional institutional controls on upland remedial features and the subaqueous caps in the Delaware River.

Status of Implementation

The remedial action was conducted by the PRP contractor from July 2008 to March 2010 and consisted of the following activities:

- Excavated and backfilled areas CY-1, CY-2, SA-2, SA-3 and SA-4/5.
 - Overburden or cover soils with PCB concentrations below 25 mg/kg were used as backfill in the southern excavation areas;
 - Soils with PCB concentrations above 25 mg/kg were disposed of off-site.
- Removed the southern area UST and properly disposed offsite.
- Removed two additional USTs found during construction and disposed off-site.
- Power washed and surface coated Building 7 floor with epoxy.
- Installed the sheet pile wall.
- Excavated near-shore sediments and backfilled with geotextile and R-3 stone in the Delaware River.
 - Approved sediments from the mudflat and deep-water excavation areas were placed in the southern cap area.
- Installed marine mattresses and buttress stone to cap sediments in the Delaware River.
- Installed a Light Non-Aqueous Phase Liquid (LNAPL) trench for monitoring presence of LNAPL.
- Installed six monitoring wells in the southern area.

² The marine mattresses are rock-filled containers constructed of high strength geogrid material.

³ The Revised Remedial Plan notes that other institutional and engineering controls to be implemented at the Site include marking of the geotextile liner under the soil cap in the southern area, a new fence around portions of the Site, warning signs, and a public education program.

- Covered the southern area with geotextile and 24 inches of cover soil (with a total of 48 inches in the southern part of the southern area).
- Covered the courtyard with geotextile and 12 inches of cover soil.
- Posted PCB warning signs along the Delaware River.

Some remedial components, such as the geotextile liner in the courtyard area, were not specifically required by the 2006 Revised Remedial Plan but added additional protectiveness.

Institutional Control (IC) Review

As described in the 1997 ROD and 2006 Revised Remedial Plan, institutional controls are required at the Site. See Table 2 for a summary of planned and implemented institutional controls. The institutional controls have been implemented on the upland portion of the Site by a 2002 Notice of Hazardous Substance Disclosure and Declaration of Restrictions, filed with the Recorder of Deeds for the City of Philadelphia. See Figure 2 for parcels affected by this institutional control, which includes:

- A prohibition on residential or agricultural uses (commercial and industrial uses are permitted).
- A prohibition on subsurface excavation, digging, drilling or other disturbance of the surface soils and cover or subsurface underlying the premises conducted without EPA approval.
- A prohibition on groundwater use at the Site for domestic purposes, including drinking water.

Upon review of the remedy and institutional controls during the 2013 FYR, EPA recognized that the institutional controls in place to protect the remedial systems on land and in the Delaware River were not comprehensive. EPA issued an ESD in 2014 to require the following additional institutional controls as part of the site remedy:

- A prohibition on all activities that would in any manner disturb or interfere with the remedial systems that have been implemented on the upland portion of the Site without prior written permission from EPA. The remedial systems include the soil cover, monitoring wells, epoxy coating on the floor of Building 7, LNAPL trench, sheet pile wall, and security measures to prevent access to the upland portion of the Site.
- A prohibition on all activities at the Site that would in any manner disturb or interfere with the remedial systems placed in the Delaware River, including subaqueous caps, “danger” buoys, bank armoring and the sheet pile wall, without prior written permission from EPA.

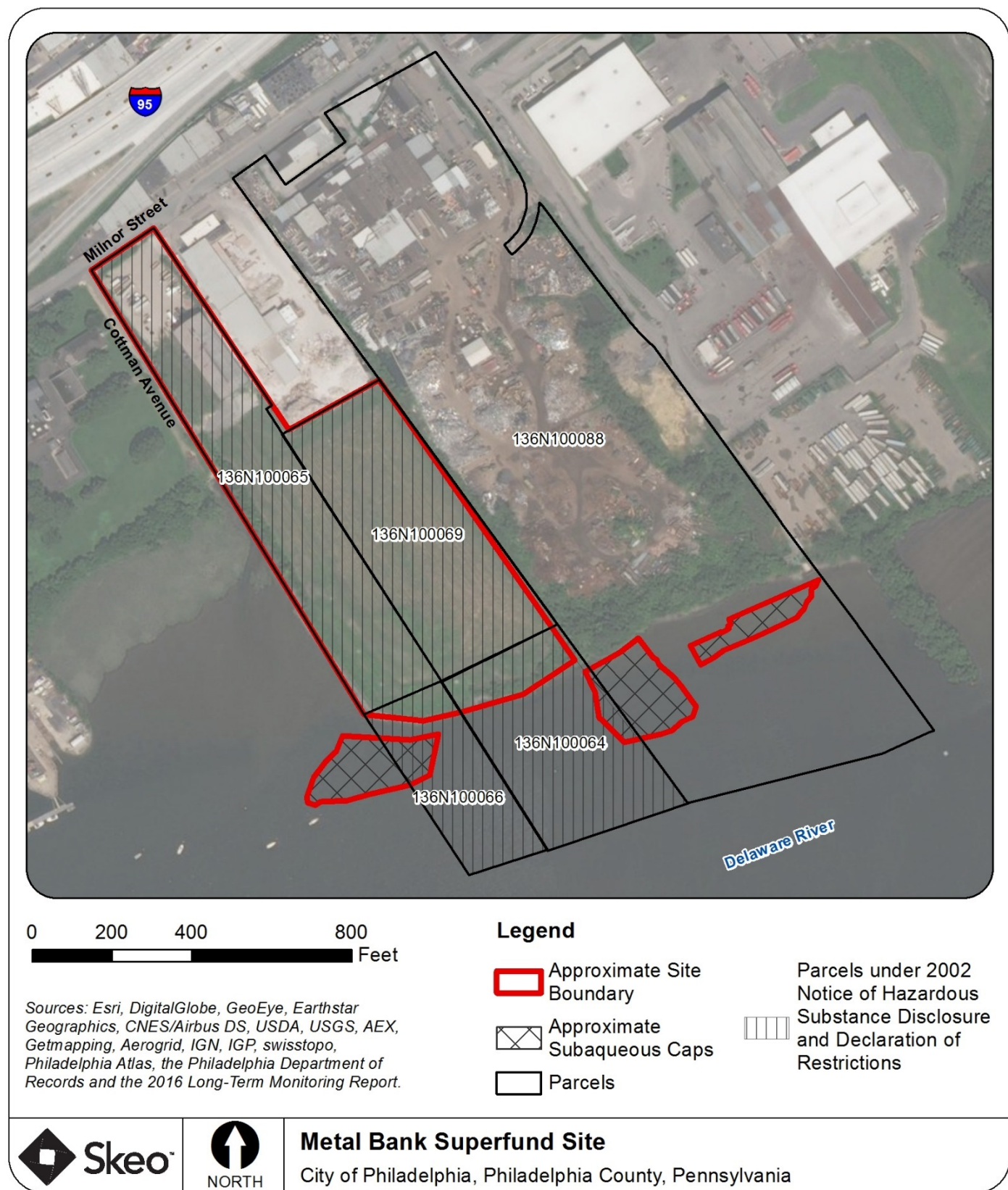
These institutional controls are not yet in place.

The Revised Remedial Plan notes that a public education program is a required institutional control. The 2013 FYR states that the PRP group will conduct annual educational meetings with the Quaker City Yacht Club to inform them of potential hazards posed to boaters and other recreational users of the Delaware River by the marine mattresses. The PRP conducted one meeting with the yacht club and has not held any further meetings due to lack of interest from the yacht club.

Table 2: Summary of Planned and Implemented ICs

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)^a	IC Objective	Title of IC Instrument Implemented and Date
Groundwater and soil	Yes	Yes	136N100069, 136N100065, 136N100066 and 136N100064	• Prohibit residential or agricultural uses • Prohibit excavation, digging, drilling or other disturbance of the soils • Prohibit groundwater use at the Site	2002 Notice of Hazardous Substance Disclosure and Declaration of Restrictions
Groundwater, soil and sediment	Yes	Yes	136N100069, 136N100065, 136N100088, 136N100066 136N100064 and other areas where subaqueous caps are present (See Figure 2) ^b	• Prohibit activities that would interfere with the upland remedial systems, including the soil cover, monitoring wells, epoxy coating on the floor of Building 7, LNAPL trench, sheet pile wall, and security measures to prevent access to the upland portion of the Site • Prohibit activities that would interfere with the Delaware River's remedial systems, including subaqueous caps, "danger" buoys, bank armoring and the sheet pile wall	Not yet implemented
Subaqueous caps	Yes	Yes	N/A	• Conduct annual educational meetings with the Quaker City Yacht Club to provide information regarding the potential hazards posed to boaters and other recreational users of the Delaware	Public education program; suspended due to lack of interest
<i>Notes:</i> a. Parcels accessed at https://atlas.phila.gov/ on 3/13/2018. b. There is no parcel in the western half of the westernmost subaqueous cap, according to https://atlas.phila.gov/ and https://www.opendataphilly.org/dataset/property-parcels.					

Figure 2: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation and Maintenance (O&M)

The PRP Group performs O&M in accordance with the approved April 2011 Long-Term Monitoring Plan. The plan was revised in January 2014, May 2015 and October 2016. The primary activities include groundwater, LNAPL trench and sediment monitoring; inspections of the caps, Building 7 floor slab, and the sheet pile wall; and mudflat and marine mattress inspections.

Cap inspections during this FYR period indicated that erosion was not evident, and that vegetation remained intact on the southern cap area. The current mowing schedule for the southern cap area is to mow a third of the cap every year. In this FYR period, the annual Building 7 epoxy-coated floor slab inspections found only one instance of cracking in April 2015, which has since been repaired. Sheet pile wall monitoring detected signs of movement during a 2012 site inspection. Subsequent evaluations determined that one of the wall's walers (a type of structural beam) had failed and warranted repair; this repair occurred between May and July 2016. No significant outward movement has been noted since the repair.

The remediated areas in the mudflat that were backfilled with clean sediments and marine mattress inspections are currently conducted every five years. The 2017 inspection determined that the mudflat backfill is in good condition with no signs of erosion and the 2017 bathymetric survey did not find mudflat scouring or erosion. A diver-assisted sediment push probe measured sediment accumulations over the mattresses and performed visual confirmation of the integrity of the mattresses. The divers had limited visibility but based on the presence of sediment accumulation over the mattresses, the subaqueous caps are believed to be intact.

With EPA's approval, the PRPs have not conducted any biological monitoring during the review period and instead conducted sediment sampling. Groundwater, LNAPL trench, and sediment monitoring results are discussed in the Data Review section of this FYR.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determination and statement from the previous FYR as well as the recommendations from the previous FYR and the status of those recommendations.

Table 3: Protectiveness Determination/Statement from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
Sitewide	Short-term Protective	This first Five-Year Review for the Metal Bank Site finds that the remedy has been constructed in accordance with the requirements of the Revised Remedial Plan and Consent Decree. Available data suggests that the remedy is protective in the short-term. The immediate threats have been addressed through excavating PCB contaminated soil, coating portions of Building 7 with epoxy, installing sediment erosion control and monitoring features, capping contamination on the upland and in the Delaware River, and excavating and capping contaminated sediment in the Delaware River. In order for the remedy to remain protective in the long-term, operation and maintenance activities called for in the Long-Term Monitoring Plan, including bioaccumulation studies, must continue to be performed. Also, additional sediment samples are needed to ensure the Site is no longer impacting ecology in the Delaware River, and additional institutional controls should be selected and implemented to ensure long-term protectiveness.

Table 4: Status of Recommendations from the 2013 FYR

OU #	Issue	Recommendation	Current Status	Current Implementation Status Description	Completion Date (if applicable)
Sitewide	Need bioaccumulation study data	Perform bioaccumulation studies as required by the Long-Term Monitoring Plan	Considered But Not Implemented	EPA and the PRPs reached an agreement that bioaccumulation studies were not needed based on sediment sampling results.	1/17/2014
Sitewide	Need additional sediment data locations	Sample sediment accumulated in the mudflats and on marine mattresses for PCB analysis	Completed	The PRPs completed two rounds of sediment sampling in 2015 and 2016.	12/15/2017
Sitewide	Selection of ICs	Issue ESD for ICs	Completed	EPA issued an ESD in 2014.	4/2/2014
Sitewide	Implementation of ICs	Implement ICs	Ongoing	EPA and the PRPs are working to implement ICs.	N/A

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

A public notice was made available by the EPA's website⁴ and by newspaper posting in the *Northeast Times* on 5/9/2018 (Appendix D). It stated that the FYR was underway and invited the public to submit any comments to EPA. The results of the review and the report will be made available at the Site's information repository, Northeast Regional Library, located at 2228 Cottman Avenue, Philadelphia, PA 19149, and online at: <https://www.epa.gov/superfund/search-superfund-five-year-reviews>.

Interviews were not conducted as part of this FYR due to lack of community interest in the Site.

Data Review

Data reviewed in this FYR period include LNAPL trench inspections, 2015 and 2016 sediment sampling data, and groundwater monitoring data.

LNAPL Trench

The LNAPL trench is monitored by the PRP Group to evaluate whether LNAPL is present and whether contaminants may be migrating from groundwater to surface water. The trench is visually inspected for sheen/oil; if LNAPL is present, adsorbent booms or active pumping are used to remove oil. No measurable free product was observed during this FYR period or has ever been observed during the LNAPL trench inspections. Water elevations are also monitored in the LNAPL trench sumps to determine if they are greater than the soil cap elevation (11 feet above mean sea level). If this occurs, soil samples for PCBs would be collected from the cap and analyzed to evaluate potential upward LNAPL migration into the soil cap. Groundwater elevations ranged from 2 to 4 feet above mean sea level during this FYR period and no soil samples were required. Groundwater elevation data are included in Appendix G.

⁴ Accessed on 5/23/2018 at <https://www.epa.gov/pa/metal-bank-superfund-site-philadelphia-pa>.

Sediment

Sediment sampling is not currently conducted at scheduled intervals. Following the 2013 FYR, EPA requested that the PRP Group conduct additional rounds of sediment sampling, which were performed in 2015 and 2016 using passive samplers. The PRP Group conducted two rounds of sampling at the mudflat, adjacent to the sheet pile wall in the mudflat backfill area, and in the marine mattress area of the subaqueous caps. In addition to these on-site samples, reference samples were collected from two areas, one east and one west of the Site, for a total of 16 samples each round. EPA collected six split samples during the 2015 sampling event. Only one site sample exceeded the sediment cleanup level of 1 mg/kg total PCBs. This exceedance of 1.1 mg/kg in the mudflat (MF-2) was a split sample, and neither the original sample nor its field duplicate exceeded 1 mg/kg (both were 0.33 mg/kg). The mattress and sheet pile areas had similar PCB concentrations (average of 0.16 mg/kg for the two sampling events), and the mudflat area had slightly higher concentrations (average of 0.4 mg/kg for the two sampling events). The eastern reference area had lower average concentrations than any site area, while the western reference area average concentrations were higher than any site area. The western reference area had the highest single concentration of total PCBs, 1.3 mg/kg. EPA will evaluate the need for additional sediment sampling during the next FYR period.

The PRP Group collected porewater results during the sediment sampling. No samples exceeded the current freshwater chronic National Recommended Water Quality Criteria for aquatic life for total PCBs (0.014 micrograms per liter [µg/L]).⁵ See Appendix G for sediment and porewater sampling results and locations.

Groundwater

The objective of the groundwater monitoring program is to evaluate the effectiveness of the upland source removal at reducing contaminant concentrations by reviewing concentration trends and to determine the potential for contaminant migration from groundwater to surface water. Shallow groundwater is monitored by the PRP Group annually in MW-3 and MW-4 and biannually in MW-1, MW-2, MW-5 and MW-6 (Figure 3). Analytical parameters included in the monitoring program are PCB Aroclors and semi-volatile organic compounds (SVOCs). In the last five years, PCBs were infrequently detected in groundwater and all instances of PCB detections are shown in Table 5, below. No PCBs were detected in groundwater in 2014, 2016 or 2017. The ROD and Revised Remedial Plan did not identify cleanup levels for PCBs in groundwater; however, for comparison purposes, all PCB detections during this FYR period were below the federal Maximum Contaminant Level (MCL) of 0.5 µg/L.

Table 5: PCB Detections during FYR period

PCB	Concentration (µg/L)	Date	Well
Total PCBs/Aroclor 1268	0.033	April 2013	MW-3
Total PCBs/Aroclor 1254	0.0072 J	June 2015	MW-3
Total PCBs/Aroclor 1242	0.025 J	April 2013	MW-4
Aroclor 1242	0.043 J	April 2013 (duplicate)	MW-4
Aroclor 1260	0.0049 J		
Total PCBs	0.0479		
Total PCBs/Aroclor 1242	0.095	October 2013	MW-4
Total PCBs/Aroclor 1242	0.015	October 2013	MW-6
<i>Notes:</i> Source: 2017 Long-Term Monitoring Annual Report, Table 2-4. J = reported value may not be accurate or precise			

⁵ Freshwater chronic National Recommended Water Quality Criteria for aquatic life accessed on 3/6/18 at <https://www.epa.gov/wqc/national-recommended-water-quality-criteria-aquatic-life-criteria-table>. While this was not identified as a cleanup level in the ROD, it is used in this case for reference purposes.

SVOC concentrations in groundwater during this FYR period were comparable to previous years. The highest SVOC concentrations were in MW-5, which is downgradient of the southern cap area (Figure 3). SVOCs detected during this FYR period are shown in Table 6, below. The PRP Group contractor evaluated SVOC concentration trends in groundwater since construction of the remedy was completed in 2010 using the Mann-Kendall statistical test. The test determined that there was not a statistically significant trend in any of the monitoring wells at the Site over the past seven years.

Table 6: Select SVOC Concentrations during FYR period from MW-5

SVOC	Concentration (µg/L)				
	April 2013	October 2013	October 2014	June 2015	April 2017
Acenaphthene	16	59	53	34	33
Acenaphthylene	1.2 J	2	1.2 J	1.1 J	1.4 J
Anthracene	1.7 J	5.5	3.7	2.7	2.3
Biphenyl	ND	9.3 J	9 J	3.7 J	1.7 J
Carbazole	3.1	44	36	25	20
Dibenzofuran	1.3 J	33	30	17	13
2,4-Dimethylphenol	120	67	39	67	25
Fluoranthene	5.5	7.5	5.2	3.9	5.3
Fluorene	1 J	41	38	22	16
2-Methylnaphthalene	ND	44	54	18	5
Naphthalene	ND	270	280	150	31
Phenanthrene	ND	42	41	16	6.9
Pyrene	3.3	3.4	2.7	3	3
<i>Notes:</i> Source: 2017 Long-Term Monitoring Annual Report, Table 2-4. J = reported value may not be accurate or precise ND = non-detect MW-5 was not sampled in 2016, due to a 2015 reduction in sampling of MW-1, MW-2, MW-5 and MW-6 to biannually. This table does not present groundwater cleanup goals, because groundwater cleanup goals were not selected as part of the remedy, and groundwater is instead used as an indicator of the source area cleanup effectiveness.					

Figure 3: Detailed Site Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Site Inspection

The site inspection was performed on 2/5/2018. Participants included EPA RPM William Geiger, EPA hydrogeologist Ayowale Ayodele, EPA BTAG Biologist Matt Taynor, George Horvat of PECO Energy Company (PRP), Joe Vitale and Nicholas Steenhaut of Ramboll (PRP contractor), Jon Wybar and Bernie Laber of Revolution Recovery (owner of site property and adjacent recycling facility), and Hagai Nassau and Kelly MacDonald of Skeo (EPA FYR contractor). The purpose of the inspection was to assess the protectiveness of the remedy.

The Site was fenced with a 6-foot chain-link fence topped with barbed wire. Access to the Site is restricted by the gate of the adjacent scrapyard, Revolution Recovery. There were “no trespassing” signs on the fence that also identify the area as a Superfund site. Participants began the inspection at the northwestern part of the Site in the courtyard area. The cap in this area was recently covered with additional gravel and is used by Revolution Recovery for truck and container storage. Participants also inspected Building 7. The building is vacant, but Revolution Recovery has expressed interest in reusing the building for its operations. EPA is currently reviewing a work plan submitted by Revolution Recovery proposing raising the floor of the building by adding crushed stone and laying a concrete slab.

The southern cap area was well vegetated with tall grasses. There were some areas of ponding on the cap, due to rain the day before the inspection. Site monitoring wells were visible; however, two wells were not properly secured, including one with a broken cap (see photos in Appendix F). Participants also inspected the site fence and sheet pile wall on the southern part of the Site along the Delaware River. The fence had fish advisory signs facing the river; however, a downed sign was identified that warrants repair. Rip rap was present just beyond the sheet pile wall. Participants also inspected the sheet pile wall repair, which appeared to be in good condition. Additional rip rap was present in front of the repaired area to provide added protection. Participants observed the metal covers of the LNAPL trench and did not inspect the subaqueous caps as part of this FYR. The PRP Group noted that the buoys normally marking the subaqueous caps were not present, as they had been removed for winter to avoid ice damage. The site inspection checklist and photos are provided in Appendices E and F, respectively.

Skeo staff contacted the site repository, the Northeast Regional Library, on 3/20/2018, and no site-related documents were available.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes. The Selected Remedy appears to be functioning as intended. Soil contamination in the southern and courtyard areas was excavated, disposed of off-site, or consolidated on-site and capped, thereby preventing exposure to contaminated materials. The southern area cap is well vegetated, and the courtyard area cap is covered with gravel. O&M of the capped areas is performed by the PRP Group in accordance with the O&M Plan.

The sheet pile wall is in good condition following a 2016 repair and effectively prevents erosion of fill materials into the river. Monitoring of the LNAPL trench is being performed in accordance with the selected remedy and no measurable LNAPL was observed during this FYR period. The Building 7 epoxy coating is in good condition and any future modifications to Building 7 by Revolution Recovery will be performed in accordance with EPA-approved work plans. Near-shore sediments were excavated and backfilled, and marine mattresses were installed. These subaqueous caps were inspected in 2017 and appeared to be in good condition and intact. The Site is fenced and has “no trespassing” and fish consumption warning signage.

Groundwater monitoring data show that source control is effective, as there are not significant negative impacts to site groundwater. As approved by EPA, the PRPs conducted sediment sampling in 2015 and 2016 in lieu of bioaccumulation studies. Sediment contaminant concentrations were generally below the cleanup level.

Institutional controls are in place on the upland area of the Site and include restrictions on residential or agricultural uses, excavation or disturbance of the soils, and groundwater use. EPA issued a 2014 ESD to also require institutional controls to: 1) specifically protect upland remedial systems, including the soil cover, monitoring wells, epoxy coating on the floor of Building 7, LNAPL trench, sheet pile wall, and site security measures, and 2) prohibit activities that would interfere with the Delaware River's remedial systems, including subaqueous caps, "danger" buoys, bank armoring and the sheet pile wall. These additional institutional controls are not yet in place. A public education program is required by the Revised Remedial Plan; however, these educational meetings have been suspended due to lack of interest.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives used at the time of the remedy selection still valid?

Yes. The sediment PCB cleanup level of 1 mg/kg is based on EPA's 1990 *Guidance on Remedial Actions for Superfund Sites with PCB Contamination*. This cleanup goal remains protective and consistent with current EPA policy.

A screening-level risk evaluation was conducted to evaluate the protectiveness of the soil cleanup levels. The evaluation compared the cleanup levels to EPA's current composite worker Regional Screening Levels (RSLs) to estimate the corresponding carcinogenic risk and noncarcinogenic hazard quotients (HQ) (Table 7).⁶ As shown in Table 7, the soil cleanup goals are within EPA's acceptable carcinogenic risk range of 1×10^{-4} to 1×10^{-6} and noncancer HQs do not exist for PCBs. Therefore, the cleanup levels remain valid for non-residential land use.

Table 7: Industrial Screening-level Risk Evaluation of Soil Cleanup Goals

Area	Contaminant	Cleanup Goal (mg/kg)	Composite Worker RSL ^a (mg/kg)		Cancer Risk ^b	Noncancer HQ
			1×10^{-6}	HQ = 1.0		
Southern area	PCBs	25	0.94	N/A	2.7×10^{-5}	N/A
Courtyard area	PCBs	10	0.94	N/A	1.1×10^{-5}	N/A
Notes: a. Current EPA RSLs are available at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables (accessed 5/24/2018). b. The carcinogenic risk was calculated using the following equation, based on the fact that RSLs are derived based on 1×10^{-6} risk: $\text{Carcinogenic risk} = (\text{Cleanup goal} \div \text{carcinogenic-based RSL}) \times 10^{-6}$ N/A = no RSL available or unable to calculate risk						

Dioxin sampling was performed during the RI/FS and was determined to present an unacceptable risk onsite and was detected at the adjacent St. Vincent's property off-site. Since the RI/FS was performed, EPA has issued a non-cancer toxicity value for dioxin. EPA's dioxin reassessment has been developed and undergone review for many years, with the participation of scientific experts in EPA and other federal agencies, as well as scientific experts in the private sector and academia. The Agency followed current guidelines and incorporated the latest data and physiological/biochemical research into the reassessment. On February 17, 2012, EPA released the final human health non-cancer dioxin reassessment, publishing an oral non-cancer toxicity value, or reference dose (RfD), of 7×10^{-10} mg/kg-day for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in EPA's Integrated Risk Information System (IRIS). The dioxin cancer reassessment will follow thereafter. The dioxin RfD was approved for immediate use at Superfund sites to ensure protection of human health.

⁶ Composite worker RSL used because an institutional control is in place that prohibits residential land use.

As part of this FYR, EPA evaluated the dioxin results using the revised toxicity factors and determined that the Selected Remedy addressed any unacceptable risk due to dioxin on-site via excavation and capping. The maximum dioxin concentrations detected offsite were below current dioxin cleanup levels.

Due to the presence of SVOCs in groundwater and the planned reuse of Building 7 and the rest of the Site, a screening-level vapor intrusion risk evaluation was conducted to analyze this potential exposure pathway and determine if it poses a future concern if occupiable structures were to be used or built on site (Appendix H). The screening-level risk evaluation concluded that current groundwater concentrations do not present unacceptable risk from potential vapor intrusion. Concentrations of naphthalene appear to be declining, so it is unlikely that this pathway would pose future concerns.

The exposure assumptions used at the time of remedy selection are still valid. There is currently industrial reuse on the courtyard area of the property, and there are plans for other uses, such as expanding Revolution Recovery's operations to Building 7 and developing a public recreational trail along the river. These current and future uses are in line with the commercial/industrial land use allowed by the institutional control, and with proper planning will not affect protectiveness. While the recreational trail is not commercial use, exposure for this scenario is not as frequent as commercial use and therefore is not expected to present an incompatible use of the Site.

The ROD and Revised Remedial Plan did not select formal remedial action objectives; however, the intent of the remedy was to prevent exposure to contaminated soil, groundwater and sediment and to prevent the migration of contaminants to the Delaware River. These objectives remain valid.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No other information has come to light that could call into question the protectiveness of the remedy.

VI. ISSUES/RECOMMENDATIONS

Issues and Recommendations Identified in the FYR:

OU(s): Sitewide	Issue Category: Institutional Controls			
	Issue: Institutional controls required by the 2014 ESD are not in place.			
	Recommendation: Implement institutional controls required by the 2014 ESD.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	PRP	EPA	9/30/2019

OTHER FINDINGS

Several additional recommendations were identified during the FYR. These recommendations do not affect current and/or future protectiveness.

- The PRP conducted one meeting with the yacht club to inform them of potential hazards posed to boaters and other recreational users of the Delaware River by the marine mattresses; however, no further meetings have been held due to lack of interest from the yacht club. Consider resuming yacht club educational meetings if needed in the future.

- Update repository with site documents.
- Repair unsecured monitoring wells.
- Repair downed fish advisory signage.

VII. PROTECTIVENESS STATEMENT

Sitewide Protectiveness Statement	
<i>Protectiveness Determination:</i> Short-term Protective	
<i>Protectiveness Statement:</i> The remedy at the Site currently protects human health and the environment because contaminated soil and sediment were excavated and/or capped, Building 7 was sealed with epoxy, institutional controls are in place for the upland property, and long-term monitoring is being performed. For the remedy to be protective over the long term, the institutional controls required by the 2014 ESD must be implemented.	

VIII. NEXT REVIEW

The next FYR Report for the Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

2013 Long-Term Monitoring Annual Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by ENVIRON International Corporation for Cottman Avenue PRP Group. March 2014.

2014 Long-Term Monitoring Annual Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by ENVIRON International Corporation for Cottman Avenue PRP Group. March 2015.

2015 Long-Term Monitoring Annual Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by Ramboll Environ US Corporation for Cottman Avenue PRP Group. March 2016.

2016 Long-Term Monitoring Annual Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by Ramboll Environ US Corporation for Cottman Avenue PRP Group. February 2017.

2017 Long-Term Monitoring Annual Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by Ramboll US Corporation for Cottman Avenue PRP Group. March 2018.

Consent Decree for Settlement of Claims Involving Defendant Irvin G. Schorsch, Jr., Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by the Eastern District Court of Pennsylvania. August 2005.

Consent Decree for Settlement of Claims Involving Defendant John B. Schorsch, Jr., Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by the Eastern District Court of Pennsylvania. August 2005.

Consent Decree for Settlement of Claims Involving the Utility Group, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by the Eastern District Court of Pennsylvania. August 2005.

Explanation of Significant Differences No. 1, Metal Bank Superfund Site, Philadelphia, Pennsylvania. EPA Region 3. September 2000.

Explanation of Significant Differences No. 2, Metal Bank Superfund Site, Philadelphia, Pennsylvania. EPA Region 3. December 2000.

Final Draft Feasibility Study, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by EARTH TECH for Cottman Avenue PRP Group. October 1994.

Final Remedial Investigation, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by EARTH TECH for Cottman Avenue PRP Group. October 14, 1994.

First Five-Year Review Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. EPA Region 3. August 29, 2013.

Long Term Monitoring Final Work Plan, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by ARCADIS US Inc. for Cottman Avenue PRP Group. Revised April 2011.

Preliminary Close Out Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. EPA Region 3. March 2010.

Record of Decision, Metal Bank Superfund Site, Philadelphia, Pennsylvania. EPA Region 3. December 31, 1997.

Remedial Action Report/Engineer's Report, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by Malcolm Pirnie, Inc. and ENVIRON Inc. March 2013.

Revised Remedial Plan, Metal Bank Superfund Site, Philadelphia, Pennsylvania. EPA Region 3. June 29, 2004.

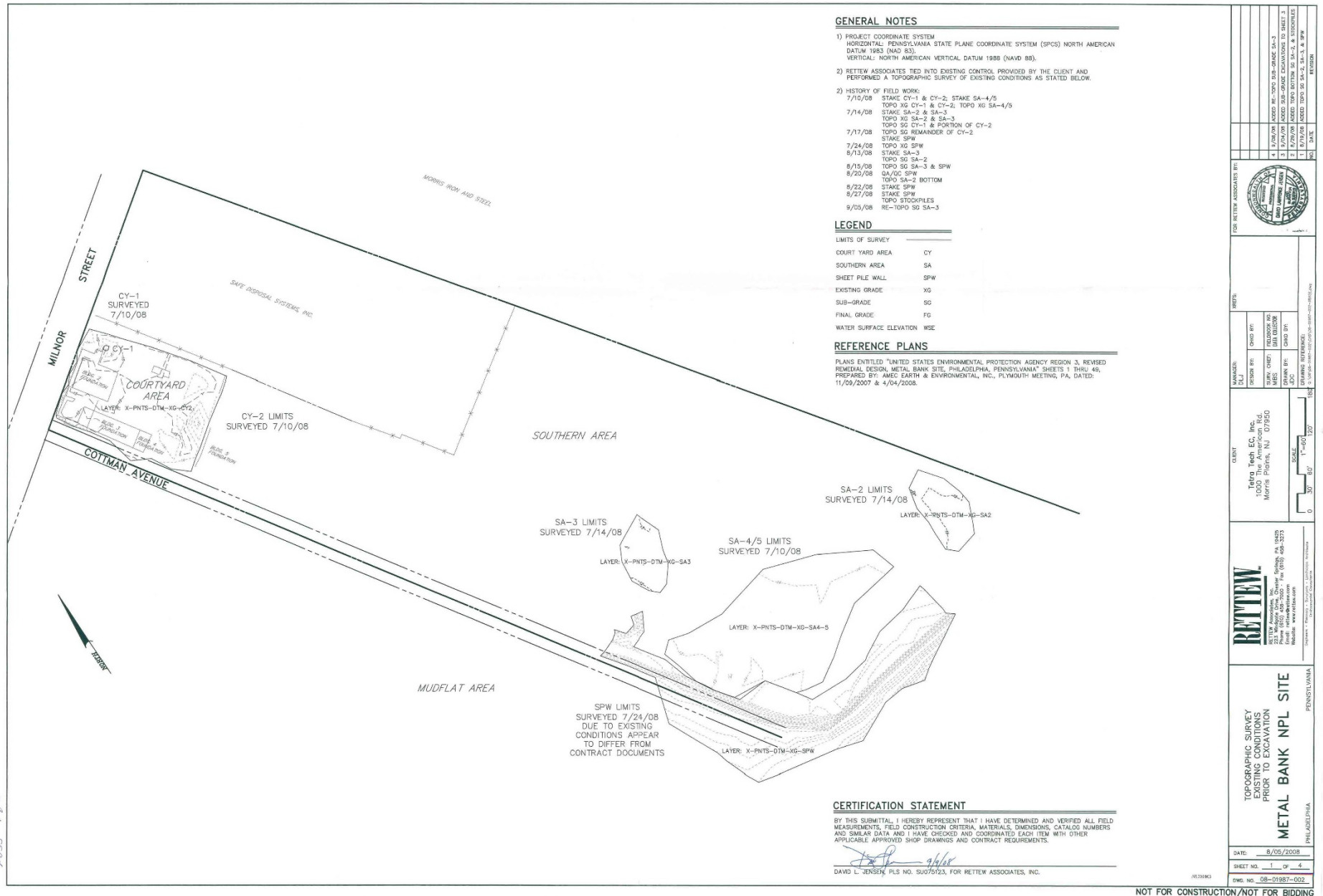
Supplemental Sediment Investigation, Metal Bank Superfund Site, Philadelphia, Pennsylvania. Prepared by Ramboll Environ US Corporation for Cottman Avenue PRP Group. December 2017.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
Metal Bank conducted transformer salvage and recycling operations at the Site	1962-1973
U.S. Coast Guard documented releases of oil to the Delaware River and traced oil slicks back to the Site	August 1972
EPA detected PCBs at high concentrations in original oil samples taken by U.S. Coast Guard	1977
EPA completed the Site's Preliminary Assessment/Site Investigation	February 1, 1980
EPA proposed the Site to the NPL	December 30, 1982
EPA finalized the Site on the NPL	September 8, 1983
Metal Bank installed and began operating a groundwater/oil recovery and treatment system to recover oil under a stipulation between the United States and Metal Bank and approved by the Eastern Pennsylvania District Court	December 13, 1983
EPA identified additional PRPs and notified them of their potential liability under CERCLA	December 1987
Metal Bank shut down the groundwater/oil recovery and treatment system and maintained that all feasible oil had been recovered	1989
EPA entered into an Administrative Order on Consent (AOC) with the utility PRP group to conduct a remedial investigation/feasibility study (RI/FS) at the Site	June 1991
The PRPs completed the RI/FS and EPA issued the ROD for the Site	December 31, 1997
EPA entered into an AOC with the utility PRP group to conduct the remedial design	1998
EPA issued the first ESD to allow for a different placement of the sheet pile wall, clarify the performance standards for sediment, eliminate the requirement of a "cofferdam," permit use of turbidity curtains during sediment excavation, and permit use of geotextile to prevent the upward migration of contaminated soil during flooding conditions, instead of soil monitoring	September 27, 2000
EPA issued the second ESD to allow for confirmation sampling either before or after hot spot excavation, change the location for the oil collection system, add performance standards during subsurface soil excavation, limit the location of the sheet pile wall to the southern corner of the Site, and require additional erosion control measures	December 15, 2000
Current owner of the upland portion of the Site implemented institutional controls in the form of a Notice of Hazardous Substance Disclosure and Declaration of Restrictions with the city of Philadelphia	September 2002
EPA approved the remedial design	January 21, 2003
EPA entered into a consent decree with the utility PRP group, agreeing on a revised remedy, which included the Revised Remedial Plan	March 14, 2006
EPA approved the revised remedial design	February 2008
Utility PRP group began the remedial action at the Site	July 7, 2008
EPA, Pennsylvania Department of Environmental Protection (PADEP) and the utility PRP group conducted a final inspection and determined that the remedy had been constructed in accordance with the revised remedy	February 24, 2010
EPA issued the Preliminary Close Out Report for the Site, indicating construction completion at the Site	March 23, 2010
EPA, PADEP and the utility PRP group inspected the vegetative cover on the cap and determined that it was properly established	May 23, 2012
Utility PRP group submitted a Remedial Action completion report to EPA	March 2013
EPA completed the Site's first FYR	August 29, 2013
EPA issued the third ESD to require additional institutional controls	April 2, 2014

APPENDIX C – HISTORICAL SITE MAP



APPENDIX D – PRESS NOTICE

EPA REVIEWS CLEANUP Metal Bank Superfund Site

The U.S. Environmental Agency is reviewing the cleanup that was conducted at the Metal Bank Superfund Site located in northeast Philadelphia. EPA inspects sites regularly to ensure that cleanups conducted remain protective of public health and the environment. EPA's previous review of the site in 2013 determined that the remedy was working as designed, and additional sampling should be performed to ensure long-term protectiveness. Findings from the current review that is being conducted will be available August 2018.

For questions or to provide site-related information for the review:

Contact: Larry Johnson, *Community Involvement Coordinator*

Phone: 215-814-3239

Email: johnson.larry-c@epa.gov

To access detailed site information including the Review Report once finalized: <https://www.epa.gov/superfund/metalbank>

Protecting human health and the environment

APPENDIX E – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST			
I. SITE INFORMATION			
Site Name: Metal Bank		Date of Inspection: <u>2/5/18</u>	
Location and Region: Philadelphia, PA; Region 3		EPA ID: PAD046557096	
Agency, Office or Company Leading the Five-Year Review: <u>EPA</u>		Weather/Temperature: <u>sunny, 35 degrees</u>	
Remedy Includes: (Check all that apply) ☒ Landfill cover/containment ☒ Access controls ☒ Institutional controls ☐ Groundwater pump and treatment ☐ Surface water collection and treatment ☒ Other: <u>epoxy of Building 7 floor; subaqueous caps; sheet-pile wall</u> ☐ Monitored natural attenuation ☐ Groundwater containment ☐ Vertical barrier walls			
Attachments: ☒ Inspection team roster attached ☐ Site map attached			
II. INTERVIEWS (check all that apply)			
1. O&M Site Manager Name _____ Title _____ Date _____ Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____ Problems, suggestions ☐ Report attached: _____			
2. O&M Staff Name _____ Title _____ Date _____ Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____ Problems/suggestions ☐ Report attached: _____			
3. Local Regulatory Authorities and Response Agencies (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply. Agency _____ Contact _____ Name _____ Title _____ Date _____ Phone No. _____ Problems/suggestions ☐ Report attached: _____ Agency _____ Contact _____ Name _____ Title _____ Date _____ Phone No. _____ Problems/suggestions ☐ Report attached: _____ Agency _____ Contact _____ Name _____ Title _____ Date _____ Phone No. _____ Problems/suggestions ☐ Report attached: _____ Agency _____ Contact _____ Name _____ Title _____ Date _____ Phone No. _____ Problems/suggestions ☐ Report attached: _____			

Name	Title	Date	Phone No.
Problems/suggestions ☐ Report attached: _____			
4. Other Interviews (optional) ☐ Report attached: _____			
III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)			
1. O&M Documents			
☐ O&M manual	☐ Readily available	☐ Up to date	☒ N/A
☐ As-built drawings	☐ Readily available	☐ Up to date	☒ N/A
☐ Maintenance logs	☐ Readily available	☐ Up to date	☒ N/A
Remarks: _____			
2. Site-Specific Health and Safety Plan			
☐ Contingency plan/emergency response plan	☐ Readily available	☐ Up to date	☒ N/A
Remarks: _____			
3. O&M and OSHA Training Records			
☐ Readily available	☐ Up to date	☒ N/A	
Remarks: _____			
4. Permits and Service Agreements			
☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A
☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A
Remarks: _____			
5. Gas Generation Records			
☐ Readily available	☐ Up to date	☒ N/A	
Remarks: _____			
6. Settlement Monument Records			
☐ Readily available	☐ Up to date	☒ N/A	
Remarks: _____			
7. Groundwater Monitoring Records			
☐ Readily available	☐ Up to date	☒ N/A	
Remarks: _____			
8. Leachate Extraction Records			
☐ Readily available	☐ Up to date	☒ N/A	
Remarks: _____			
9. Discharge Compliance Records			
☐ Air	☐ Readily available	☐ Up to date	☒ N/A
☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A
Remarks: _____			

10.	Daily Access/Security Logs	☐ Readily available	☐ Up to date	☒ N/A																																																								
Remarks: _____																																																												
IV. O&M COSTS																																																												
1.	O&M Organization ☐ State in-house ☐ PRP in-house ☐ Federal facility in-house ☐ _____	☐ Contractor for state ☒ Contractor for PRP ☐ Contractor for Federal facility																																																										
2.	O&M Cost Records ☐ Readily available ☐ Up to date ☐ Funding mechanism/agreement in place ☐ Unavailable Original O&M cost estimate: _____ ☐ Breakdown attached Total annual cost by year for review period if available <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">From: _____</td> <td style="width: 25%;">To: _____</td> <td style="width: 25%;">_____</td> <td style="width: 25%; text-align: right;">☐ Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr><td colspan="4"> </td></tr> <tr> <td>From: _____</td> <td>To: _____</td> <td>_____</td> <td style="text-align: right;">☐ Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr><td colspan="4"> </td></tr> <tr> <td>From: _____</td> <td>To: _____</td> <td>_____</td> <td style="text-align: right;">☐ Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr><td colspan="4"> </td></tr> <tr> <td>From: _____</td> <td>To: _____</td> <td>_____</td> <td style="text-align: right;">☐ Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr><td colspan="4"> </td></tr> <tr> <td>From: _____</td> <td>To: _____</td> <td>_____</td> <td style="text-align: right;">☐ Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> </table>				From: _____	To: _____	_____	☐ Breakdown attached	Date	Date	Total cost						From: _____	To: _____	_____	☐ Breakdown attached	Date	Date	Total cost						From: _____	To: _____	_____	☐ Breakdown attached	Date	Date	Total cost						From: _____	To: _____	_____	☐ Breakdown attached	Date	Date	Total cost						From: _____	To: _____	_____	☐ Breakdown attached	Date	Date	Total cost	
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3.	Unanticipated or Unusually High O&M Costs during Review Period Describe costs and reasons: _____																																																											
V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A																																																												
A. Fencing																																																												
1.	Fencing Damaged ☐ Location shown on site map ☒ Gates secured ☐ N/A Remarks: <u>Access to the Site is restricted by gate of adjacent Revolution Recovery property.</u>																																																											
B. Other Access Restrictions																																																												
1.	Signs and Other Security Measures ☐ Location shown on site map ☐ N/A Remarks: <u>"No trespassing," Superfund and fish consumption signs present on site. One sign had fallen and warrants repair.</u>																																																											

C. Institutional Controls (ICs)			
1. Implementation and Enforcement Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A Type of monitoring (e.g., self-reporting, drive by): _____ Frequency: _____ Responsible party/agency: _____ Contact _____ Name Title Date Phone no. Reporting is up to date ☐ Yes ☐ No ☒ N/A Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A Specific requirements in deed or decision documents have been met ☐ Yes ☒ No ☐ N/A Violations have been reported ☐ Yes ☐ No ☒ N/A Other problems or suggestions: ☐ Report attached			
2. Adequacy ☐ ICs are adequate ☒ ICs are inadequate ☐ N/A Remarks: <u>ICs needed for subaqueous caps and additional ICs needed for upland area.</u>			
D. General			
1. Vandalism/Trespassing ☐ Location shown on site map ☒ No vandalism evident Remarks: _____			
2. Land Use Changes On Site ☐ N/A Remarks: <u>Courtyard area is now used for truck parking and container storage; Revolution Recovery plans to reuse Building 7 and potentially develop on top of the southern area cap. The city of Philadelphia plans to add a recreational trail on the riverfront part of the Site.</u>			
3. Land Use Changes Off Site ☐ N/A Remarks: <u>Residential redevelopment planned for former St. Vincent's property.</u>			
VI. GENERAL SITE CONDITIONS			
A. Roads ☐ Applicable ☒ N/A			
1. Roads Damaged ☐ Location shown on site map ☐ Roads adequate ☐ N/A Remarks: _____			
B. Other Site Conditions			
Remarks: _____			
VII. LANDFILL COVERS ☒ Applicable ☐ N/A			
A. Landfill Surface			
1. Settlement (low spots) ☐ Location shown on site map ☒ Settlement not evident Area extent: _____ Depth: _____ Remarks: _____			
2. Cracks ☐ Location shown on site map ☒ Cracking not evident			

	Lengths: _____	Widths: _____	Depths: _____
	Remarks: _____		
3.	Erosion Area extent: _____ Remarks: _____	☐ Location shown on site map	☒ Erosion not evident Depth: _____
4.	Holes Area extent: _____ Remarks: _____	☐ Location shown on site map	☒ Holes not evident Depth: _____
5.	Vegetative Cover ☒ No signs of stress Remarks: _____	☒ Grass ☐ Trees/shrubs (indicate size and locations on a diagram)	☒ Cover properly established
6.	Alternative Cover (e.g., armored rock, concrete) Remarks: _____	☒ N/A	
7.	Bulges Area extent: _____ Remarks: _____	☐ Location shown on site map	☒ Bulges not evident Height: _____
8.	Wet Areas/Water Damage ☐ Wet areas ☒ Ponding ☐ Seeps ☐ Soft subgrade Remarks: _____	☐ Wet areas/water damage not evident ☐ Location shown on site map ☐ Location shown on site map ☐ Location shown on site map ☐ Location shown on site map	Area extent: _____ Area extent: <u>small areas of ponding in tire tracks on cap</u> Area extent: _____ Area extent: _____
9.	Slope Instability ☒ No evidence of slope instability Area extent: _____ Remarks: _____	☐ Slides	☐ Location shown on site map
B. Benches ☐ Applicable ☒ N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)			
1.	Flows Bypass Bench Remarks: _____	☐ Location shown on site map	☐ N/A or okay
2.	Bench Breached Remarks: _____	☐ Location shown on site map	☐ N/A or okay

3.	Bench Overtopped	☐ Location shown on site map	☐ N/A or okay
Remarks: _____			
C. Letdown Channels ☐ Applicable ☒ N/A (Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)			
1.	Settlement (Low spots)	☐ Location shown on site map	☐ No evidence of settlement
Area extent: _____		Depth: _____	
Remarks: _____			
2.	Material Degradation	☐ Location shown on site map	☐ No evidence of degradation
Material type: _____		Area extent: _____	
Remarks: _____			
3.	Erosion	☐ Location shown on site map	☐ No evidence of erosion
Area extent: _____		Depth: _____	
Remarks: _____			
4.	Undercutting	☐ Location shown on site map	☐ No evidence of undercutting
Area extent: _____		Depth: _____	
Remarks: _____			
5.	Obstructions	Type: _____	☐ No obstructions
☐ Location shown on site map		Area extent: _____	
Size: _____			
Remarks: _____			
6.	Excessive Vegetative Growth	Type: _____	
☐ No evidence of excessive growth			
☐ Vegetation in channels does not obstruct flow			
☐ Location shown on site map		Area extent: _____	
Remarks: _____			
D. Cover Penetrations ☒ Applicable ☐ N/A			
1.	Gas Vents	☐ Active	☐ Passive
☐ Properly secured/locked		☐ Functioning	☐ Routinely sampled
☐ Evidence of leakage at penetration		☐ Needs maintenance	☐ Good condition
			☒ N/A
Remarks: _____			
2.	Gas Monitoring Probes		
☐ Properly secured/locked		☐ Functioning	☐ Routinely sampled
☐ Evidence of leakage at penetration		☐ Needs maintenance	☐ Good condition
			☒ N/A
Remarks: _____			

3.	Monitoring Wells (within surface area of landfill)	☐ Properly secured/locked	☐ Functioning	☐ Routinely sampled	☐ Good condition
		☐ Evidence of leakage at penetration	☒ Needs maintenance	☐ N/A	
Remarks: <u>two wells were not properly secured</u>					
4.	Extraction Wells Leachate	☐ Properly secured/locked	☐ Functioning	☐ Routinely sampled	☐ Good condition
		☐ Evidence of leakage at penetration	☐ Needs maintenance	☒ N/A	
Remarks: _____					
5.	Settlement Monuments	☐ Located	☐ Routinely surveyed	☒ N/A	
Remarks: _____					
E. Gas Collection and Treatment		☐ Applicable	☒ N/A		
1.	Gas Treatment Facilities	☐ Flaring	☐ Thermal destruction	☐ Collection for reuse	
		☐ Good condition	☐ Needs maintenance		
Remarks: _____					
2.	Gas Collection Wells, Manifolds and Piping	☐ Good condition	☐ Needs maintenance		
Remarks: _____					
3.	Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings)	☐ Good condition	☐ Needs maintenance	☐ N/A	
Remarks: _____					
F. Cover Drainage Layer		☒ Applicable	☐ N/A		
1.	Outlet Pipes Inspected	☐ Functioning	☒ N/A		
Remarks: _____					
2.	Outlet Rock Inspected	☒ Functioning	☐ N/A		
Remarks: _____					
G. Detention/Sedimentation Ponds		☐ Applicable	☒ N/A		
1.	Siltation	Area extent: _____	Depth: _____	☐ N/A	
		☐ Siltation not evident			
Remarks: _____					
2.	Erosion	Area extent: _____	Depth: _____		
		☐ Erosion not evident			
Remarks: _____					
3.	Outlet Works	☐ Functioning	☐ N/A		
Remarks: _____					

4.	Dam	☐ Functioning	☐ N/A
Remarks: _____			
H. Retaining Walls		☒ Applicable	☐ N/A
1.	Deformations	☐ Location shown on site map	☒ Deformation not evident
Horizontal displacement: _____		Vertical displacement: _____	
Rotational displacement: _____			
Remarks: <u>Sheet pile wall monitoring detected signs of movement during a 2012 site inspection. Subsequent evaluations determined that one of the wall's walers had failed and warranted repair; this repair occurred between May and July 2016. No significant outward movement has been noted since the repair.</u>			
2.	Degradation	☐ Location shown on site map	☒ Degradation not evident
Remarks: _____			
I. Perimeter Ditches/Off-Site Discharge		☐ Applicable	☒ N/A
1.	Siltation	☐ Location shown on site map	☐ Siltation not evident
Area extent: _____		Depth: _____	
Remarks: _____			
2.	Vegetative Growth	☐ Location shown on site map	☐ N/A
☐ Vegetation does not impede flow			
Area extent: _____		Type: _____	
Remarks: _____			
3.	Erosion	☐ Location shown on site map	☐ Erosion not evident
Area extent: _____		Depth: _____	
Remarks: _____			
4.	Discharge Structure	☐ Functioning	☐ N/A
Remarks: _____			
VIII. VERTICAL BARRIER WALLS		☐ Applicable	☒ N/A
1.	Settlement	☐ Location shown on site map	☐ Settlement not evident
Area extent: _____		Depth: _____	
Remarks: _____			
2.	Performance Monitoring	Type of monitoring: _____	
☐ Performance not monitored			
Frequency: _____		☐ Evidence of breaching	
Head differential: _____			
Remarks: _____			

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A			
A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A			
1. Pumps, Wellhead Plumbing and Electrical ☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A Remarks: _____			
2. Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances ☐ Good condition ☐ Needs maintenance Remarks: _____			
3. Spare Parts and Equipment ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided Remarks: _____			
B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A			
1. Collection Structures, Pumps and Electrical ☐ Good condition ☐ Needs maintenance Remarks: _____			
2. Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances ☐ Good condition ☐ Needs maintenance Remarks: _____			
3. Spare Parts and Equipment ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided Remarks: _____			
C. Treatment System ☐ Applicable ☐ N/A			
1. Treatment Train (check components that apply) ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation ☐ Air stripping ☐ Carbon adsorbers ☐ Filters: _____ ☐ Additive (e.g., chelation agent, flocculent): _____ ☐ Others: _____ ☐ Good condition ☐ Needs maintenance ☐ Sampling ports properly marked and functional ☐ Sampling/maintenance log displayed and up to date ☐ Equipment properly identified ☐ Quantity of groundwater treated annually: _____ ☐ Quantity of surface water treated annually: _____ Remarks: _____			

2.	Electrical Enclosures and Panels (properly rated and functional)	☐ N/A ☐ Good condition ☐ Needs maintenance
Remarks: _____		
3.	Tanks, Vaults, Storage Vessels	☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance
Remarks: _____		
4.	Discharge Structure and Appurtenances	☐ N/A ☐ Good condition ☐ Needs maintenance
Remarks: _____		
5.	Treatment Building(s)	☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair ☐ Chemicals and equipment properly stored
Remarks: _____		
6.	Monitoring Wells (pump and treatment remedy)	☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition ☐ All required wells located ☐ Needs maintenance ☐ N/A
Remarks: _____		
D. Monitoring Data		
1.	Monitoring Data	☐ Is routinely submitted on time ☐ Is of acceptable quality
2.	Monitoring Data Suggests:	☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining
E. Monitored Natural Attenuation		
1.	Monitoring Wells (natural attenuation remedy)	☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition ☐ All required wells located ☐ Needs maintenance ☐ N/A
Remarks: _____		
X. OTHER REMEDIES		
If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.		
XI. OVERALL OBSERVATIONS		
A.	Implementation of the Remedy	
Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions). <u>The site remedy of excavating soil and capping on site, installing a sheet pile wall, and capping sediment contamination appears to be effective. Institutional controls on the capped sediment and on upland remedial features are needed.</u>		

B. Adequacy of O&M	Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. <u>O&M appears adequate. The Site's upland caps are well vegetated or covered with gravel, and the sheet pile wall is in good condition. The subaqueous caps are monitored. Sediment sampling verified the protectiveness of the remedy for biota in the river.</u>
C. Early Indicators of Potential Remedy Problems	Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future. <u>N/A</u>
D. Opportunities for Optimization	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. <u>N/A</u>

APPENDIX F – SITE PHOTOS

Sheet Pile Wall Repair – May to July 2016



Photo 1: Pre-mobilization site conditions. View of future equipment storage and staging areas, facing southeast.



Photo 2: Site access road, equipment staging and R6 material stockpile area, facing west.

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RAMBOLL ENVIRON

Site Photographs

Metal Bank NPL Site – Sheetpile Repair
7301 Milnor St., Philadelphia, PA 19136
May – July, 2016

Page 1 of 10



Photo 3: R6 material stockpile on top of crushed stone pad at end of site access road, facing northeast.



Photo 4: R6 material placement via long-reach excavator, facing west.



Photo 5: R6 material placement via crane equipped with grapple attachment, facing northwest.



Photo 6: R6 material placement via crane, assisted by CEI spotter, facing east.



Photo 7: Extent of R6 material placement along southern sheetpile wall (Zone 1), facing east.



Photo 8: Site surveyor conducting upland survey of sheetpile wall targets, facing southwest.



Photo 9: Site surveyor conducting material placement survey, facing west.



Photo 10: Dock welders prepping for removal of old water section, facing northeast.



Photo 11: Dock welders positioning new waler section already prepared for installation, facing northeast.



Photo 12: Dock welders continuing final fabrication and installation of HP8 segments, facing north.



Photo 13: View of repaired water section, HP8 segments, tie-rod extensions, and pack-outs, facing east.



Photo 14: New HP8 segments along sheetpile wall, facing west.



Photo 15: View of completed water repair area and HP8 segments, facing northwest.



Photo 16: Contractors performing tie-rod stress tests, facing southeast.



Photo 17: Installation of perimeter fencing along sheetpile wall, facing west.



Photo 18: View of completed perimeter fence, facing northeast.



Photo 19: Site restoration; removal of Reese mats which formed the site access road, facing east.



Photo 20: Site restoration; completed revegetation efforts (seeding) across disturbed areas of site, facing east.



Courtyard area (Building 7 in background).



Interior of Building 7.



Southern area (Building 7 and off-site Revolution Recovery in background).



Southern area.



Sheet pile wall.



LNAPL trench sump cover.



Double-locked monitoring well.



Monitoring well with broken lid.

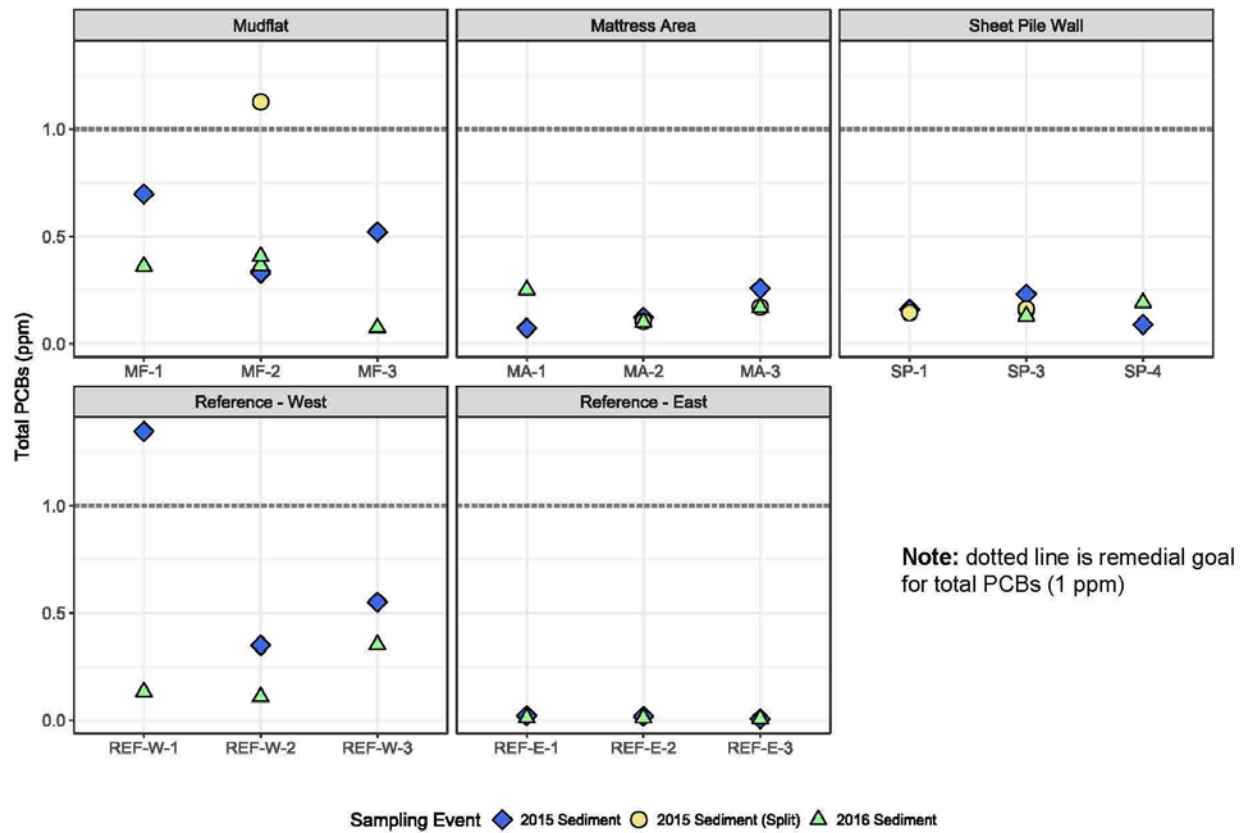


Site fence.



Site fence with “no trespassing” sign.

APPENDIX G – SUPPORTING GROUNDWATER, SEDIMENT, POREWATER AND LNAPL TRENCH DATA FROM RAMBOLL ENVIRON



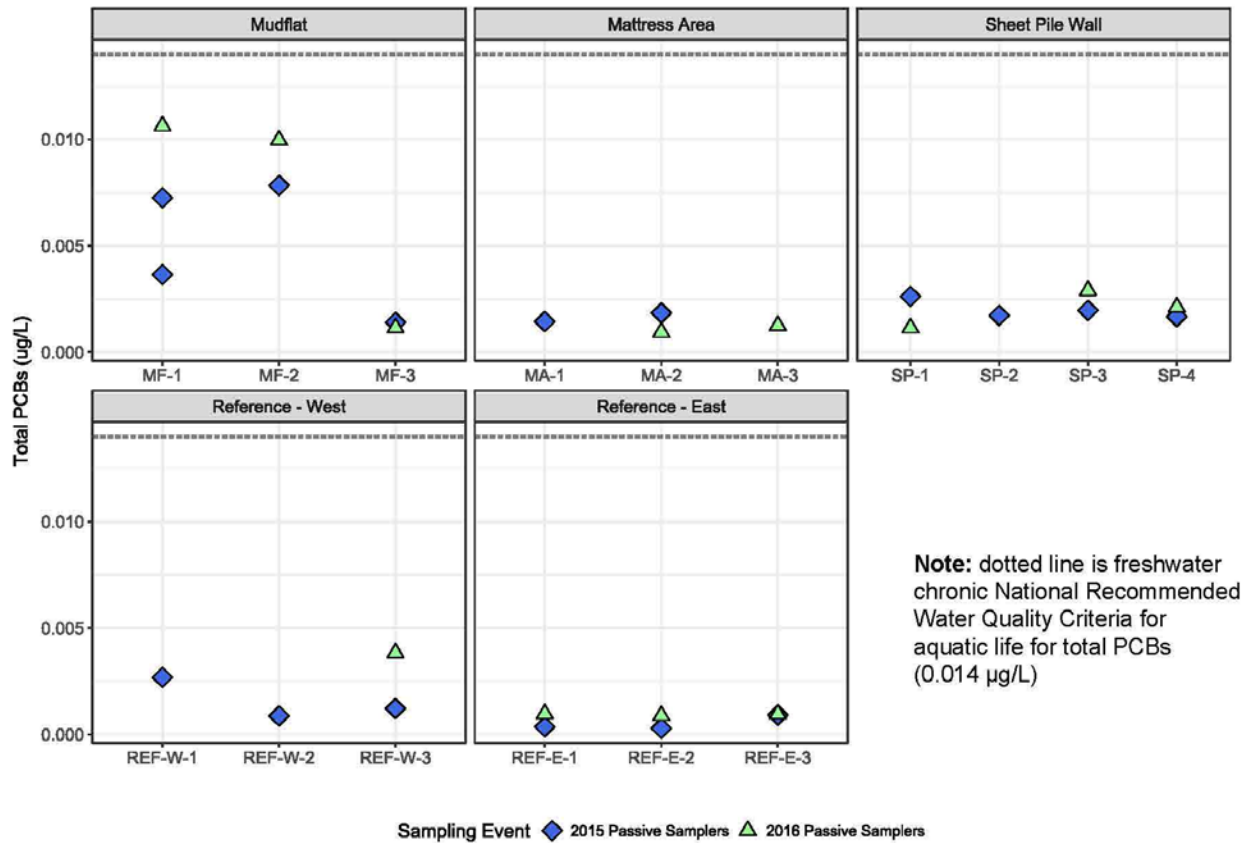


Table 7-1. Sediment Summary Statistics (Round 1 and Round 2)
Metal Bank Cottman Avenue Superfund Site, Philadelphia, PA

Site or Reference	Area	Sample Count	Total PCBs (ppm)			
			Minimum	Median	Average	Maximum
Combined (2015 and 2016)						
Site	All	17	0.073	0.19	0.25	0.7
Site	Mattress Area	6	0.073	0.15	0.16	0.26
Site	Mudflat	6	0.074	0.38	0.4	0.7
Site	Sheet Pile Wall	5	0.09	0.16	0.16	0.23
Reference	All	12	0.0067	0.066	0.24	1.3
Reference	Reference - East	6	0.0067	0.011	0.013	0.022
Reference	Reference - West	6	0.11	0.35	0.47	1.3
Round 1 (2015)						
Site	All	9	0.073	0.23	0.28	0.7
Site	Mattress Area	3	0.073	0.12	0.15	0.26
Site	Mudflat	3	0.34	0.52	0.52	0.7
Site	Sheet Pile Wall	3	0.09	0.16	0.16	0.23
Reference	All	6	0.0067	0.19	0.38	1.3
Reference	Reference - East	3	0.0067	0.019	0.016	0.022
Reference	Reference - West	3	0.35	0.55	0.75	1.3
Round 2 (2016)						
Site	All	8	0.074	0.18	0.21	0.41
Site	Mattress Area	3	0.1	0.17	0.17	0.25
Site	Mudflat	3	0.074	0.36	0.28	0.41
Site	Sheet Pile Wall	2	0.13	0.16	0.16	0.19
Reference	All	6	0.0072	0.061	0.1	0.35
Reference	Reference - East	3	0.0072	0.011	0.0099	0.012
Reference	Reference - West	3	0.11	0.13	0.2	0.35

ppm: parts per million (milligram(s) per kilogram)

Table 7-3. Porewater Summary Statistics (Round 1 and Round 2)
Metal Bank Cottman Avenue Superfund Site, Philadelphia, PA

Site or Reference	Area	Sample Count	Total PCBs (µg/L)			
			Minimum	Median	Average	Maximum
Combined (2015 and 2016)						
Site	All	17	0.00094	0.0018	0.0033	0.011
Site	Mattress Area	4	0.00094	0.0014	0.0014	0.0018
Site	Mudflat	6	0.0011	0.0066	0.0061	0.011
Site	Sheet Pile Wall	7	0.0011	0.002	0.002	0.0029
Reference	All	10	0.00029	0.00094	0.0013	0.0038
Reference	Reference - East	6	0.00029	0.0009	0.00073	0.00097
Reference	Reference - West	4	0.00088	0.002	0.0022	0.0038
Round 1 (2015)						
Site	All	9	0.0014	0.0018	0.0029	0.0078
Site	Mattress Area	2	0.0014	0.0016	0.0016	0.0018
Site	Mudflat	3	0.0014	0.0055	0.0049	0.0078
Site	Sheet Pile Wall	4	0.0017	0.0018	0.002	0.0026
Reference	All	6	0.00029	0.0009	0.0011	0.0027
Reference	Reference - East	3	0.00029	0.00036	0.00052	0.00092
Reference	Reference - West	3	0.00088	0.0012	0.0016	0.0027
Round 2 (2016)						
Site	All	8	0.00094	0.0017	0.0038	0.011
Site	Mattress Area	2	0.00094	0.0011	0.0011	0.0013
Site	Mudflat	3	0.0011	0.01	0.0072	0.011
Site	Sheet Pile Wall	3	0.0011	0.0021	0.0021	0.0029
Reference	All	4	0.00088	0.00096	0.0017	0.0038
Reference	Reference - East	3	0.00088	0.00096	0.00094	0.00097
Reference	Reference - West	1	0.0038	0.0038	0.0038	0.0038

µg/L: microgram(s) per liter

PCBs: polychlorinated biphenyls



Appendix E - LNAPL Sump Measurements
Metal Bank NPL Site
Philadelphia, PA

Date	Sump 1 Top of SLCPP = 11.99		Sump 2 Top of SLCPP = 12.06		Sump 3 Top of SLCPP = 11.85		Sump 4 Top of SLCPP = 12.64		Sump 5 Top of SLCPP = 12.77	
	GW Elevation	Product Thickness	GW Elevation	Product Thickness	GW Elevation	Product Thickness	GW Elevation	Product Thickness	GW Elevation	Product Thickness
3/31/2010	3.74	0	3.66	0	3.70	0	3.64	0	3.62	0
4/14/2010	3.19	0	3.16	0	3.25	0	3.24	0	3.17	0
4/28/2010	3.29	0	3.26	0	3.35	0	3.34	0	3.27	0
5/12/2010	2.89	0	2.86	0	2.95	0	2.94	0	2.87	0
5/27/2010	2.79	0	2.86	0	2.85	0	2.84	0	2.77	0
6/9/2010	2.79	0	2.76	0	2.75	0	2.74	0	2.77	0
6/23/2010	2.79	0	2.76	0	2.85	0	2.84	0	2.77	0
7/7/2010	2.59	0	2.56	0	2.55	0	2.64	0	2.57	0
11/11/2010	2.64	0	2.61	0	2.65	0	2.69	0	2.62	0
1/10/2011	2.31	0	2.34	0	2.22	0	2.24	0	2.12	0
4/11/2011	3.08	0	3.03	0	3.02	0	3.03	0	2.94	0
7/25/2011	2.99	0	3.01	0	3.01	0	3.00	0	2.94	0
10/26/2011	3.67	0	3.63	0	3.45	0	3.49	0	3.44	0
1/13/2012	2.70	0	1.68	0	1.74	0	1.55	0	1.63	0
4/25/2012	2.91	0	2.75	0	2.57	0	2.63	0	2.58	0
7/17/2012	2.81	0	2.84	0	2.68	0	2.79	< 0.01	2.69	0
10/18/2012	2.64	0	2.61	0	2.62	0	2.51	0	2.51	0
1/25/2013	3.29	0	3.21	0	3.14	0	3.15	0	3.15	0
4/11/2013	3.30	0	3.27	0	3.09	0	3.15	0	3.10	0
7/23/2013	3.70	0	--	0	3.27	0	3.27	0	3.19	0
10/9/2013	2.99	0	2.94	0	2.89	0	1.88	0	2.78	0
4/11/2014	3.20	0	3.66	0	3.73	0	3.66	0	3.61	0
10/30/2014	2.68	0	2.71	0	2.82	0	2.66	< 0.01	2.70	0
4/30/2015	3.88	0	3.71	0	3.64	0	3.66	0	3.61	0
12/22/2015	3.66	0	3.12	0	3.04	0	3.04	0	3.05	0
10/4/2016	3.06	0	1.94	0	2.83	0	2.89	0	2.82	0
4/24/2017	3.50	0	3.34	0	2.27	0	3.32	0	3.15	0
10/30/2017	2.58	0	2.24	0	2.22	0	3.11	0	3.10	0

Notes:

All measurements are presented in feet above mean sea level.

SLCPP - Smooth Lined Corrugated Plastic Pipe

*LNAPL trench groundwater elevations reported prior to this Annual Report were based on an estimated difference from the surveyed top of the concrete sump vaults to the measuring points (top of SLCPP), below. In 2017, the measuring points were surveyed, allowing us to update all the LNAPL trench groundwater elevations shown in this table.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01
Field Sample ID	MB-MW-01-20100729	MB-MW-01-20101018	MB-MW-01-20110111	MB-MW-01-20110411	MB-MW-01-20110725	MB-MW-01-20111026	MB-MW-01-20120424	MB-MW-01-20121017	MB-MW-01
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/29/2010	10/18/2010	1/11/2011	4/11/2011	7/25/2011	10/26/2011	4/24/2012	10/17/2012	
Comments									
SVOC									
Acenaphthene	0.585 (0.0148)	--	1.76 J (0.164)	--	0.71 J (1.9)	--	2.8 (0.21)	1.8 J (2.4)	
Acenaphthylene	0.306 (0.0157)	--	U (0.173)	--	U (0.15)	--	0.14 J (0.21)	U (2.4)	
Acetophenone	0.396 J (0.0824)	--	U (0.912)	--	U (0.78)	--	U (1)	U (12)	
Anthracene	U (0.0159)	--	U (0.176)	--	U (0.15)	--	0.35 (0.21)	U (2.4)	
Benzaldehyde	1.28 (0.154)	--	U (1.71)	--	U (1.5)	--	1 B (1)	U (12)	
Benzo(a)anthracene	U (0.0151)	--	U (0.168)	--	U (0.14)	--	U (0.21)	U (2.4)	
Benzo(a)pyrene	U (0.0138)	--	U (0.153)	--	U (0.13)	--	U (0.21)	U (2.4)	
Benzo(b)fluoranthene	U (0.0162)	--	U (0.179)	--	U (0.15)	--	0.68 B (0.21)	U (2.4)	
Benzo(g,h,i)perylene	U (0.0156)	--	U (0.172)	--	U (0.15)	--	0.17 B (0.21)	U (2.4)	
Benzo(k)fluoranthene	U (0.0563)	--	U (0.624)	--	U (0.53)	--	U (0.21)	U (2.4)	
Biphenyl	U (0.0427)	--	U (0.473)	--	U (0.4)	--	0.16 B (1)	U (12)	
bis(2-Chloroethyl) ether	U (0.0259)	--	U (0.286)	--	U (0.24)	--	U (0.21)	U (2.4)	
bis(2-Ethylhexyl)phthalate	U (1.29)	--	U (14.3)	--	U (12)	--	U (2.1)	U (24)	
Butylbenzylphthalate	U (0.147)	--	U (1.62)	--	U (1.4)	--	U (1)	U (12)	
Caprolactam	U (1.23)	--	U (13.6)	--	U (12)	--	U (5.2)	U (59)	
Carbazole	1.69 (0.0163)	--	2.05 J (0.18)	--	0.68 J (1.9)	--	2.4 (0.21)	1.4 J (2.4)	
4-Chloroaniline	U (0.0912)	--	U (1.01)	--	U (0.86)	--	U (1)	U (12)	
2-Chlorophenol	U (0.17)	--	U (1.88)	--	U (1.6)	--	UL (1)	U (12)	
4-Chlorophenyl-phenyl ether	U (0.0518)	--	U (0.573)	--	U (0.49)	--	0.07 J (1)	U (12)	
Chrysene	U (0.0144)	--	U (0.16)	--	U (0.14)	--	U (0.21)	U (2.4)	
Dibenz(a,h)anthracene	U (0.016)	--	U (0.177)	--	U (0.15)	--	0.51 B (0.21)	U (2.4)	
Dibenzofuran	0.0958 J (0.0636)	--	U (0.703)	--	U (0.6)	--	0.45 J (1)	U (12)	
2,4-Dichlorophenol	U (0.0344)	--	U (0.381)	--	U (0.32)	--	UL (0.21)	U (2.4)	
Diethylphthalate	U (0.15)	--	U (1.66)	--	U (1.4)	--	0.89 J (1)	U (12)	
2,4-Dimethylphenol	0.111 J (0.0878)	--	U (0.971)	--	U (0.83)	--	UL (1)	U (12)	
Dimethylphthalate	U (0.0788)	--	U (0.872)	--	U (0.74)	--	0.11 J (1)	U (12)	
Di-n-butylphthalate	U (0.129)	--	U (1.42)	--	U (1.2)	--	0.15 J (1)	U (12)	
4,6-Dinitro-2-methylphenol	U (0.226)	--	U (2.5)	--	U (2.1)	--	UL (5.2)	U (59)	
Di-n-octylphthalate	U (0.213)	--	U (2.36)	--	U (2)	--	U (1)	U (12)	
Fluoranthene	U (0.0167)	--	U (0.185)	--	U (0.16)	--	U (0.21)	U (2.4)	
Fluorene	0.185 J (0.0222)	--	0.467 J (0.246)	--	0.24 J (1.9)	--	1 (0.21)	0.6 J (2.4)	
Indeno(1,2,3-cd)pyrene	U (0.0205)	--	U (0.227)	--	U (0.19)	--	0.4 B (0.21)	U (2.4)	
Isophorone	U (0.0663)	--	U (0.734)	--	U (0.63)	--	U (1)	U (12)	
2-Methylnaphthalene	0.052 J (0.0126)	--	0.599 J (0.139)	--	0.21 J (1.9)	--	1 B (0.21)	0.41 J (2.4)	
2-Methylphenol	U (0.0888)	--	U (0.983)	--	U (0.84)	--	UL (1)	U (12)	
3&4-Methylphenol	--	--	--	--	--	--	0.12 J (1)	U (12)	
4-Methylphenol	0.228 J (0.0929)	--	U (1.03)	--	U (0.88)	--	--	--	
Naphthalene	0.189 J (0.0144)	--	74.6 (0.16)	--	20 (1.9)	--	79 B (0.42)	66 (2.4)	
N-Nitrosodiphenylamine	U (0.0879)	--	U (0.972)	--	U (0.83)	--	U (1)	1.9 J (12)	
Pentachlorophenol	U (0.0683)	--	U (0.756)	--	U (0.64)	--	UL (1)	U (12)	
Phenanthrene	U (0.044)	--	U (0.487)	--	U (0.41)	--	0.68 (0.21)	U (2.4)	
Phenol	0.315 (0.0598)	--	U (0.662)	--	U (0.56)	--	UL (0.21)	U (2.4)	
Pyrene	U (0.0162)	--	U (0.179)	--	U (0.15)	--	U (0.21)	U (2.4)	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	--	--	--		U (0.0421)	--	--
PCB-001 (2-CB)	0.00153 JQ (0.00027)	UB (0.00039)	UB (0.000451)	0.00283 EMPC J (0.00032)	UB (0.00048)	0.0153 B (0.0421)	--	--	
PCB-002 (3-CB)	U (0.000297)	UB (0.000413)	0.00285 J (0.000466)	UB (0.000328)	U (0.0005)	0.0127 B (0.0421)	--	--	
PCB-003 (4-CB)	0.00111 JQ (0.000328)	UB (0.000436)	0.00198 EMPC J (0.000479)	UB (0.000335)	U (0.00052)	0.007 B (0.0421)	--	--	
PCB-209 (DeCB)	U (0.000735)	UB (0.00116)	U (0.00136)	0.0017 J (0.000647)	U (0.0013)	0.00211 EMPC J (0.0421)	--	--	
PCB-004 (2,2'-DiCB)	0.00629 BJQ (0.00177)	0.01 BJQ (0.00283)	0.00417 JQ (0.00333)	0.00467 BJQ (0.00204)	0.007 JQ (0.0032)	0.0121 B (0.0632)	--	--	
PCB-005 (2,3-DiCB)	0.000799 J (0.00132)	U (0.00161)	U (0.00225)	UB (0.00142)	U (0.0023)	0.00343 B (0.0421)	--	--	
PCB-006 (2,3'-DiCB)	0.00248 JQ (0.00124)	UB (0.00152)	0.00179 EMPC J (0.00211)	UB (0.00133)	UB (0.0021)	0.00569 B (0.0421)	--	--	
PCB-007 (2,4-DiCB)	0.00164 JQ (0.00128)	UB (0.00156)	U (0.00217)	UB (0.00137)	UB (0.0022)	0.0045 B (0.0421)	--	--	
PCB-008 (2,4'-DiCB)	UB (0.00122)	0.0136 BJ (0.00149)	UB (0.00207)	UB (0.0013)	UB (0.0021)	0.0124 B (0.0632)	--	--	
PCB-009 (2,5-DiCB)	U (0.00129)	U (0.00157)	U (0.00218)	UB (0.00138)	0.0041 EMPC J (0.0022)	0.00372 B (0.0421)	--	--	
PCB-010 (2,6-DiCB)	U (0.00138)	U (0.00169)	U (0.00235)	U (0.00148)	UB (0.0024)	U (0.0421)	--	--	
PCB-011 (3,3'-DiCB)	UB (0.00122)	UB (0.00149)	UB (0.00208)	UB (0.00131)	UB (0.0021)	0.0138 B (0.0632)	--	--	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-01 MB-MW-01-20100729 Micropurge 7/29/2010	MB-MW-01 MB-MW-01-20101018 Micropurge 10/18/2010	MB-MW-01 MB-MW-01-20110111 Micropurge 1/11/2011	MB-MW-01 MB-MW-01-20110411 Micropurge 4/11/2011	MB-MW-01 MB-MW-01-20110725 Micropurge 7/25/2011	MB-MW-01 MB-MW-01-20111026 Micropurge 10/26/2011	MB-MW-01 MB-MW-01-20120424 Micropurge 4/24/2012	MB-MW-01 MB-MW-01-20121017 Micropurge 10/17/2012
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	0.00107 J (0.00125)	U (0.00153)	U (0.00213)	UB (0.00134)	0.0026 EMPC J (0.0022)	0.00469 B (0.0632)	--	--
PCB-013 (3,4'-DiCB)	0.00107 J (0.00125)	U (0.00153)	U (0.00213)	UB (0.00134)	0.0026 EMPC J (0.0022)	0.00469 B (0.0632)	--	--
PCB-014 (3,5-DiCB)	U (0.00108)	U (0.00132)	U (0.00184)	UB (0.00116)	U (0.0019)	0.00374 B (0.0421)	--	--
PCB-015 (4,4'-DiCB)	0.00386 JQ (0.00126)	UB (0.00131)	UB (0.002)	UB (0.00128)	UB (0.0021)	0.00357 B (0.0421)	--	--
PCB-170 (2,2',3,3',4,4',5-HpCB)	U (0.000734)	U (0.00102)	U (0.00102)	UB (0.00108)	U (0.0012)	U (0.0421)	--	--
PCB-171 (2,2',3,3',4,4',6-HpCB)	U (0.000665)	U (0.00096)	U (0.000938)	U (0.000979)	U (0.0012)	U (0.0421)	--	--
PCB-172 (2,2',3,3',4,5,5'-HpCB)	U (0.000659)	U (0.000951)	U (0.000929)	U (0.00097)	U (0.0011)	U (0.0421)	--	--
PCB-173 (2,2',3,3',4,5,6-HpCB)	U (0.000665)	U (0.00096)	U (0.000938)	U (0.000979)	U (0.0012)	U (0.0421)	--	--
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.00302 JQ (0.000617)	UB (0.00089)	U (0.00087)	UB (0.000908)	U (0.0011)	U (0.0421)	--	--
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.000592)	U (0.000855)	U (0.000835)	U (0.000872)	U (0.001)	U (0.0421)	--	--
PCB-177 (2,2',3,3',4,5',6'-HpCB)	U (0.000632)	UB (0.000912)	U (0.000891)	U (0.00093)	U (0.0011)	U (0.0421)	--	--
PCB-176 (2,2',3,3',4,6,6'-HpCB)	U (0.000451)	U (0.000651)	U (0.000636)	U (0.000664)	U (0.00078)	U (0.0421)	--	--
PCB-178 (2,2',3,3',5,5',6-HpCB)	U (0.00064)	U (0.000924)	U (0.000903)	U (0.000942)	U (0.0011)	U (0.0421)	--	--
PCB-179 (2,2',3,3',5,6,6'-HpCB)	U (0.000476)	U (0.000687)	U (0.000671)	U (0.0007)	U (0.00082)	U (0.0421)	--	--
PCB-180 (2,2',3,4,4',5,5'-HpCB)	0.00458 J (0.000503)	UB (0.000726)	UB (0.000709)	UB (0.00074)	UB (0.00087)	0.00188 B (0.0421)	--	--
PCB-181 (2,2',3,4,4',5,6'-HpCB)	U (0.000592)	U (0.000854)	U (0.000835)	U (0.000871)	U (0.001)	U (0.0421)	--	--
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.000575)	U (0.00083)	U (0.000811)	U (0.000847)	U (0.001)	U (0.0421)	--	--
PCB-183 (2,2',3,4,4',5',6-HpCB)	U (0.000588)	UB (0.000848)	U (0.000829)	U (0.000865)	U (0.001)	U (0.0421)	--	--
PCB-185 (2,2',3,4,5,5',6-HpCB)	U (0.000588)	0.00221 JQ (0.000848)	U (0.000829)	U (0.000865)	U (0.001)	U (0.0421)	--	--
PCB-187 (2,2',3,4',5,5',6-HpCB)	0.00252 JQ (0.00055)	0.00871 BJ (0.000794)	0.00248 EMPC J (0.000776)	UB (0.00081)	0.0019 J (0.00095)	0.00213 EMPC J (0.0421)	--	--
PCB-188 (2,2',3,4',5,6,6'-HpCB)	0.00106 JQ (0.000407)	U (0.0006)	U (0.000579)	U (0.000599)	U (0.00071)	U (0.0421)	--	--
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.000413)	U (0.00032)	U (0.000483)	U (0.000546)	U (0.00092)	U (0.0421)	--	--
PCB-190 (2,3,3',4,4',5,6-HpCB)	U (0.000459)	U (0.00062)	U (0.000667)	U (0.000675)	U (0.00079)	U (0.0421)	--	--
PCB-191 (2,3,3',4,4',5',6-HpCB)	U (0.000451)	U (0.000651)	U (0.000636)	U (0.000663)	U (0.00078)	U (0.0421)	--	--
PCB-193 (2,3,3',4',5,5',6-HpCB)	0.00458 J (0.000503)	UB (0.000726)	UB (0.000709)	UB (0.00074)	UB (0.00087)	0.00188 B (0.0421)	--	--
PCB-128 (2,2',3,3',4,4',5-HxCB)	0.000999 JQ (0.000691)	0.00181 J (0.000748)	0.00117 JQ (0.000813)	0.00295 J (0.000791)	U (0.0012)	U (0.0421)	--	--
PCB-129 (2,2',3,3',4,5-HxCB)	UB (0.000715)	UB (0.000773)	UB (0.000841)	UB (0.000818)	UB (0.0012)	0.00727 J (0.0421)	--	--
PCB-130 (2,2',3,3',4,5'-HxCB)	U (0.000923)	U (0.000998)	U (0.00109)	U (0.00106)	U (0.0015)	U (0.0421)	--	--
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.000945)	U (0.00102)	U (0.00111)	U (0.00108)	U (0.0016)	U (0.0421)	--	--
PCB-132 (2,2',3,3',4,6'-HxCB)	0.0028 JQ (0.000899)	0.00593 J (0.000973)	0.00363 J (0.00106)	0.00361 J (0.00103)	0.0032 J (0.0015)	--	--	--
PCB-133 (2,2',3,3',5,5'-HxCB)	U (0.000867)	U (0.000938)	U (0.00102)	U (0.000993)	U (0.0014)	--	--	--
PCB-134 (2,2',3,3',5,6-HxCB)	U (0.000924)	U (0.000999)	U (0.00109)	UB (0.00106)	U (0.0015)	U (0.0421)	--	--
PCB-135 (2,2',3,3',5,6'-HxCB)	0.00419 JQ (0.000794)	U (0.00184)	U (0.00113)	UB (0.00111)	UB (0.0016)	U (0.0421)	--	--
PCB-136 (2,2',3,3',6,6'-HxCB)	0.0014 JQ (0.000583)	U (0.00135)	U (0.000831)	UB (0.000818)	U (0.0011)	U (0.0421)	--	--
PCB-137 (2,2',3,4,4',5-HxCB)	U (0.000796)	U (0.000861)	U (0.000936)	0.00146 J (0.000911)	U (0.0013)	U (0.0421)	--	--
PCB-138 (2,2',3,4,4',5'-HxCB)	UB (0.000715)	UB (0.000773)	UB (0.000841)	UB (0.000818)	UB (0.0012)	--	--	--
PCB-139 (2,2',3,4,4',6-HxCB)	U (0.000791)	U (0.000856)	U (0.000931)	UB (0.000906)	U (0.0013)	U (0.0421)	--	--
PCB-140 (2,2',3,4,4',6'-HxCB)	U (0.000791)	U (0.000856)	U (0.000931)	UB (0.000906)	U (0.0013)	U (0.0421)	--	--
PCB-141 (2,2',3,4,5,5'-HxCB)	0.00121 JQ (0.000824)	0.00281 BJQ (0.000891)	0.00168 J (0.000969)	0.00126 JQ (0.000943)	U (0.0014)	U (0.0421)	--	--
PCB-143 (2,2',3,4,5,6'-HxCB)	U (0.000924)	U (0.000999)	U (0.00109)	UB (0.00106)	U (0.0015)	U (0.0421)	--	--
PCB-144 (2,2',3,4,5',6-HxCB)	U (0.000737)	U (0.00171)	U (0.00105)	U (0.00103)	U (0.0014)	U (0.0421)	--	--
PCB-146 (2,2',3,4',5,5'-HxCB)	U (0.000752)	UB (0.000813)	U (0.000884)	UB (0.000861)	U (0.0013)	U (0.0421)	--	--
PCB-147 (2,2',3,4',5,6-HxCB)	UB (0.000768)	UB (0.000831)	UB (0.000904)	UB (0.00088)	UB (0.0013)	0.00463 EMPC J (0.0421)	--	--
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.000779)	U (0.00181)	U (0.00111)	U (0.00109)	U (0.0015)	U (0.0421)	--	--
PCB-149 (2,2',3,4',5',6-HxCB)	0.00803 BJ (0.000768)	0.0123 BJ (0.000831)	0.00619 JQ (0.000904)	0.00784 BJ (0.00088)	0.0079 BJ (0.0013)	0.00463 EMPC J (0.0421)	--	--
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.000543)	U (0.00126)	U (0.000774)	0.00157 JQ (0.000762)	U (0.0011)	U (0.0421)	--	--
PCB-151 (2,2',3,5,5',6-HxCB)	0.00419 JQ (0.000794)	U (0.00184)	U (0.00113)	UB (0.00111)	UB (0.0016)	U (0.0421)	--	--
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.000554)	U (0.00129)	U (0.00079)	U (0.000777)	U (0.0011)	U (0.0421)	--	--
PCB-153 (2,2',4,4',5,5'-HxCB)	UB (0.000618)	UB (0.000668)	UB (0.000727)	UB (0.000707)	UB (0.001)	0.00491 B (0.0421)	--	--
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.000646)	U (0.0015)	U (0.000921)	U (0.000906)	U (0.0013)	U (0.0421)	--	--
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.000528)	U (0.00123)	U (0.000753)	0.00109 JQ (0.000741)	U (0.001)	U (0.0421)	--	--
PCB-156 (2,3,3',4,4',5-HxCB)	U (0.000733)	U (0.000824)	U (0.000959)	0.00294 J (0.000853)	U (0.0012)	U (0.0421)	--	--
PCB-157 (2,3,3',4,4',5'-HxCB)	U (0.000733)	U (0.000824)	U (0.000959)	UB (0.000853)	U (0.0012)	U (0.0421)	--	--
PCB-158 (2,3,3',4,4',6-HxCB)	U (0.00064)	UB (0.00064)	U (0.000663)	UB (0.000646)	U (0.00094)	U (0.0421)	--	--
PCB-159 (2,3,3',4,5,5'-HxCB)	U (0.000605)	U (0.000654)	U (0.000711)	U (0.000692)	U (0.001)	U (0.0421)	--	--
PCB-160 (2,3,3',4,5,6-HxCB)	UB (0.000715)	UB (0.000773)	UB (0.000841)	UB (0.000818)	UB (0.0012)	0.00727 J (0.0421)	--	--
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.000597)	U (0.000646)	U (0.000702)	U (0.000684)	U (0.001)	U (0.0421)	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-01 MB-MW-01-20100729 Micropurge 7/29/2010	MB-MW-01 MB-MW-01-20101018 Micropurge 10/18/2010	MB-MW-01 MB-MW-01-20110111 Micropurge 1/11/2011	MB-MW-01 MB-MW-01-20110411 Micropurge 4/11/2011	MB-MW-01 MB-MW-01-20110725 Micropurge 7/25/2011	MB-MW-01 MB-MW-01-20111026 Micropurge 10/26/2011	MB-MW-01 MB-MW-01-20120424 Micropurge 4/24/2012	MB-MW-01 MB-MW-01-20121017 Micropurge 10/17/2012
PCB Congeners [ng/L] (continued)								
PCB-163 (2,3,3',4',5,6-HxCB)	UB (0.000715)	UB (0.000773)	UB (0.000841)	UB (0.000818)	UB (0.0012)	0.00727 J (0.0421)	--	--
PCB-164 (2,3,3',4',5',6-HxCB)	U (0.000629)	UB (0.000681)	U (0.00074)	UB (0.000721)	U (0.0011)	U (0.0421)	--	--
PCB-166 (2,3,4,4',5,6-HxCB)	0.000999 JQ (0.000691)	UB (0.000748)	UB (0.000813)	UB (0.000791)	U (0.0012)	U (0.0421)	--	--
PCB-167 (2,3',4,4',5,5'-HxCB)	U (0.000459)	U (0.000429)	U (0.000517)	UB (0.000558)	U (0.00075)	U (0.0421)	--	--
PCB-168 (2,3',4,4',5',6-HxCB)	UB (0.000618)	UB (0.000668)	UB (0.000727)	UB (0.000707)	UB (0.001)	0.00491 B (0.0421)	--	--
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.000474)	U (0.000587)	U (0.000511)	U (0.000499)	U (0.00082)	U (0.0421)	--	--
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.0092 J (0.000715)	0.0249 J (0.00112)	U (0.00097)	UB (0.00129)	U (0.0014)	0.00688 EMPC J (0.0421)	--	--
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	U (0.000508)	0.00163 EMPC J (0.000758)	U (0.000652)	U (0.00093)	U (0.0009)	U (0.0421)	--	--
PCB-208 (2,2',3,3',4,5,5',6'-NoCB)	0.00283 JQ (0.000528)	0.0105 J (0.000762)	U (0.000654)	U (0.000975)	U (0.00089)	0.00254 EMPC J (0.0421)	--	--
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.0016 J (0.000582)	0.00458 J (0.000684)	U (0.000754)	0.0012 JQ (0.000492)	U (0.00094)	U (0.0421)	--	--
PCB-195 (2,2',3,3',4,4',5,6'-OcCB)	U (0.000632)	U (0.000742)	U (0.000818)	U (0.000534)	U (0.001)	U (0.0421)	--	--
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	U (0.000682)	U (0.00125)	U (0.000673)	U (0.000993)	U (0.0012)	--	--	--
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.000507)	U (0.000929)	U (0.000739)	U (0.000501)	U (0.0009)	U (0.0421)	--	--
PCB-198 (2,2',3,3',4,5,5',6'-OcCB)	0.00534 J (0.000704)	UB (0.00129)	0.00269 EMPC J (0.00103)	UB (0.000695)	U (0.0012)	0.00226 EMPC J (0.0421)	--	--
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.00534 J (0.000704)	UB (0.00129)	0.00269 EMPC J (0.00103)	UB (0.000695)	U (0.0012)	U (0.0421)	--	--
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	U (0.000498)	U (0.000912)	U (0.000726)	U (0.000492)	U (0.00088)	U (0.0421)	--	--
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	U (0.000481)	U (0.000881)	U (0.0007)	UB (0.000475)	U (0.00085)	0.00226 EMPC J (0.0421)	--	--
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.00173 J (0.000542)	0.00534 J (0.000992)	U (0.000789)	UB (0.000535)	U (0.00096)	0.00112 EMPC J (0.0421)	--	--
PCB-203 (2,2',3,4,4',5,5',6'-OcCB)	0.00372 JQ (0.000629)	0.00873 EMPC J (0.00115)	0.00196 EMPC J (0.000916)	UB (0.000621)	U (0.0011)	0.00202 EMPC J (0.0421)	--	--
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.000527)	U (0.000966)	U (0.000768)	U (0.000521)	U (0.00094)	U (0.0421)	--	--
PCB-205 (2,3,3',4,4',5,5',6'-OcCB)	U (0.00049)	U (0.000576)	U (0.000635)	U (0.000415)	U (0.0008)	U (0.0421)	--	--
PCB-24/27	--	--	--	--	--	U (0.0421)	--	--
PCB-42/59	--	--	--	--	--	0.00278 J (0.0421)	--	--
PCB-52/69	--	--	--	--	--	0.0126 J (0.0421)	--	--
PCB-61/70	--	--	--	--	--	0.00903 B (0.0421)	--	--
PCB-90/101	--	--	--	--	--	0.00979 J (0.0421)	--	--
PCB-107/109	--	--	--	--	--	U (0.0421)	--	--
PCB-132/161	--	--	--	--	--	U (0.0421)	--	--
PCB-133/142	--	--	--	--	--	U (0.0421)	--	--
PCB-138/163/164	--	--	--	--	--	0.00727 J (0.0421)	--	--
PCB-196/203	--	--	--	--	--	U (0.0421)	--	--
PCB-082 (2,2',3,3',4-PeCB)	U (0.000758)	U (0.00164)	U (0.00107)	U (0.00103)	U (0.0015)	U (0.0421)	--	--
PCB-083 (2,2',3,3',5-PeCB)	0.00488 J (0.000637)	UB (0.000638)	UB (0.000903)	UB (0.000864)	0.0053 EMPC J (0.0012)	0.00458 J (0.0421)	--	--
PCB-084 (2,2',3,3',6-PeCB)	0.00283 J (0.000725)	UB (0.00157)	U (0.00103)	UB (0.000983)	U (0.0014)	U (0.0421)	--	--
PCB-085 (2,2',3,4,4'-PeCB)	0.000737 JQ (0.000525)	U (0.00114)	U (0.000744)	UB (0.000712)	U (0.001)	U (0.0421)	--	--
PCB-086 (2,2',3,4,5-PeCB)	UB (0.000537)	UB (0.00116)	UB (0.000761)	UB (0.000728)	UB (0.001)	0.00853 EMPC J (0.0421)	--	--
PCB-087 (2,2',3,4,5'-PeCB)	0.00609 BJQ (0.000537)	0.011 J (0.00116)	0.00599 J (0.000761)	0.0164 BJ (0.000728)	0.0075 JQ (0.001)	0.00853 EMPC J (0.0421)	--	--
PCB-088 (2,2',3,4,6-PeCB)	U (0.000646)	U (0.0014)	U (0.000915)	UB (0.000876)	U (0.0012)	U (0.0421)	--	--
PCB-089 (2,2',3,4,6'-PeCB)	U (0.000701)	U (0.00152)	U (0.000993)	U (0.000951)	U (0.0013)	U (0.0421)	--	--
PCB-090 (2,2',3,4',5-PeCB)	0.00983 BJ (0.000546)	0.0138 BJQ (0.00119)	0.00746 BJQ (0.000774)	0.0114 BJQ (0.000741)	0.0089 BJQ (0.001)	--	--	--
PCB-097 (2,2',3,4',5'-PeCB)	UB (0.000537)	UB (0.00116)	UB (0.000761)	UB (0.000728)	UB (0.001)	0.00853 EMPC J (0.0421)	--	--
PCB-091 (2,2',3,4',6-PeCB)	U (0.000646)	U (0.0014)	U (0.000915)	0.00464 JQ (0.000876)	U (0.0012)	U (0.0421)	--	--
PCB-098 (2,2',3,4',6'-PeCB)	U (0.000604)	U (0.00131)	U (0.000855)	UB (0.000819)	U (0.0012)	U (0.0421)	--	--
PCB-092 (2,2',3,5,5'-PeCB)	0.00103 JQ (0.00062)	U (0.00135)	U (0.000879)	UB (0.000841)	U (0.0012)	U (0.0421)	--	--
PCB-093 (2,2',3,5,6-PeCB)	U (0.000623)	U (0.00135)	U (0.000882)	UB (0.000845)	U (0.0012)	U (0.0421)	--	--
PCB-094 (2,2',3,5,6'-PeCB)	U (0.000701)	U (0.00152)	U (0.000993)	U (0.00095)	U (0.0013)	U (0.0421)	--	--
PCB-095 (2,2',3,5',6-PeCB)	0.00951 J (0.00066)	UB (0.00143)	UB (0.000935)	UB (0.000895)	UB (0.0013)	0.00908 J (0.0421)	--	--
PCB-096 (2,2',3,6,6'-PeCB)	U (0.000524)	U (0.00114)	U (0.000743)	0.00231 J (0.000711)	U (0.001)	U (0.0421)	--	--
PCB-099 (2,2',4,4',5-PeCB)	0.00488 J (0.000637)	0.00586 BJ (0.00138)	0.00376 JQ (0.000903)	0.00526 JQ (0.000864)	0.0053 JQ (0.0012)	0.00458 J (0.0421)	--	--
PCB-100 (2,2',4,4',6-PeCB)	U (0.000623)	U (0.00135)	U (0.000882)	UB (0.000845)	U (0.0012)	U (0.0421)	--	--
PCB-101 (2,2',4,5,5'-PeCB)	UB (0.000546)	UB (0.00119)	UB (0.000774)	UB (0.000741)	UB (0.001)	0.00979 J (0.0421)	--	--
PCB-102 (2,2',4,5,6'-PeCB)	U (0.000604)	U (0.00131)	U (0.000855)	0.00365 J (0.000819)	U (0.0012)	U (0.0421)	--	--
PCB-103 (2,2',4,5',6-PeCB)	U (0.000615)	U (0.00133)	U (0.000871)	U (0.000834)	U (0.0012)	U (0.0421)	--	--
PCB-104 (2,2',4,6,6'-PeCB)	U (0.000467)	U (0.00101)	U (0.000662)	U (0.000634)	U (0.0009)	U (0.0421)	--	--
PCB-105 (2,3,3',4,4'-PeCB)	0.00256 J (0.000433)	UB (0.00034)	UB (0.000467)	UB (0.000463)	U (0.00076)	0.00193 B (0.0421)	--	--
PCB-108 (2,3,3',4,5'-PeCB)	U (0.000468)	U (0.000369)	U (0.000493)	UB (0.000497)	U (0.00079)	U (0.0421)	--	--
PCB-109 (2,3,3',4,6-PeCB)	UB (0.000537)	UB (0.00116)	UB (0.000761)	UB (0.000728)	UB (0.001)	0.00853 EMPC J (0.0421)	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-01 MB-MW-01-20100729 Micropurge 7/29/2010	MB-MW-01 MB-MW-01-20101018 Micropurge 10/18/2010	MB-MW-01 MB-MW-01-20110111 Micropurge 1/11/2011	MB-MW-01 MB-MW-01-20110411 Micropurge 4/11/2011	MB-MW-01 MB-MW-01-20110725 Micropurge 7/25/2011	MB-MW-01 MB-MW-01-20111026 Micropurge 10/26/2011	MB-MW-01 MB-MW-01-20120424 Micropurge 4/24/2012	MB-MW-01 MB-MW-01-20121017 Micropurge 10/17/2012
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5'-PeCB)	U (0.000446)	U (0.000351)	U (0.000469)	UB (0.000472)	U (0.00075)	--	--	--
PCB-110 (2,3,3',4',6'-PeCB)	0.0112 BJ (0.000464)	0.0136 BJQ (0.00101)	0.0104 BJQ (0.000657)	0.0136 J (0.000629)	0.014 BJQ (0.00089)	0.0102 B (0.0421)	--	--
PCB-111 (2,3,3',5',5'-PeCB)	U (0.000439)	U (0.000952)	U (0.000622)	U (0.000595)	U (0.00084)	U (0.0421)	--	--
PCB-113 (2,3,3',5',6'-PeCB)	UB (0.000546)	UB (0.00119)	UB (0.000774)	UB (0.000741)	UB (0.001)	0.00979 J (0.0421)	--	--
PCB-114 (2,3,4,4',5'-PeCB)	U (0.000415)	U (0.000335)	U (0.000431)	U (0.000444)	U (0.00071)	--	--	--
PCB-115 (2,3,4,4',6'-PeCB)	UB (0.000464)	UB (0.00101)	UB (0.000657)	UB (0.000629)	UB (0.00089)	0.0102 EMPC J (0.0421)	--	--
PCB-116 (2,3,4,5,6'-PeCB)	0.000737 JQ (0.000525)	U (0.00114)	U (0.000744)	0.00413 JQ (0.000712)	U (0.001)	U (0.0421)	--	--
PCB-117 (2,3,4',5,6'-PeCB)	0.000737 JQ (0.000525)	U (0.00114)	U (0.000744)	UB (0.000712)	U (0.001)	U (0.0421)	--	--
PCB-118 (2,3',4,4',5'-PeCB)	0.00691 BJ (0.00043)	0.00808 BJ (0.000338)	0.00896 BJQ (0.000434)	0.00716 J (0.000453)	0.0081 BJQ (0.00074)	0.00542 B (0.0421)	--	--
PCB-119 (2,3',4,4',6'-PeCB)	UB (0.000537)	UB (0.00116)	UB (0.000761)	UB (0.000728)	UB (0.001)	0.00853 EMPC J (0.0421)	--	--
PCB-120 (2,3',4,5,5'-PeCB)	U (0.000452)	U (0.00098)	U (0.00064)	U (0.000613)	U (0.00087)	U (0.0421)	--	--
PCB-121 (2,3',4,5',6'-PeCB)	U (0.000455)	U (0.000988)	U (0.000645)	U (0.000617)	U (0.00087)	U (0.0421)	--	--
PCB-122 (2,3,3',4',5'-PeCB)	U (0.0005)	U (0.000394)	U (0.000526)	U (0.00053)	U (0.00085)	U (0.0421)	--	--
PCB-123 (2,3',4,4',5'-PeCB)	U (0.000477)	U (0.000362)	U (0.000478)	UB (0.000512)	U (0.00081)	U (0.0421)	--	--
PCB-124 (2,3',4',5,5'-PeCB)	U (0.000468)	U (0.000369)	U (0.000493)	UB (0.000497)	U (0.00079)	U (0.0421)	--	--
PCB-125 (2,3',4',5',6'-PeCB)	UB (0.000537)	UB (0.00116)	UB (0.000761)	UB (0.000728)	UB (0.001)	0.00853 EMPC J (0.0421)	--	--
PCB-126 (3,3',4,4',5'-PeCB)	U (0.00045)	U (0.000361)	U (0.000516)	UB (0.000467)	U (0.00072)	U (0.0421)	--	--
PCB-127 (3,3',4,5,5'-PeCB)	U (0.000454)	U (0.000358)	U (0.000478)	U (0.000481)	U (0.00077)	U (0.0421)	--	--
PCB-040 (2,2',3,3'-TeCB)	0.00629 J (0.000717)	0.00702 BJ (0.00073)	UB (0.000766)	UB (0.000787)	0.0081 J (0.001)	0.00474 EMPC J (0.0421)	--	--
PCB-041 (2,2',3,4'-TeCB)	0.00629 J (0.000717)	0.00702 BJ (0.00073)	UB (0.000766)	UB (0.000787)	0.0081 J (0.001)	0.00474 EMPC J (0.0421)	--	--
PCB-042 (2,2',3,4'-TeCB)	0.00239 J (0.00073)	UB (0.000743)	0.00271 EMPC J (0.00078)	UB (0.000801)	0.0038 EMPC J (0.001)	--	--	--
PCB-043 (2,2',3,5'-TeCB)	U (0.00067)	U (0.000683)	U (0.000716)	UB (0.000736)	U (0.00096)	U (0.0421)	--	--
PCB-044 (2,2',3,5'-TeCB)	UB (0.000641)	UB (0.000653)	UB (0.000685)	UB (0.000704)	UB (0.00092)	0.0217 B (0.0421)	--	--
PCB-045 (2,2',3,6'-TeCB)	UB (0.000744)	UB (0.000757)	0.00248 EMPC J (0.000794)	UB (0.000816)	0.004 EMPC J (0.0011)	0.00492 B (0.0421)	--	--
PCB-046 (2,2',3,6'-TeCB)	0.00138 JQ (0.000879)	U (0.000895)	U (0.000939)	UB (0.000965)	U (0.0013)	U (0.0421)	--	--
PCB-047 (2,2',4,4'-TeCB)	UB (0.000641)	UB (0.000653)	UB (0.000685)	UB (0.000704)	UB (0.00092)	0.0217 B (0.0421)	--	--
PCB-048 (2,2',4,5'-TeCB)	0.00202 J (0.000712)	UB (0.000725)	0.00132 EMPC J (0.00076)	UB (0.000781)	0.002 EMPC J (0.001)	U (0.0421)	--	--
PCB-049 (2,2',4,5'-TeCB)	0.00584 J (0.000591)	UB (0.000602)	UB (0.000631)	UB (0.000649)	UB (0.00085)	0.00478 B (0.0421)	--	--
PCB-050 (2,2',4,6'-TeCB)	0.00163 JQ (0.00069)	0.00291 J (0.000703)	0.00228 J (0.000737)	UB (0.000758)	0.0036 J (0.00099)	0.00153 EMPC J (0.0421)	--	--
PCB-051 (2,2',4,6'-TeCB)	0.00516 BJ (0.000744)	0.00519 BJ (0.000757)	0.00248 JQ (0.000794)	0.00633 J (0.000816)	0.004 JQ (0.0011)	0.00492 B (0.0421)	--	--
PCB-052 (2,2',5,5'-TeCB)	UB (0.000691)	UB (0.000704)	UB (0.000739)	UB (0.000759)	UB (0.00099)	--	--	--
PCB-053 (2,2',5,6'-TeCB)	0.00163 JQ (0.00069)	0.00291 J (0.000703)	0.00228 J (0.000737)	UB (0.000758)	0.0036 J (0.00099)	0.00153 EMPC J (0.0421)	--	--
PCB-054 (2,2',6,6'-TeCB)	U (0.000774)	U (0.00117)	U (0.000963)	0.00211 JQ (0.00114)	U (0.0018)	U (0.0421)	--	--
PCB-055 (2,3,3',4'-TeCB)	U (0.000556)	U (0.000566)	U (0.000593)	UB (0.00061)	U (0.00079)	U (0.0421)	--	--
PCB-056 (2,3,3',4'-TeCB)	0.00225 JQ (0.000523)	UB (0.000532)	UB (0.000558)	UB (0.000574)	UB (0.00075)	0.00291 J (0.0421)	--	--
PCB-057 (2,3,3',5'-TeCB)	U (0.000529)	U (0.000539)	U (0.000565)	UB (0.000581)	U (0.00076)	U (0.0421)	--	--
PCB-058 (2,3,3',5'-TeCB)	U (0.000526)	U (0.000536)	U (0.000562)	UB (0.000578)	U (0.00075)	U (0.0421)	--	--
PCB-059 (2,3,3',6'-TeCB)	0.00122 J (0.000511)	U (0.00052)	0.000633 EMPC J (0.000545)	UB (0.000561)	U (0.00073)	0.00102 EMPC J (0.0421)	--	--
PCB-060 (2,3,4,4'-TeCB)	0.00143 JQ (0.000538)	UB (0.000548)	U (0.000575)	UB (0.000591)	UB (0.00077)	0.00168 EMPC J (0.0421)	--	--
PCB-061 (2,3,4,5'-TeCB)	UB (0.00051)	UB (0.00052)	UB (0.000545)	UB (0.00056)	UB (0.00073)	--	--	--
PCB-062 (2,3,4,6'-TeCB)	0.00122 J (0.000511)	U (0.00052)	0.000633 EMPC J (0.000545)	UB (0.000561)	U (0.00073)	0.00102 EMPC J (0.0421)	--	--
PCB-063 (2,3,4',5'-TeCB)	U (0.00049)	U (0.0005)	U (0.000524)	UB (0.000538)	U (0.0007)	U (0.0421)	--	--
PCB-064 (2,3,4',6'-TeCB)	UB (0.000483)	UB (0.000492)	UB (0.000516)	UB (0.000531)	UB (0.00069)	0.00549 J (0.0421)	--	--
PCB-065 (2,3,5,6'-TeCB)	UB (0.000641)	UB (0.000653)	UB (0.000685)	UB (0.000704)	UB (0.00092)	0.0217 B (0.0421)	--	--
PCB-066 (2,3',4,4'-TeCB)	0.00477 J (0.000507)	UB (0.000516)	UB (0.000541)	UB (0.000556)	UB (0.00073)	0.00589 B (0.0421)	--	--
PCB-067 (2,3',4,5'-TeCB)	U (0.000476)	U (0.000484)	U (0.000508)	UB (0.000522)	U (0.00068)	U (0.0421)	--	--
PCB-068 (2,3',4,5'-TeCB)	0.00393 J (0.000479)	UB (0.000488)	UB (0.000512)	UB (0.000526)	U (0.00069)	U (0.0421)	--	--
PCB-069 (2,3',4,6'-TeCB)	0.00584 J (0.000591)	UB (0.000602)	UB (0.000631)	UB (0.000649)	UB (0.00085)	0.00478 B (0.0421)	--	--
PCB-070 (2,3',4',5'-TeCB)	UB (0.00051)	UB (0.00052)	UB (0.000545)	UB (0.00056)	UB (0.00073)	0.00903 B (0.0421)	--	--
PCB-076 (2,3',4',5'-TeCB)	UB (0.00051)	UB (0.00052)	UB (0.000545)	UB (0.00056)	UB (0.00073)	0.00903 B (0.0421)	--	--
PCB-071 (2,3',4',6'-TeCB)	0.00629 J (0.000717)	0.00702 BJ (0.00073)	UB (0.000766)	UB (0.000787)	0.0081 J (0.001)	0.00474 EMPC J (0.0421)	--	--
PCB-072 (2,3',5,5'-TeCB)	U (0.000515)	U (0.000524)	U (0.00055)	UB (0.000565)	U (0.00074)	U (0.0421)	--	--
PCB-073 (2,3',5',6'-TeCB)	U (0.00067)	U (0.000683)	U (0.000716)	UB (0.000736)	U (0.00096)	U (0.0421)	--	--
PCB-074 (2,4,4',5'-TeCB)	UB (0.00051)	UB (0.00052)	UB (0.000545)	UB (0.00056)	UB (0.00073)	0.00903 B (0.0421)	--	--
PCB-075 (2,4,4',6'-TeCB)	0.00122 J (0.000511)	U (0.00052)	0.000633 EMPC J (0.000545)	UB (0.000561)	U (0.00073)	0.00102 EMPC J (0.0421)	--	--
PCB-077 (3,3',4,4'-TeCB)	U (0.000497)	0.000622 EMPC J (0.000504)	U (0.000539)	UB (0.00053)	0.0015 J (0.0007)	U (0.0421)	--	--
PCB-078 (3,3',4,5'-TeCB)	U (0.000547)	U (0.000557)	U (0.000584)	UB (0.0006)	U (0.00078)	U (0.0421)	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-01 MB-MW-01-20100729 Micropurge 7/29/2010	MB-MW-01 MB-MW-01-20101018 Micropurge 10/18/2010	MB-MW-01 MB-MW-01-20110111 Micropurge 1/11/2011	MB-MW-01 MB-MW-01-20110411 Micropurge 4/11/2011	MB-MW-01 MB-MW-01-20110725 Micropurge 7/25/2011	MB-MW-01 MB-MW-01-20111026 Micropurge 10/26/2011	MB-MW-01 MB-MW-01-20120424 Micropurge 4/24/2012	MB-MW-01 MB-MW-01-20121017 Micropurge 10/17/2012
PCB Congeners [ng/L] (continued)								
PCB-079 (3,3',4,5'-TeCB)	U (0.00048)	U (0.000489)	U (0.000512)	UB (0.000527)	U (0.00069)	U (0.0421)	--	--
PCB-081 (3,4,4',5'-TeCB)	U (0.000494)	U (0.000505)	U (0.00052)	UB (0.000559)	U (0.00072)	U (0.0421)	--	--
PCB-016 (2,2',3-TrCB)	0.00611 JQ (0.00101)	U (0.00262)	0.00558 J (0.00176)	UB (0.00128)	UB (0.002)	U (0.0421)	--	--
PCB-017 (2,2',4-TrCB)	0.00699 J (0.000846)	UB (0.00219)	0.00601 J (0.00146)	UB (0.00107)	UB (0.0017)	U (0.0421)	--	--
PCB-018 (2,2',5-TrCB)	0.014 J (0.000749)	UB (0.00194)	UB (0.0013)	UB (0.000948)	UB (0.0015)	0.00624 B (0.0632)	--	--
PCB-019 (2,2',6-TrCB)	0.00309 J (0.00104)	0.00452 EMPC J (0.00268)	U (0.00179)	0.00444 EMPC J (0.00131)	0.0053 EMPC J (0.0021)	U (0.0421)	--	--
PCB-020 (2,3,3'-TrCB)	UB (0.000505)	UB (0.000424)	UB (0.000627)	UB (0.000471)	UB (0.00082)	0.00944 B (0.0421)	--	--
PCB-021 (2,3,4-TrCB)	UB (0.000506)	UB (0.000425)	UB (0.000629)	UB (0.000472)	UB (0.00082)	0.00434 B (0.0421)	--	--
PCB-022 (2,3,4'-TrCB)	0.00474 J (0.000514)	UB (0.000432)	UB (0.000639)	UB (0.00048)	UB (0.00083)	0.00396 B (0.0421)	--	--
PCB-023 (2,3,5-TrCB)	U (0.000524)	U (0.000441)	U (0.000652)	UB (0.000489)	U (0.00085)	U (0.0421)	--	--
PCB-024 (2,3,6-TrCB)	U (0.000709)	U (0.00183)	U (0.00123)	0.00364 J (0.000897)	U (0.0014)	--	--	--
PCB-025 (2,3',4'-TrCB)	U (0.000468)	UB (0.000393)	0.000757 EMPC J (0.000581)	UB (0.000436)	U (0.00076)	U (0.0421)	--	--
PCB-026 (2,3',5'-TrCB)	0.00207 JQ (0.000496)	UB (0.000417)	UB (0.000617)	UB (0.000463)	U (0.00081)	0.0015 B (0.0421)	--	--
PCB-027 (2,3',6-TrCB)	0.00138 J (0.000611)	U (0.00158)	U (0.00106)	0.00331 J (0.000774)	U (0.0012)	U (0.0421)	--	--
PCB-028 (2,4,4'-TrCB)	UB (0.000505)	UB (0.000424)	UB (0.000627)	UB (0.000471)	UB (0.00082)	0.00944 B (0.0421)	--	--
PCB-030 (2,4,6-TrCB)	0.014 J (0.000749)	UB (0.00194)	UB (0.0013)	UB (0.000948)	UB (0.0015)	0.00624 EMPC J (0.0632)	--	--
PCB-029 (2,4,5-TrCB)	0.00207 JQ (0.000496)	0.00185 BJQ (0.000417)	0.00224 J (0.000617)	0.00721 BJ (0.000463)	U (0.00081)	0.0015 B (0.0421)	--	--
PCB-031 (2,4',5'-TrCB)	0.0111 BJ (0.000493)	0.0105 BJ (0.000414)	0.00925 BJ (0.000612)	0.0127 BJ (0.00046)	0.0072 BJ (0.0008)	0.00811 B (0.0421)	--	--
PCB-032 (2,4',6-TrCB)	0.00554 JQ (0.000599)	0.00653 J (0.00155)	0.00476 J (0.00104)	UB (0.000759)	UB (0.0012)	0.00375 EMPC J (0.0421)	--	--
PCB-033 (2,3',4'-TrCB)	UB (0.000506)	UB (0.000425)	UB (0.000629)	UB (0.000472)	UB (0.00082)	0.00434 B (0.0421)	--	--
PCB-034 (2,3',5'-TrCB)	U (0.000516)	U (0.000434)	U (0.000642)	UB (0.000482)	U (0.00084)	U (0.0421)	--	--
PCB-035 (3,3',4'-TrCB)	U (0.000531)	U (0.000446)	0.00143 EMPC J (0.000659)	UB (0.000495)	U (0.00086)	U (0.0421)	--	--
PCB-036 (3,3',5'-TrCB)	U (0.000513)	U (0.000431)	U (0.000637)	UB (0.000478)	U (0.00083)	U (0.0421)	--	--
PCB-037 (3,4,4'-TrCB)	0.00285 J (0.000526)	UB (0.000442)	UB (0.000654)	UB (0.000491)	UB (0.00085)	0.00287 B (0.0421)	--	--
PCB-038 (3,4,5-TrCB)	U (0.000541)	U (0.000454)	U (0.000672)	UB (0.000505)	U (0.00088)	U (0.0421)	--	--
PCB-039 (3,4',5'-TrCB)	U (0.000481)	U (0.000404)	U (0.000597)	UB (0.000449)	U (0.00078)	U (0.0421)	--	--
PCB								
PCBs (total)	U (0.00299)	U (0.00296)	U (0.00299)	U (0.00299)	U (0.0028)	U (0.51)	U (0.01)	U (0.01)
Aroclor-1016	U (0.00257)	U (0.00254)	U (0.00257)	U (0.00257)	U (0.0024)	U (0.51)	U (0.01)	U (0.01)
Aroclor-1242	U (0.00189)	U (0.00188)	U (0.00189)	U (0.00189)	U (0.0018)	U (0.51)	U (0.01)	U (0.01)
Aroclor-1248	U (0.00232)	U (0.0023)	U (0.00232)	U (0.00232)	U (0.0022)	U (0.51)	U (0.01)	U (0.01)
Aroclor-1254	U (0.00233)	U (0.00231)	U (0.00233)	U (0.00233)	U (0.0022)	U (0.51)	U (0.01)	U (0.01)
Aroclor-1260	U (0.00138)	U (0.00137)	U (0.00138)	U (0.00138)	U (0.0013)	U (0.51)	U (0.01)	U (0.01)
Aroclor-1268	U (0.00277)	U (0.00274)	U (0.00277)	U (0.00277)	U (0.0026)	U (0.51)	U (0.01)	U (0.01)
CDDF [pg/L]								
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	U (1.87)	--	U (0.62)	--	UB (0.39)	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	U (1.48)	--	U (0.494)	--	U (0.37)	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	U (2.31)	--	UB (0.737)	--	UB (0.54)	--	--	--
Octachlorodibenzo-p-dioxin	6.29 J (2.1)	--	UB (0.719)	--	UB (0.98)	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin	U (4.94)	--	U (0.227)	--	U (0.29)	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran	U (1.57)	--	UB (0.302)	--	0.42 EMPC J (0.38)	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran	U (1.16)	--	U (0.481)	--	UB (0.3)	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran	U (1.5)	--	UB (0.202)	--	UB (0.41)	--	--	--
Octachlorodibenzofuran	U (2.66)	--	7.17 BJ (0.577)	--	2 BJQ (0.58)	--	--	--

Notes:
1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-02	MB-MW-02	MB-MW-02
Field Sample ID	MB-MW-01-20130410	MB-MW-01-20131009	MB-MW-01-20141030	MB-MW-01-20150603	MB-MW-01-20170424	MB-MW-02-20100726	MB-MW-02-20101018	MB-MW-02-20110110	MB-MW-02
Sample Method	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	
Sample Date	4/10/2013	10/9/2013	10/30/2014	6/3/2015	4/24/2017	7/26/2010	10/18/2010	1/10/2011	
Comments									
SVOC									
Acenaphthene	2.2 (2)	1.4 J (1.9)	0.78 J (2.1)	U (2.2)	U (1.9)	3.48 (0.153)	--	2.92 J (0.158)	
Acenaphthylene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.161)	--	UJ (0.167)	
Acetophenone	U (10)	U (9.6)	U (10)	U (11)	U (19)	U (0.848)	--	UJ (0.88)	
Anthracene	0.22 J (2)	0.35 J (1.9)	U (2.1)	U (2.2)	U (1.9)	1.31 J (0.163)	--	0.495 J (0.169)	
Benzaldehyde	7.8 J (10)	U (9.6)	U (10)	U (11)	U (19)	U (1.59)	--	UJ (1.65)	
Benzo(a)anthracene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.156)	--	UJ (0.162)	
Benzo(a)pyrene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.142)	--	UJ (0.147)	
Benzo(b)fluoranthene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.166)	--	UJ (0.173)	
Benzo(g,h,i)perylene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.16)	--	UJ (0.166)	
Benzo(k)fluoranthene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.58)	--	U (0.602)	
Biphenyl	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (0.44)	--	UJ (0.456)	
bis(2-Chloroethyl) ether	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.266)	--	UJ (0.276)	
bis(2-Ethylhexyl)phthalate	U (20)	U (19)	U (21)	U (22)	U (19)	U (13.3)	--	UJ (13.8)	
Butylbenzylphthalate	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	UL (1.51)	--	UJ (1.57)	
Caprolactam	U (51)	U (48)	U (52)	U (55)	U (46)	35.4 J (12.6)	--	UJ (13.1)	
Carbazole	U (2)	0.85 J (1.9)	U (2.1)	U (2.2)	U (1.9)	3.02 (0.167)	--	UJ (0.174)	
4-Chloroaniline	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (0.938)	--	UJ (0.974)	
2-Chlorophenol	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (1.75)	--	UJ (1.82)	
4-Chlorophenyl-phenyl ether	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (0.533)	--	UJ (0.553)	
Chrysene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.148)	--	U (0.154)	
Dibenz(a,h)anthracene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.164)	--	UJ (0.17)	
Dibenzofuran	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	2.18 J (0.654)	--	1.36 J (0.679)	
2,4-Dichlorophenol	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.354)	--	UJ (0.367)	
Diethylphthalate	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	34 (1.55)	--	UJ (1.61)	
2,4-Dimethylphenol	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	655 (9.03)	--	75.3 J (0.937)	
Dimethylphthalate	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (0.811)	--	UJ (0.842)	
Di-n-butylphthalate	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (1.32)	--	UJ (1.37)	
4,6-Dinitro-2-methylphenol	U (51)	U (48)	U (52)	U (55)	U (46)	U (2.33)	--	UJ (2.42)	
Di-n-octylphthalate	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (2.19)	--	UJ (2.27)	
Fluoranthene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.172)	--	0.698 J (0.178)	
Fluorene	0.72 J (2)	0.51 J (1.9)	U (2.1)	U (2.2)	U (1.9)	1.95 J (0.229)	--	1.2 J (0.238)	
Indeno(1,2,3-cd)pyrene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	U (0.211)	--	UJ (0.219)	
Isophorone	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (0.683)	--	UJ (0.708)	
2-Methylnaphthalene	0.42 J (2)	0.28 J (1.9)	U (2.1)	U (2.2)	U (1.9)	14 (0.129)	--	6.57 J (0.134)	
2-Methylphenol	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	64.3 (0.914)	--	1.63 J (0.948)	
3&4-Methylphenol	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	--	--	--	
4-Methylphenol	--	--	--	--	--	2.96 J (0.956)	--	UJ (0.992)	
Naphthalene	71 (2)	23 (1.9)	17 (2.1)	3.9 (2.2)	U (1.9)	823 (1.48)	--	292 J (0.154)	
N-Nitrosodiphenylamine	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (0.904)	--	UJ (0.938)	
Pentachlorophenol	U (10)	U (9.6)	U (10)	U (11)	U (9.3)	U (0.703)	--	UJ (0.729)	
Phenanthrene	0.54 J (2)	0.42 J (1.9)	U (2.1)	U (2.2)	U (1.9)	3.45 (0.453)	--	2.29 (0.47)	
Phenol	U (2)	U (1.9)	U (2.1)	U (2.2)	U (9.3)	1.47 J (0.616)	--	UJ (0.639)	
Pyrene	U (2)	U (1.9)	U (2.1)	U (2.2)	U (1.9)	0.734 J (0.166)	--	0.342 J (0.173)	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	--	--	--	--	--	--	--
PCB-001 (2-CB)	--	--	--	--	--	0.866 (0.001)	0.364 B (0.00142)	0.347 B (0.000413)	
PCB-002 (3-CB)	--	--	--	--	--	0.0241 J (0.00112)	0.0156 J (0.00167)	0.0152 J (0.000431)	
PCB-003 (4-CB)	--	--	--	--	--	0.0172 J (0.00125)	U (0.00199)	0.0577 (0.000448)	
PCB-209 (DeCB)	--	--	--	--	--	0.0308 J (0.000949)	0.0801 EMPC J (0.00418)	0.0706 (0.001)	
PCB-004 (2,2'-DiCB)	--	--	--	--	--	10.4 B (0.00605)	6.99 B (0.0149)	2.32 (0.00237)	
PCB-005 (2,3-DiCB)	--	--	--	--	--	0.00813 JQ (0.00464)	0.00485 EMPC J (0.00944)	0.0021 EMPC J (0.00172)	
PCB-006 (2,3'-DiCB)	--	--	--	--	--	0.469 (0.00437)	0.285 EMPC (0.00888)	0.0871 (0.00161)	
PCB-007 (2,4-DiCB)	--	--	--	--	--	0.0342 JQ (0.00449)	UB (0.00913)	0.00691 EMPC J (0.00166)	
PCB-008 (2,4'-DiCB)	--	--	--	--	--	0.343 B (0.00427)	UB (0.00869)	0.19 B (0.00158)	
PCB-009 (2,5-DiCB)	--	--	--	--	--	0.0793 (0.00451)	0.0415 EMPC J (0.00917)	0.0133 EMPC J (0.00167)	
PCB-010 (2,6-DiCB)	--	--	--	--	--	0.127 Q (0.00485)	0.0946 EMPC J (0.00986)	0.0336 J (0.00179)	
PCB-011 (3,3'-DiCB)	--	--	--	--	--	UB (0.0043)	UB (0.00873)	UB (0.00159)	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-01 MB-MW-01-20130410 Micropurge 4/10/2013	MB-MW-01 MB-MW-01-20131009 Micropurge 10/9/2013	MB-MW-01 MB-MW-01-20141030 Bladder Pump 10/30/2014	MB-MW-01 MB-MW-01-20150603 Bladder Pump 6/3/2015	MB-MW-01 MB-MW-01-20170424 Bladder Pump 4/24/2017	MB-MW-02 MB-MW-02-20100726 Micropurge 7/26/2010	MB-MW-02 MB-MW-02-20101018 Micropurge 10/18/2010	MB-MW-02 MB-MW-02-20110110 Micropurge 1/10/2011
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	--	--	--	--	--	0.0193 JQ (0.0044)	UB (0.00895)	0.0312 EMPC J (0.00163)
PCB-013 (3,4'-DiCB)	--	--	--	--	--	0.0193 JQ (0.0044)	UB (0.00895)	0.0312 EMPC J (0.00163)
PCB-014 (3,5-DiCB)	--	--	--	--	--	U (0.0038)	U (0.00772)	U (0.0014)
PCB-015 (4,4'-DiCB)	--	--	--	--	--	0.0152 JQ (0.0045)	UB (0.00807)	0.157 B (0.00159)
PCB-170 (2,2',3,3',4,4',5-HpCB)	--	--	--	--	--	0.0523 (0.00211)	0.135 J (0.0061)	0.0732 (0.00127)
PCB-171 (2,2',3,3',4,4',6-HpCB)	--	--	--	--	--	0.0155 J (0.00191)	0.0408 J (0.00586)	0.0203 J (0.00118)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	--	--	--	--	--	0.00727 J (0.00189)	0.0182 EMPC J (0.0058)	0.00859 J (0.00117)
PCB-173 (2,2',3,3',4,5,6-HpCB)	--	--	--	--	--	0.0155 J (0.00191)	0.0408 J (0.00586)	0.0203 J (0.00118)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	--	--	--	--	--	0.0463 (0.00177)	0.137 J (0.00543)	0.0755 (0.0011)
PCB-175 (2,2',3,3',4,5',6-HpCB)	--	--	--	--	--	U (0.0017)	U (0.00522)	U (0.00105)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	--	--	--	--	--	0.0221 JQ (0.00181)	0.065 EMPC J (0.00557)	0.0371 J (0.00112)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	--	--	--	--	--	0.00639 JQ (0.0013)	0.0146 J (0.00398)	0.00764 J (0.000802)
PCB-178 (2,2',3,3',5,5',6-HpCB)	--	--	--	--	--	0.0103 J (0.00184)	0.0278 EMPC J (0.00564)	0.0139 J (0.00114)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	--	--	--	--	--	0.0232 J (0.00137)	0.0683 J (0.00419)	0.018 J (0.000846)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	--	--	--	--	--	0.0912 (0.00144)	0.249 B (0.00443)	0.16 (0.000894)
PCB-181 (2,2',3,4,4',5,6-HpCB)	--	--	--	--	--	U (0.0017)	U (0.00521)	U (0.00105)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	--	--	--	--	--	U (0.00165)	U (0.00507)	U (0.00102)
PCB-183 (2,2',3,4,4',5',6-HpCB)	--	--	--	--	--	0.0328 J (0.00169)	UB (0.00518)	0.0502 (0.00105)
PCB-185 (2,2',3,4,5,5',6-HpCB)	--	--	--	--	--	0.0328 J (0.00169)	0.0871 J (0.00518)	0.0502 (0.00105)
PCB-187 (2,2',3,4',5,5',6-HpCB)	--	--	--	--	--	0.0861 (0.00158)	0.222 B (0.00485)	0.115 (0.000979)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	--	--	--	--	--	U (0.00117)	U (0.00371)	U (0.000735)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	--	--	--	--	--	U (0.00118)	0.00505 EMPC J (0.00241)	0.00144 EMPC J (0.000616)
PCB-190 (2,3,3',4,4',5,6-HpCB)	--	--	--	--	--	0.012 J (0.00132)	0.0184 J (0.00404)	0.00441 EMPC J (0.000816)
PCB-191 (2,3,3',4,4',5',6-HpCB)	--	--	--	--	--	U (0.00129)	U (0.00397)	0.00241 EMPC J (0.000802)
PCB-193 (2,3,3',4',5,5',6-HpCB)	--	--	--	--	--	0.0912 (0.00144)	0.249 B (0.00443)	0.16 (0.000894)
PCB-128 (2,2',3,3',4,4'-HxCB)	--	--	--	--	--	0.0717 (0.0021)	0.157 J (0.00503)	0.0571 (0.00143)
PCB-129 (2,2',3,3',4,5-HxCB)	--	--	--	--	--	0.478 B (0.00217)	0.947 B (0.0052)	0.425 B (0.00148)
PCB-130 (2,2',3,3',4,5'-HxCB)	--	--	--	--	--	0.0286 J (0.00281)	0.0799 J (0.00671)	0.0212 J (0.00191)
PCB-131 (2,2',3,3',4,6-HxCB)	--	--	--	--	--	0.00653 J (0.00288)	0.0212 J (0.00688)	0.00465 EMPC J (0.00195)
PCB-132 (2,2',3,3',4,6'-HxCB)	--	--	--	--	--	0.193 (0.00274)	0.39 (0.00654)	0.151 (0.00186)
PCB-133 (2,2',3,3',5,5'-HxCB)	--	--	--	--	--	0.00774 J (0.00264)	0.0183 JQ (0.00631)	0.00531 J (0.00179)
PCB-134 (2,2',3,3',5,6-HxCB)	--	--	--	--	--	0.0434 (0.00281)	0.0863 EMPC J (0.00672)	0.0251 J (0.00191)
PCB-135 (2,2',3,3',5,6'-HxCB)	--	--	--	--	--	0.187 (0.00284)	0.327 (0.00931)	0.106 (0.00157)
PCB-136 (2,2',3,3',6,6'-HxCB)	--	--	--	--	--	0.0859 (0.00208)	0.171 J (0.00683)	0.0409 J (0.00116)
PCB-137 (2,2',3,4,4',5-HxCB)	--	--	--	--	--	0.0224 J (0.00242)	0.0578 J (0.00579)	0.0169 J (0.00164)
PCB-138 (2,2',3,4,4',5'-HxCB)	--	--	--	--	--	0.478 B (0.00217)	0.947 B (0.0052)	0.425 B (0.00148)
PCB-139 (2,2',3,4,4',6-HxCB)	--	--	--	--	--	0.00958 J (0.00241)	0.0236 J (0.00576)	0.00663 J (0.00164)
PCB-140 (2,2',3,4,4',6'-HxCB)	--	--	--	--	--	0.00958 J (0.00241)	0.0236 J (0.00576)	0.00663 J (0.00164)
PCB-141 (2,2',3,4,5,5'-HxCB)	--	--	--	--	--	0.0736 (0.00251)	0.153 BJ (0.00599)	0.076 (0.0017)
PCB-143 (2,2',3,4,5,6'-HxCB)	--	--	--	--	--	0.0434 (0.00281)	0.0863 EMPC J (0.00672)	0.0251 J (0.00191)
PCB-144 (2,2',3,4,5',6-HxCB)	--	--	--	--	--	0.016 JQ (0.00263)	0.0248 EMPC J (0.00864)	0.0115 J (0.00146)
PCB-146 (2,2',3,4',5,5'-HxCB)	--	--	--	--	--	0.0599 (0.00229)	0.133 J (0.00547)	0.0513 (0.00155)
PCB-147 (2,2',3,4',5,6-HxCB)	--	--	--	--	--	0.41 B (0.00234)	0.759 B (0.00559)	0.333 (0.00159)
PCB-148 (2,2',3,4',5,6'-HxCB)	--	--	--	--	--	U (0.00278)	U (0.00914)	U (0.00155)
PCB-149 (2,2',3,4',5',6-HxCB)	--	--	--	--	--	0.41 B (0.00234)	0.759 B (0.00559)	0.333 (0.00159)
PCB-150 (2,2',3,4',6,6'-HxCB)	--	--	--	--	--	U (0.00194)	U (0.00637)	U (0.00108)
PCB-151 (2,2',3,5,5',6-HxCB)	--	--	--	--	--	0.187 (0.00284)	0.327 (0.00931)	0.106 (0.00157)
PCB-152 (2,2',3,5,6,6'-HxCB)	--	--	--	--	--	U (0.00198)	U (0.00649)	U (0.0011)
PCB-153 (2,2',4,4',5,5'-HxCB)	--	--	--	--	--	0.308 B (0.00188)	0.623 B (0.00449)	0.316 (0.00128)
PCB-154 (2,2',4,4',5,6'-HxCB)	--	--	--	--	--	U (0.00231)	0.0139 EMPC J (0.00757)	0.00247 EMPC J (0.00128)
PCB-155 (2,2',4,4',6,6'-HxCB)	--	--	--	--	--	U (0.00189)	U (0.00619)	U (0.00105)
PCB-156 (2,3,3',4,4',5-HxCB)	--	--	--	--	--	0.0455 (0.0022)	0.121 J (0.00534)	0.0283 JS (0.00199)
PCB-157 (2,3,3',4,4',5'-HxCB)	--	--	--	--	--	0.0455 (0.0022)	0.121 J (0.00534)	0.0283 J (0.00199)
PCB-158 (2,3,3',4,4',6-HxCB)	--	--	--	--	--	0.041 (0.00172)	0.0964 BJ (0.0041)	0.0399 J (0.00117)
PCB-159 (2,3,3',4,5,5'-HxCB)	--	--	--	--	--	U (0.00184)	U (0.0044)	0.00273 EMPC J (0.00125)
PCB-160 (2,3,3',4,5,6-HxCB)	--	--	--	--	--	0.478 B (0.00217)	0.947 B (0.0052)	0.425 B (0.00148)
PCB-162 (2,3,3',4',5,5'-HxCB)	--	--	--	--	--	U (0.00182)	U (0.00434)	U (0.00123)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-01 MB-MW-01-20130410 Micropurge 4/10/2013	MB-MW-01 MB-MW-01-20131009 Micropurge 10/9/2013	MB-MW-01 MB-MW-01-20141030 Bladder Pump 10/30/2014	MB-MW-01 MB-MW-01-20150603 Bladder Pump 6/3/2015	MB-MW-01 MB-MW-01-20170424 Bladder Pump 4/24/2017	MB-MW-02 MB-MW-02-20100726 Micropurge 7/26/2010	MB-MW-02 MB-MW-02-20101018 Micropurge 10/18/2010	MB-MW-02 MB-MW-02-20110110 Micropurge 1/10/2011
PCB Congeners [ng/L] (continued)								
PCB-163 (2,3,3',4',5,6-HxCB)	--	--	--	--	--	0.478 B (0.00217)	0.947 B (0.0052)	0.425 B (0.00148)
PCB-164 (2,3,3',4',5',6-HxCB)	--	--	--	--	--	0.0347 J (0.00192)	0.082 J (0.00458)	0.0266 J (0.0013)
PCB-166 (2,3,4,4',5,6-HxCB)	--	--	--	--	--	0.0717 (0.0021)	0.157 J (0.00503)	0.0571 (0.00143)
PCB-167 (2,3',4,4',5,5'-HxCB)	--	--	--	--	--	0.0131 J (0.00139)	0.0332 J (0.00325)	0.00805 J (0.000769)
PCB-168 (2,3',4,4',5',6-HxCB)	--	--	--	--	--	0.308 B (0.00188)	0.623 B (0.00449)	0.316 (0.00128)
PCB-169 (3,3',4,4',5,5'-HxCB)	--	--	--	--	--	U (0.00149)	U (0.00356)	U (0.000916)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	--	--	--	--	--	0.139 (0.0013)	0.397 L (0.00415)	0.308 (0.00128)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	--	--	--	--	--	0.0106 J (0.000945)	0.0404 J (0.00303)	0.0202 J (0.00086)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	--	--	--	--	--	0.0586 (0.000999)	0.155 EMPC J (0.00321)	0.112 (0.000862)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	--	--	--	--	--	0.0286 J (0.00106)	0.0988 J (0.0032)	0.0759 (0.000982)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	--	--	--	--	--	0.00339 JQ (0.00115)	0.0182 J (0.00348)	0.0129 J (0.00107)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	--	--	--	--	--	0.0145 J (0.0014)	0.0423 J (0.00611)	0.0265 J (0.00106)
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	--	--	--	--	--	U (0.00104)	U (0.00455)	0.00717 EMPC J (0.000792)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	--	--	--	--	--	0.12 (0.00144)	0.267 (0.00631)	0.0336 EMPC J (0.0011)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	--	--	--	--	--	0.12 (0.00144)	0.267 (0.00631)	0.0336 J (0.0011)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	--	--	--	--	--	0.0055 JQ (0.00102)	0.0169 EMPC J (0.00447)	U (0.000778)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	--	--	--	--	--	0.0083 J (0.000986)	0.0174 EMPC J (0.00431)	0.0132 J (0.000751)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	--	--	--	--	--	0.039 J (0.00111)	0.103 J (0.00486)	0.0527 (0.000846)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	--	--	--	--	--	0.0787 (0.00129)	0.197 J (0.00564)	0.115 (0.000981)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	--	--	--	--	--	U (0.00108)	U (0.00473)	U (0.000823)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	--	--	--	--	--	U (0.000891)	U (0.0027)	U (0.000827)
PCB-24/27	--	--	--	--	--	--	--	--
PCB-42/59	--	--	--	--	--	--	--	--
PCB-52/69	--	--	--	--	--	--	--	--
PCB-61/70	--	--	--	--	--	--	--	--
PCB-90/101	--	--	--	--	--	--	--	--
PCB-107/109	--	--	--	--	--	--	--	--
PCB-132/161	--	--	--	--	--	--	--	--
PCB-133/142	--	--	--	--	--	--	--	--
PCB-138/163/164	--	--	--	--	--	--	--	--
PCB-196/203	--	--	--	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	--	--	--	--	--	0.0723 (0.00329)	0.168 J (0.0106)	0.0243 J (0.00146)
PCB-083 (2,2',3,3',5-PeCB)	--	--	--	--	--	0.463 (0.00277)	0.966 B (0.00891)	0.148 (0.00123)
PCB-084 (2,2',3,3',6-PeCB)	--	--	--	--	--	0.348 (0.00315)	0.608 (0.0101)	0.0877 (0.0014)
PCB-085 (2,2',3,4,4'-PeCB)	--	--	--	--	--	0.094 (0.00228)	0.221 (0.00734)	0.0361 J (0.00101)
PCB-086 (2,2',3,4,5-PeCB)	--	--	--	--	--	0.439 B (0.00233)	0.934 EMPC (0.0075)	0.166 (0.00103)
PCB-087 (2,2',3,4,5'-PeCB)	--	--	--	--	--	0.439 B (0.00233)	0.934 Q (0.0075)	0.166 (0.00103)
PCB-088 (2,2',3,4,6-PeCB)	--	--	--	--	--	0.286 (0.0028)	0.496 (0.00903)	0.0512 (0.00124)
PCB-089 (2,2',3,4,6'-PeCB)	--	--	--	--	--	0.00635 J (0.00304)	U (0.0098)	0.003 J (0.00135)
PCB-090 (2,2',3,4',5-PeCB)	--	--	--	--	--	0.81 B (0.00237)	1.52 B (0.00764)	0.278 B (0.00105)
PCB-097 (2,2',3,4',5'-PeCB)	--	--	--	--	--	0.439 B (0.00233)	0.934 EMPC (0.0075)	0.166 (0.00103)
PCB-091 (2,2',3,4',6-PeCB)	--	--	--	--	--	0.286 (0.0028)	0.496 (0.00903)	0.0512 (0.00124)
PCB-098 (2,2',3,4',6'-PeCB)	--	--	--	--	--	0.0496 (0.00262)	0.0944 J (0.00844)	0.00646 EMPC J (0.00116)
PCB-092 (2,2',3,5,5'-PeCB)	--	--	--	--	--	0.26 (0.00269)	0.469 (0.00867)	0.061 (0.00119)
PCB-093 (2,2',3,5,6-PeCB)	--	--	--	--	--	U (0.0027)	0.0498 EMPC J (0.0087)	0.00221 J (0.0012)
PCB-094 (2,2',3,5,6'-PeCB)	--	--	--	--	--	0.0339 J (0.00304)	0.0611 J (0.0098)	0.00461 J (0.00135)
PCB-095 (2,2',3,5',6-PeCB)	--	--	--	--	--	1.14 (0.00287)	1.81 B (0.00922)	0.306 (0.00127)
PCB-096 (2,2',3,6,6'-PeCB)	--	--	--	--	--	0.0285 J (0.00228)	0.0387 EMPC J (0.00733)	0.00276 EMPC J (0.00101)
PCB-099 (2,2',4,4',5-PeCB)	--	--	--	--	--	0.463 (0.00277)	0.966 B (0.00891)	0.148 (0.00123)
PCB-100 (2,2',4,4',6-PeCB)	--	--	--	--	--	U (0.0027)	0.0498 EMPC J (0.0087)	0.00221 J (0.0012)
PCB-101 (2,2',4,5,5'-PeCB)	--	--	--	--	--	0.81 B (0.00237)	1.52 B (0.00764)	0.278 B (0.00105)
PCB-102 (2,2',4,5,6'-PeCB)	--	--	--	--	--	0.0496 (0.00262)	0.0944 J (0.00844)	0.00646 JQ (0.00116)
PCB-103 (2,2',4,5',6-PeCB)	--	--	--	--	--	0.0236 JQ (0.00267)	0.0557 EMPC J (0.00859)	0.00359 EMPC J (0.00118)
PCB-104 (2,2',4,6,6'-PeCB)	--	--	--	--	--	U (0.00203)	U (0.00653)	U (0.0009)
PCB-105 (2,3,3',4,4'-PeCB)	--	--	--	--	--	0.105 (0.00163)	0.201 BJ (0.00326)	0.0613 (0.000705)
PCB-108 (2,3,3',4,5'-PeCB)	--	--	--	--	--	0.0138 J (0.00177)	0.0277 EMPC J (0.00339)	0.00499 EMPC J (0.000749)
PCB-109 (2,3,3',4,6-PeCB)	--	--	--	--	--	0.439 B (0.00233)	0.934 EMPC (0.0075)	0.166 (0.00103)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-01 MB-MW-01-20130410 Micropurge 4/10/2013	MB-MW-01 MB-MW-01-20131009 Micropurge 10/9/2013	MB-MW-01 MB-MW-01-20141030 Bladder Pump 10/30/2014	MB-MW-01 MB-MW-01-20150603 Bladder Pump 6/3/2015	MB-MW-01 MB-MW-01-20170424 Bladder Pump 4/24/2017	MB-MW-02 MB-MW-02-20100726 Micropurge 7/26/2010	MB-MW-02 MB-MW-02-20101018 Micropurge 10/18/2010	MB-MW-02 MB-MW-02-20110110 Micropurge 1/10/2011
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5-PeCB)	--	--	--	--	--	0.043 (0.00168)	0.0779 J (0.00323)	0.0158 J (0.000713)
PCB-110 (2,3,3',4',6-PeCB)	--	--	--	--	--	0.942 B (0.00201)	1.76 B (0.00648)	0.328 B (0.000893)
PCB-111 (2,3,3',5,5'-PeCB)	--	--	--	--	--	U (0.00191)	U (0.00614)	U (0.000846)
PCB-113 (2,3,3',5',6-PeCB)	--	--	--	--	--	0.81 B (0.00237)	1.52 B (0.00764)	0.278 B (0.00105)
PCB-114 (2,3,4,4',5-PeCB)	--	--	--	--	--	0.00487 JQ (0.0016)	0.011 EMPC J (0.00304)	0.00259 EMPC J (0.000659)
PCB-115 (2,3,4,4',6-PeCB)	--	--	--	--	--	0.942 B (0.00201)	1.76 B (0.00648)	0.328 B (0.000893)
PCB-116 (2,3,4,5,6-PeCB)	--	--	--	--	--	0.094 (0.00228)	0.221 (0.00734)	0.0361 J (0.00101)
PCB-117 (2,3,4',5,6-PeCB)	--	--	--	--	--	0.094 (0.00228)	0.221 (0.00734)	0.0361 J (0.00101)
PCB-118 (2,3',4,4',5-PeCB)	--	--	--	--	--	0.407 B (0.00172)	0.708 B (0.00302)	0.188 B (0.00068)
PCB-119 (2,3',4,4',6-PeCB)	--	--	--	--	--	0.439 B (0.00233)	0.934 EMPC (0.0075)	0.166 (0.00103)
PCB-120 (2,3',4,5,5'-PeCB)	--	--	--	--	--	U (0.00196)	U (0.00631)	U (0.000871)
PCB-121 (2,3',4,5',6-PeCB)	--	--	--	--	--	U (0.00198)	U (0.00636)	U (0.000877)
PCB-122 (2,3,3',4',5'-PeCB)	--	--	--	--	--	0.00411 JQ (0.00189)	0.0101 JQ (0.00362)	0.00239 JQ (0.0008)
PCB-123 (2,3',4,4',5'-PeCB)	--	--	--	--	--	0.00347 JQ (0.00176)	0.00925 EMPC J (0.00332)	0.00206 EMPC J (0.000741)
PCB-124 (2,3',4',5,5'-PeCB)	--	--	--	--	--	0.0138 J (0.00177)	0.0277 EMPC J (0.00339)	0.00499 EMPC J (0.000749)
PCB-125 (2,3',4',5',6-PeCB)	--	--	--	--	--	0.439 B (0.00233)	0.934 EMPC (0.0075)	0.166 (0.00103)
PCB-126 (3,3',4,4',5-PeCB)	--	--	--	--	--	0.00337 JQ (0.00161)	0.00594 EMPC J (0.00332)	U (0.000742)
PCB-127 (3,3',4,5,5'-PeCB)	--	--	--	--	--	U (0.00171)	U (0.00329)	U (0.000726)
PCB-040 (2,2',3,3'-TeCB)	--	--	--	--	--	0.41 (0.00255)	0.585 B (0.00621)	0.096 (0.00107)
PCB-041 (2,2',3,4-TeCB)	--	--	--	--	--	0.41 (0.00255)	0.585 B (0.00621)	0.096 (0.00107)
PCB-042 (2,2',3,4'-TeCB)	--	--	--	--	--	0.297 (0.0026)	0.406 (0.00632)	0.05 (0.00109)
PCB-043 (2,2',3,5-TeCB)	--	--	--	--	--	0.0508 Q (0.00238)	0.0626 J (0.0058)	0.01 EMPC J (0.000997)
PCB-044 (2,2',3,5'-TeCB)	--	--	--	--	--	1.49 B (0.00228)	1.92 B (0.00555)	0.256 B (0.000954)
PCB-045 (2,2',3,6-TeCB)	--	--	--	--	--	0.564 B (0.00264)	0.687 B (0.00644)	0.0734 (0.00111)
PCB-046 (2,2',3,6'-TeCB)	--	--	--	--	--	0.343 (0.00313)	0.409 (0.00761)	0.0378 J (0.00131)
PCB-047 (2,2',4,4'-TeCB)	--	--	--	--	--	1.49 B (0.00228)	1.92 B (0.00555)	0.256 B (0.000954)
PCB-048 (2,2',4,5-TeCB)	--	--	--	--	--	0.054 (0.00253)	0.0873 J (0.00616)	0.0215 J (0.00106)
PCB-049 (2,2',4,5'-TeCB)	--	--	--	--	--	1.68 (0.0021)	2.19 B (0.00511)	0.225 (0.000879)
PCB-050 (2,2',4,6-TeCB)	--	--	--	--	--	1.37 (0.00246)	1.46 (0.00598)	0.135 (0.00103)
PCB-051 (2,2',4,6'-TeCB)	--	--	--	--	--	0.564 B (0.00264)	0.687 B (0.00644)	0.0734 (0.00111)
PCB-052 (2,2',5,5'-TeCB)	--	--	--	--	--	2.16 B (0.00246)	3 B (0.00599)	0.389 B (0.00103)
PCB-053 (2,2',5,6'-TeCB)	--	--	--	--	--	1.37 (0.00246)	1.46 (0.00598)	0.135 (0.00103)
PCB-054 (2,2',6,6'-TeCB)	--	--	--	--	--	0.0927 (0.00493)	0.0758 J (0.00732)	0.00695 JQ (0.0015)
PCB-055 (2,3,3',4-TeCB)	--	--	--	--	--	0.00407 JQ (0.00198)	0.0113 EMPC J (0.00481)	0.00216 EMPC J (0.000827)
PCB-056 (2,3,3',4'-TeCB)	--	--	--	--	--	0.0577 (0.00186)	0.0953 BJ (0.00453)	0.0343 J (0.000778)
PCB-057 (2,3,3',5-TeCB)	--	--	--	--	--	0.0205 J (0.00188)	0.039 J (0.00458)	0.00257 J (0.000787)
PCB-058 (2,3,3',5'-TeCB)	--	--	--	--	--	0.00539 JQ (0.00187)	0.00579 J (0.00456)	U (0.000783)
PCB-059 (2,3,3',6-TeCB)	--	--	--	--	--	0.086 (0.00182)	0.117 J (0.00442)	0.018 J (0.00076)
PCB-060 (2,3,4,4'-TeCB)	--	--	--	--	--	0.016 JQ (0.00192)	UB (0.00466)	0.0138 J (0.000801)
PCB-061 (2,3,4,5-TeCB)	--	--	--	--	--	0.456 B (0.00181)	0.682 B (0.00442)	0.192 B (0.000759)
PCB-062 (2,3,4,6-TeCB)	--	--	--	--	--	0.086 (0.00182)	0.117 J (0.00442)	0.018 J (0.00076)
PCB-063 (2,3,4',5-TeCB)	--	--	--	--	--	0.0295 J (0.00174)	0.0485 J (0.00425)	0.00495 EMPC J (0.00073)
PCB-064 (2,3,4',6-TeCB)	--	--	--	--	--	0.151 B (0.00172)	0.225 B (0.00419)	0.0535 (0.000719)
PCB-065 (2,3,5,6-TeCB)	--	--	--	--	--	1.49 B (0.00228)	1.92 B (0.00555)	0.256 B (0.000954)
PCB-066 (2,3',4,4'-TeCB)	--	--	--	--	--	0.313 (0.0018)	0.461 B (0.00439)	0.108 B (0.000754)
PCB-067 (2,3',4,5-TeCB)	--	--	--	--	--	0.0122 JQ (0.00169)	0.0246 EMPC J (0.00412)	0.00249 EMPC J (0.000708)
PCB-068 (2,3',4,5'-TeCB)	--	--	--	--	--	0.0275 J (0.00171)	UB (0.00415)	UB (0.000713)
PCB-069 (2,3',4,6-TeCB)	--	--	--	--	--	1.68 (0.0021)	2.19 B (0.00511)	0.225 (0.000879)
PCB-070 (2,3',4',5-TeCB)	--	--	--	--	--	0.456 B (0.00181)	0.682 B (0.00442)	0.192 B (0.000759)
PCB-076 (2,3',4',5'-TeCB)	--	--	--	--	--	0.456 B (0.00181)	0.682 B (0.00442)	0.192 B (0.000759)
PCB-071 (2,3',4',6-TeCB)	--	--	--	--	--	0.41 (0.00255)	0.585 B (0.00621)	0.096 (0.00107)
PCB-072 (2,3',5,5'-TeCB)	--	--	--	--	--	0.0295 J (0.00183)	0.0491 J (0.00445)	0.00373 J (0.000766)
PCB-073 (2,3',5',6-TeCB)	--	--	--	--	--	0.0508 Q (0.00238)	0.0626 J (0.0058)	0.01 EMPC J (0.000997)
PCB-074 (2,4,4',5-TeCB)	--	--	--	--	--	0.456 B (0.00181)	0.682 B (0.00442)	0.192 B (0.000759)
PCB-075 (2,4,4',6-TeCB)	--	--	--	--	--	0.086 (0.00182)	0.117 J (0.00442)	0.018 J (0.00076)
PCB-077 (3,3',4,4'-TeCB)	--	--	--	--	--	0.00546 JQ (0.00175)	0.00911 EMPC J (0.00432)	0.00419 J (0.000742)
PCB-078 (3,3',4,5-TeCB)	--	--	--	--	--	U (0.00194)	U (0.00473)	U (0.000813)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-02	MB-MW-02	MB-MW-02
Field Sample ID	MB-MW-01-20130410	MB-MW-01-20131009	MB-MW-01-20141030	MB-MW-01-20150603	MB-MW-01-20170424	MB-MW-02-20100726	MB-MW-02-20101018	MB-MW-02-20110110	MB-MW-02-20110110
Sample Method	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/10/2013	10/9/2013	10/30/2014	6/3/2015	4/24/2017	7/26/2010	10/18/2010	1/10/2011	1/10/2011
Comments									
PCB Congeners [ng/L] (continued)									
PCB-079 (3,3',4,5'-TeCB)	--	--	--	--	--	0.00437 J (0.00171)	0.0151 EMPC J (0.00415)	0.00258 J (0.000714)	
PCB-081 (3,4,4',5'-TeCB)	--	--	--	--	--	U (0.00177)	U (0.00426)	U (0.000733)	
PCB-016 (2,2',3-TrCB)	--	--	--	--	--	0.22 (0.00425)	UB (0.0105)	0.0896 (0.00162)	
PCB-017 (2,2',4-TrCB)	--	--	--	--	--	1.11 (0.00354)	0.915 (0.00878)	0.17 (0.00135)	
PCB-018 (2,2',5-TrCB)	--	--	--	--	--	1.25 (0.00314)	0.971 B (0.00778)	0.286 B (0.0012)	
PCB-019 (2,2',6-TrCB)	--	--	--	--	--	1.33 (0.00434)	0.829 (0.0108)	0.215 (0.00166)	
PCB-020 (2,3,3'-TrCB)	--	--	--	--	--	0.599 B (0.00178)	0.739 B (0.00339)	0.186 B (0.000744)	
PCB-021 (2,3,4-TrCB)	--	--	--	--	--	0.0941 B (0.00178)	UB (0.0034)	0.0639 B (0.000746)	
PCB-022 (2,3,4'-TrCB)	--	--	--	--	--	0.0721 (0.00181)	UB (0.00345)	0.0435 B (0.000758)	
PCB-023 (2,3,5-TrCB)	--	--	--	--	--	U (0.00185)	U (0.00352)	U (0.000773)	
PCB-024 (2,3,6-TrCB)	--	--	--	--	--	U (0.00297)	0.0288 EMPC J (0.00736)	U (0.00113)	
PCB-025 (2,3',4-TrCB)	--	--	--	--	--	0.455 (0.00165)	0.508 (0.00314)	0.0491 (0.000689)	
PCB-026 (2,3',5-TrCB)	--	--	--	--	--	0.805 (0.00175)	0.892 B (0.00333)	0.0926 (0.000731)	
PCB-027 (2,3',6-TrCB)	--	--	--	--	--	1.82 (0.00256)	1.36 (0.00635)	0.187 (0.000977)	
PCB-028 (2,4,4'-TrCB)	--	--	--	--	--	0.599 B (0.00178)	0.739 B (0.00339)	0.186 B (0.000744)	
PCB-030 (2,4,6-TrCB)	--	--	--	--	--	1.25 (0.00314)	0.971 B (0.00778)	0.286 B (0.0012)	
PCB-029 (2,4,5-TrCB)	--	--	--	--	--	0.805 (0.00175)	0.892 B (0.00333)	0.0926 (0.000731)	
PCB-031 (2,4',5-TrCB)	--	--	--	--	--	0.37 B (0.00174)	0.441 B (0.00331)	0.138 B (0.000726)	
PCB-032 (2,4',6-TrCB)	--	--	--	--	--	0.738 S (0.00251)	0.83 (0.00622)	0.141 (0.000958)	
PCB-033 (2,3',4'-TrCB)	--	--	--	--	--	0.0941 B (0.00178)	UB (0.0034)	0.0639 B (0.000746)	
PCB-034 (2,3',5'-TrCB)	--	--	--	--	--	0.00469 JQ (0.00182)	0.00931 EMPC J (0.00347)	0.00123 EMPC J (0.000761)	
PCB-035 (3,3',4-TrCB)	--	--	--	--	--	U (0.00187)	U (0.00356)	0.00196 EMPC J (0.000782)	
PCB-036 (3,3',5-TrCB)	--	--	--	--	--	0.0342 J (0.00181)	0.0541 J (0.00344)	0.00376 EMPC J (0.000755)	
PCB-037 (3,4,4'-TrCB)	--	--	--	--	--	0.0138 J (0.00185)	UB (0.00353)	0.0262 J (0.000775)	
PCB-038 (3,4,5-TrCB)	--	--	--	--	--	U (0.00191)	U (0.00363)	U (0.000797)	
PCB-039 (3,4',5-TrCB)	--	--	--	--	--	U (0.00169)	0.00289 EMPC J (0.00323)	U (0.000708)	
PCB									
PCBs (total)	U (0.01)	U (0.0095)	U (0.01)	U (0.01)	U (0.01)	U (0.00299)	0.0668 (0.00299)	R (0.00302)	
Aroclor-1016	U (0.01)	U (0.0095)	U (0.01)	U (0.01)	U (0.01)	U (0.00257)	0.0424 (0.00257)	R (0.00259)	
Aroclor-1242	U (0.01)	U (0.0095)	U (0.01)	U (0.01)	U (0.01)	U (0.00189)	U (0.00189)	R (0.00191)	
Aroclor-1248	U (0.01)	U (0.0095)	U (0.01)	U (0.01)	U (0.01)	U (0.00232)	U (0.00232)	R (0.00234)	
Aroclor-1254	U (0.01)	U (0.0095)	U (0.01)	U (0.01)	U (0.01)	U (0.00233)	U (0.00233)	R (0.00236)	
Aroclor-1260	U (0.01)	U (0.0095)	U (0.01)	U (0.01)	U (0.01)	U (0.00138)	0.0244 (0.00138)	R (0.0014)	
Aroclor-1268	U (0.01)	U (0.0095)	U (0.01)	U (0.01)	U (0.01)	U (0.00277)	U (0.00277)	R (0.0028)	
CDDF [pg/L]									
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	U (1.89)	--	U (0.493)	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	U (1.48)	--	1.31 EMPC J (0.389)	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	--	--	--	--	4.6 J (2.59)	--	15.6 EMPC J (0.704)	
Octachlorodibenzo-p-dioxin	--	--	--	--	--	43.8 J (2.64)	--	195 B (0.815)	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	--	--	--	--	U (4.75)	--	0.152 BJQ (0.259)	
1,2,3,7,8-Pentachlorodibenzofuran	--	--	--	--	--	U (1.66)	--	U (0.308)	
1,2,3,4,7,8-Hexachlorodibenzofuran	--	--	--	--	--	U (1.08)	--	UB (0.409)	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	--	--	--	--	U (1.54)	--	UB (0.334)	
Octachlorodibenzofuran	--	--	--	--	--	7.03 JQ (2.67)	--	29.7 BJ (0.467)	

- Notes:
- 1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
 - 2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
Field Sample ID	MB-MW-02-20110411	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-02-20141030	MB-MW-02
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	MB-MW-02
Sample Date	4/11/2011	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	MB-MW-02
Comments									MB-MW-02
SVOC									
Acenaphthene	--	0.58 J (1.9)	--	U (0.2)	0.75 J (2.3)	U (2.1)	U (1.9)	0.66 J (2.3)	
Acenaphthylene	--	U (0.15)	--	U (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Acetophenone	--	U (0.78)	--	1.2 B (1)	U (11)	U (10)	U (9.7)	UL (11)	
Anthracene	--	0.25 J (1.9)	--	0.29 (0.2)	U (2.3)	0.37 J (2.1)	U (1.9)	UL (2.3)	
Benzaldehyde	--	U (1.5)	--	1.2 B (1)	U (11)	U (10)	U (9.7)	UL (11)	
Benzo(a)anthracene	--	U (0.14)	--	U (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Benzo(a)pyrene	--	UJ (0.13)	--	0.15 B (0.2)	U (2.3)	UL (2.1)	U (1.9)	UL (2.3)	
Benzo(b)fluoranthene	--	UJ (0.15)	--	0.67 B (0.2)	U (2.3)	UL (2.1)	U (1.9)	UL (2.3)	
Benzo(g,h,i)perylene	--	U (0.15)	--	0.11 B (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Benzo(k)fluoranthene	--	UJ (0.53)	--	0.089 J (0.2)	U (2.3)	UL (2.1)	U (1.9)	UL (2.3)	
Biphenyl	--	U (0.4)	--	0.16 B (1)	U (11)	U (10)	U (9.7)	UL (11)	
bis(2-Chloroethyl) ether	--	U (0.24)	--	R (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
bis(2-Ethylhexyl)phthalate	--	U (12)	--	U (2)	U (23)	U (21)	U (19)	UL (23)	
Butylbenzylphthalate	--	U (1.4)	--	U (1)	U (11)	U (10)	U (9.7)	UL (11)	
Caprolactam	--	U (12)	--	U (5.1)	U (57)	U (52)	42 J (49)	UL (57)	
Carbazole	--	U (0.15)	--	U (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
4-Chloroaniline	--	U (0.86)	--	U (1)	U (11)	U (10)	U (9.7)	UL (11)	
2-Chlorophenol	--	U (1.6)	--	UL (1)	U (11)	U (10)	U (9.7)	U (11)	
4-Chlorophenyl-phenyl ether	--	U (0.49)	--	U (1)	U (11)	U (10)	U (9.7)	UL (11)	
Chrysene	--	U (0.14)	--	U (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Dibenz(a,h)anthracene	--	U (0.15)	--	0.54 B (0.2)	U (2.3)	UL (2.1)	U (1.9)	UL (2.3)	
Dibenzofuran	--	U (0.6)	--	0.083 J (1)	U (11)	U (10)	U (9.7)	UL (11)	
2,4-Dichlorophenol	--	U (0.32)	--	0.082 J (0.2)	U (2.3)	U (2.1)	U (1.9)	U (2.3)	
Diethylphthalate	--	U (1.4)	--	20 (1)	3.9 J (11)	U (10)	97 (9.7)	UL (11)	
2,4-Dimethylphenol	--	250 (9.7)	--	3.3 L (1)	3.5 J (11)	65 (10)	150 (9.7)	U (11)	
Dimethylphthalate	--	U (0.74)	--	U (1)	U (11)	U (10)	U (9.7)	UL (11)	
Di-n-butylphthalate	--	U (1.2)	--	U (1)	17 (11)	U (10)	U (9.7)	UL (11)	
4,6-Dinitro-2-methylphenol	--	U (2.1)	--	UL (5.1)	U (57)	U (52)	U (49)	U (57)	
Di-n-octylphthalate	--	U (2)	--	U (1)	U (11)	U (10)	U (9.7)	UL (11)	
Fluoranthene	--	0.27 J (1.9)	--	U (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Fluorene	--	U (0.21)	--	U (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Indeno(1,2,3-cd)pyrene	--	U (0.19)	--	0.43 B (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Isophorone	--	U (0.63)	--	U (1)	U (11)	2.2 J (10)	U (9.7)	UL (11)	
2-Methylnaphthalene	--	2.3 (1.9)	--	0.41 B (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
2-Methylphenol	--	1.8 J (9.7)	--	0.11 J (1)	U (11)	U (10)	U (9.7)	U (11)	
3&4-Methylphenol	--	--	--	0.35 J (1)	U (11)	U (10)	U (9.7)	U (11)	
4-Methylphenol	--	U (0.88)	--	--	--	--	--	--	
Naphthalene	--	250 (1.9)	--	1.2 B (0.2)	5.5 (2.3)	U (2.1)	1.2 J (1.9)	UL (2.3)	
N-Nitrosodiphenylamine	--	U (0.83)	--	U (1)	U (11)	U (10)	U (9.7)	UL (11)	
Pentachlorophenol	--	U (0.64)	--	UL (1)	U (11)	U (10)	U (9.7)	U (11)	
Phenanthrene	--	0.45 J (1.9)	--	0.083 B (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
Phenol	--	U (0.56)	--	0.86 L (0.2)	U (2.3)	U (2.1)	U (1.9)	U (2.3)	
Pyrene	--	0.18 J (1.9)	--	0.18 J (0.2)	U (2.3)	U (2.1)	U (1.9)	UL (2.3)	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	0.00856 EMPC J (0.0421)	--	--	--	--	--	
PCB-001 (2-CB)	0.169 (0.000404)	0.6 B (0.00071)	0.349 B (0.0421)	--	--	--	--	--	
PCB-002 (3-CB)	UB (0.0004)	0.016 J (0.00073)	0.0327 J (0.0421)	--	--	--	--	--	
PCB-003 (4-CB)	UB (0.000395)	0.009 J (0.00074)	0.0202 J (0.0421)	--	--	--	--	--	
PCB-209 (DeCB)	0.0461 (0.000673)	0.078 EMPC (0.0018)	0.112 (0.0421)	--	--	--	--	--	
PCB-004 (2,2'-DiCB)	1.77 B (0.00224)	7.7 (0.0049)	2.64 B (0.0632)	--	--	--	--	--	
PCB-005 (2,3-DiCB)	UB (0.00153)	0.0056 EMPC J (0.0033)	0.0054 B (0.0421)	--	--	--	--	--	
PCB-006 (2,3'-DiCB)	0.0542 B (0.00144)	0.24 (0.0031)	0.0797 B (0.0421)	--	--	--	--	--	
PCB-007 (2,4-DiCB)	UB (0.00147)	0.018 EMPC J (0.0032)	0.00819 B (0.0421)	--	--	--	--	--	
PCB-008 (2,4'-DiCB)	0.0572 BJ (0.0014)	0.22 B (0.003)	0.0833 B (0.0632)	--	--	--	--	--	
PCB-009 (2,5-DiCB)	0.0104 EMPC J (0.00148)	0.036 EMPC J (0.0032)	0.0198 B (0.0421)	--	--	--	--	--	
PCB-010 (2,6-DiCB)	0.0288 J (0.00159)	0.088 (0.0035)	0.0432 (0.0421)	--	--	--	--	--	
PCB-011 (3,3'-DiCB)	UB (0.00141)	UB (0.0031)	0.0176 B (0.0632)	--	--	--	--	--	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
Field Sample ID	MB-MW-02-20110411	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-02-20141030	MB-MW-02
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	MB-MW-02
Sample Date	4/11/2011	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	MB-MW-02
Comments									MB-MW-02
PCB Congeners [ng/L] (continued)									
PCB-012 (3,4-DiCB)	UB (0.00145)	0.013 EMPC J (0.0031)	0.0159 B (0.0632)	--	--	--	--	--	--
PCB-013 (3,4'-DiCB)	UB (0.00145)	0.013 EMPC J (0.0031)	0.0159 B (0.0632)	--	--	--	--	--	--
PCB-014 (3,5-DiCB)	UB (0.00125)	0.0029 EMPC J (0.0027)	0.00385 B (0.0421)	--	--	--	--	--	--
PCB-015 (4,4'-DiCB)	UB (0.00136)	0.022 EMPC J (0.003)	0.0561 (0.0421)	--	--	--	--	--	--
PCB-170 (2,2',3,3',4,4',5-HpCB)	UB (0.00145)	0.053 (0.0017)	0.183 (0.0421)	--	--	--	--	--	--
PCB-171 (2,2',3,3',4,4',6-HpCB)	UB (0.00139)	0.017 EMPC J (0.0017)	0.0535 EMPC (0.0421)	--	--	--	--	--	--
PCB-172 (2,2',3,3',4,5,5'-HpCB)	UB (0.00138)	0.0088 J (0.0017)	0.0202 EMPC J (0.0421)	--	--	--	--	--	--
PCB-173 (2,2',3,3',4,5,6-HpCB)	UB (0.00139)	0.017 EMPC J (0.0017)	0.0535 EMPC (0.0421)	--	--	--	--	--	--
PCB-174 (2,2',3,3',4,5,6'-HpCB)	UB (0.00129)	0.046 B (0.0016)	0.191 (0.0421)	--	--	--	--	--	--
PCB-175 (2,2',3,3',4,5',6-HpCB)	UB (0.00124)	0.0024 EMPC J (0.0015)	0.00665 J (0.0421)	--	--	--	--	--	--
PCB-177 (2,2',3,3',4,5',6'-HpCB)	UB (0.00132)	0.027 BJ (0.0016)	0.0945 (0.0421)	--	--	--	--	--	--
PCB-176 (2,2',3,3',4,6,6'-HpCB)	UB (0.000942)	0.0068 EMPC J (0.0012)	0.0215 J (0.0421)	--	--	--	--	--	--
PCB-178 (2,2',3,3',5,5',6-HpCB)	UB (0.00134)	0.008 J (0.0016)	0.0363 J (0.0421)	--	--	--	--	--	--
PCB-179 (2,2',3,3',5,6,6'-HpCB)	UB (0.000994)	0.024 J (0.0012)	0.094 (0.0421)	--	--	--	--	--	--
PCB-180 (2,2',3,4,4',5,5'-HpCB)	UB (0.00105)	0.094 B (0.0013)	0.339 C (0.0421)	--	--	--	--	--	--
PCB-181 (2,2',3,4,4',5,6-HpCB)	0.00258 EMPC J (0.00124)	U (0.0015)	U (0.0421)	--	--	--	--	--	--
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.0012)	U (0.0015)	U (0.0421)	--	--	--	--	--	--
PCB-183 (2,2',3,4,4',5',6-HpCB)	UB (0.00123)	0.034 J (0.0015)	0.123 C (0.0421)	--	--	--	--	--	--
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.0768 (0.00123)	0.034 J (0.0015)	0.123 C183 (0.0421)	--	--	--	--	--	--
PCB-187 (2,2',3,4',5,5',6-HpCB)	UB (0.00115)	0.081 (0.0014)	0.244 (0.0421)	--	--	--	--	--	--
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.00088)	U (0.0011)	U (0.0421)	--	--	--	--	--	--
PCB-189 (2,3,3',4,4',5,5'-HpCB)	0.00341 J (0.000699)	U (0.0011)	0.00634 J (0.0421)	--	--	--	--	--	--
PCB-190 (2,3,3',4,4',5,6-HpCB)	UB (0.000958)	0.011 J (0.0012)	0.0298 J (0.0421)	--	--	--	--	--	--
PCB-191 (2,3,3',4,4',5',6-HpCB)	UB (0.000942)	0.0023 EMPC J (0.0012)	0.00608 EMPC J (0.0421)	--	--	--	--	--	--
PCB-193 (2,3,3',4',5,5',6-HpCB)	UB (0.00105)	0.094 B (0.0013)	0.339 C180 (0.0421)	--	--	--	--	--	--
PCB-128 (2,2',3,3',4,4'-HxCB)	0.0843 (0.0012)	0.091 (0.0018)	0.156 C (0.0421)	--	--	--	--	--	--
PCB-129 (2,2',3,3',4,5-HxCB)	0.575 B (0.00124)	0.58 B (0.0019)	1.08 C (0.0421)	--	--	--	--	--	--
PCB-130 (2,2',3,3',4,5'-HxCB)	0.0339 J (0.0016)	0.035 J (0.0024)	0.0598 (0.0421)	--	--	--	--	--	--
PCB-131 (2,2',3,3',4,6-HxCB)	0.00834 EMPC J (0.00164)	0.0079 EMPC J (0.0025)	0.0126 EMPC J (0.0421)	--	--	--	--	--	--
PCB-132 (2,2',3,3',4,6'-HxCB)	0.211 (0.00156)	0.22 (0.0023)	--	--	--	--	--	--	--
PCB-133 (2,2',3,3',5,5'-HxCB)	0.0105 J (0.0015)	0.0089 J (0.0023)	--	--	--	--	--	--	--
PCB-134 (2,2',3,3',5,6-HxCB)	0.0455 (0.0016)	0.047 (0.0024)	0.0754 C (0.0421)	--	--	--	--	--	--
PCB-135 (2,2',3,3',5,6'-HxCB)	0.201 (0.00165)	0.18 (0.0027)	0.364 C (0.0421)	--	--	--	--	--	--
PCB-136 (2,2',3,3',6,6'-HxCB)	0.0986 (0.00121)	0.09 (0.002)	0.163 (0.0421)	--	--	--	--	--	--
PCB-137 (2,2',3,4,4',5-HxCB)	0.0276 J (0.00138)	0.028 J (0.0021)	0.0524 (0.0421)	--	--	--	--	--	--
PCB-138 (2,2',3,4,4',5'-HxCB)	0.575 B (0.00124)	0.58 B (0.0019)	--	--	--	--	--	--	--
PCB-139 (2,2',3,4,4',6-HxCB)	0.0134 J (0.00137)	0.011 J (0.0021)	0.02 J (0.0421)	--	--	--	--	--	--
PCB-140 (2,2',3,4,4',6'-HxCB)	0.0134 J (0.00137)	0.011 J (0.0021)	0.02 J (0.0421)	--	--	--	--	--	--
PCB-141 (2,2',3,4,5,5'-HxCB)	0.0938 (0.00143)	0.08 (0.0021)	0.179 (0.0421)	--	--	--	--	--	--
PCB-143 (2,2',3,4,5,6'-HxCB)	0.0455 (0.0016)	0.047 (0.0024)	0.0754 C134 (0.0421)	--	--	--	--	--	--
PCB-144 (2,2',3,4,5',6-HxCB)	0.0207 J (0.00153)	0.016 EMPC J (0.0025)	0.0395 J (0.0421)	--	--	--	--	--	--
PCB-146 (2,2',3,4',5,5'-HxCB)	0.0729 (0.0013)	0.062 EMPC (0.002)	0.138 (0.0421)	--	--	--	--	--	--
PCB-147 (2,2',3,4',5,6-HxCB)	0.46 B (0.00133)	0.44 B (0.002)	0.927 C (0.0421)	--	--	--	--	--	--
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.00162)	U (0.0026)	U (0.0421)	--	--	--	--	--	--
PCB-149 (2,2',3,4',5',6-HxCB)	0.46 B (0.00133)	0.44 B (0.002)	0.927 C147 (0.0421)	--	--	--	--	--	--
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.00113)	U (0.0018)	U (0.0421)	--	--	--	--	--	--
PCB-151 (2,2',3,5,5',6-HxCB)	0.201 (0.00165)	0.18 (0.0027)	0.364 C135 (0.0421)	--	--	--	--	--	--
PCB-152 (2,2',3,5,6,6'-HxCB)	0.00225 J (0.00115)	U (0.0019)	U (0.0421)	--	--	--	--	--	--
PCB-153 (2,2',4,4',5,5'-HxCB)	0.413 B (0.00107)	0.37 B (0.0016)	0.815 C (0.0421)	--	--	--	--	--	--
PCB-154 (2,2',4,4',5,6'-HxCB)	0.00886 J (0.00134)	0.01 J (0.0022)	0.011 J (0.0421)	--	--	--	--	--	--
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.0011)	U (0.0018)	U (0.0421)	--	--	--	--	--	--
PCB-156 (2,3,3',4,4',5-HxCB)	0.0608 (0.00129)	0.06 (0.0019)	0.111 C (0.0421)	--	--	--	--	--	--
PCB-157 (2,3,3',4,4',5'-HxCB)	0.0608 (0.00129)	0.06 (0.0019)	0.111 C156 (0.0421)	--	--	--	--	--	--
PCB-158 (2,3,3',4,4',6-HxCB)	0.0503 (0.000977)	0.056 (0.0015)	0.101 (0.0421)	--	--	--	--	--	--
PCB-159 (2,3,3',4,5,5'-HxCB)	UB (0.00105)	0.0024 EMPC J (0.0016)	0.00734 J (0.0421)	--	--	--	--	--	--
PCB-160 (2,3,3',4,5,6-HxCB)	0.575 B (0.00124)	0.58 B (0.0019)	1.08 C129 (0.0421)	--	--	--	--	--	--
PCB-162 (2,3,3',4',5,5'-HxCB)	UB (0.00104)	U (0.0016)	0.00402 EMPC J (0.0421)	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
Field Sample ID	MB-MW-02-20110411	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-02-20141030	MB-MW-02
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	MB-MW-02
Sample Date	4/11/2011	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	MB-MW-02
Comments									MB-MW-02
PCB Congeners [ng/L] (continued)									
PCB-163 (2,3,3',4',5,6-HxCB)	0.575 B (0.00124)	0.58 B (0.0019)	1.08 C129 (0.0421)	--	--	--	--	--	--
PCB-164 (2,3,3',4',5',6-HxCB)	0.0412 J (0.00109)	0.037 J (0.0016)	0.0762 (0.0421)	--	--	--	--	--	--
PCB-166 (2,3,4,4',5,6-HxCB)	0.0843 (0.0012)	0.091 (0.0018)	0.156 C128 (0.0421)	--	--	--	--	--	--
PCB-167 (2,3',4,4',5,5'-HxCB)	0.0174 J (0.000839)	0.017 J (0.0012)	0.0332 J (0.0421)	--	--	--	--	--	--
PCB-168 (2,3',4,4',5',6-HxCB)	0.413 B (0.00107)	0.37 B (0.0016)	0.815 C153 (0.0421)	--	--	--	--	--	--
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.000761)	0.0012 EMPC J (0.0012)	U (0.0421)	--	--	--	--	--	--
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.176 (0.00149)	0.32 (0.0016)	0.443 (0.0421)	--	--	--	--	--	--
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	0.0165 J (0.00107)	0.023 J (0.0012)	0.0424 (0.0421)	--	--	--	--	--	--
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.0708 (0.00112)	0.1 (0.0012)	0.174 (0.0421)	--	--	--	--	--	--
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.0514 (0.000755)	0.046 (0.0013)	0.109 (0.0421)	--	--	--	--	--	--
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	UB (0.000819)	0.0049 J (0.0014)	0.025 EMPC J (0.0421)	--	--	--	--	--	--
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	UB (0.00109)	0.023 J (0.0019)	--	--	--	--	--	--	--
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	UB (0.000813)	U (0.0014)	0.00331 EMPC J (0.0421)	--	--	--	--	--	--
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.148 (0.00113)	0.16 (0.0019)	0.207 C (0.0421)	--	--	--	--	--	--
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.148 (0.00113)	0.16 (0.0019)	0.0196 J (0.0421)	--	--	--	--	--	--
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	UB (0.000798)	0.0093 J (0.0014)	0.02 EMPC J (0.0421)	--	--	--	--	--	--
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	UB (0.000771)	0.012 EMPC J (0.0013)	0.207 C198 (0.0421)	--	--	--	--	--	--
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.0384 J (0.000868)	0.052 (0.0015)	0.0871 (0.0421)	--	--	--	--	--	--
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.0932 (0.00101)	0.13 (0.0017)	0.179 (0.0421)	--	--	--	--	--	--
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.000845)	U (0.0014)	U (0.0421)	--	--	--	--	--	--
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	UB (0.000636)	U (0.0011)	0.0037 J (0.0421)	--	--	--	--	--	--
PCB-24/27	--	--	U (0.0421)	--	--	--	--	--	--
PCB-42/59	--	--	0.162 (0.0421)	--	--	--	--	--	--
PCB-52/69	--	--	0.95 B (0.0421)	--	--	--	--	--	--
PCB-61/70	--	--	0.487 BC (0.0421)	--	--	--	--	--	--
PCB-90/101	--	--	0.861 C (0.0421)	--	--	--	--	--	--
PCB-107/109	--	--	0.0643 (0.0421)	--	--	--	--	--	--
PCB-132/161	--	--	0.395 (0.0421)	--	--	--	--	--	--
PCB-133/142	--	--	0.0175 J (0.0421)	--	--	--	--	--	--
PCB-138/163/164	--	--	1.08 C129 (0.0421)	--	--	--	--	--	--
PCB-196/203	--	--	0.0499 (0.0421)	--	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	0.0411 EMPC J (0.00179)	0.056 EMPC (0.0025)	0.0744 EMPC (0.0421)	--	--	--	--	--	--
PCB-083 (2,2',3,3',5-PeCB)	0.349 (0.00151)	0.48 (0.0021)	0.509 C (0.0421)	--	--	--	--	--	--
PCB-084 (2,2',3,3',6-PeCB)	0.185 (0.00171)	0.27 (0.0024)	0.254 (0.0421)	--	--	--	--	--	--
PCB-085 (2,2',3,4,4'-PeCB)	0.0871 (0.00124)	0.11 EMPC (0.0017)	0.13 C (0.0421)	--	--	--	--	--	--
PCB-086 (2,2',3,4,5-PeCB)	0.33 B (0.00127)	0.46 EMPC (0.0018)	0.498 EMPC (0.0421)	--	--	--	--	--	--
PCB-087 (2,2',3,4,5'-PeCB)	0.33 B (0.00127)	0.46 Q (0.0018)	0.498 EMPC (0.0421)	--	--	--	--	--	--
PCB-088 (2,2',3,4,6-PeCB)	0.15 (0.00153)	0.21 (0.0021)	0.183 C (0.0421)	--	--	--	--	--	--
PCB-089 (2,2',3,4,6'-PeCB)	U (0.00166)	0.0079 EMPC J (0.0023)	U (0.0421)	--	--	--	--	--	--
PCB-090 (2,2',3,4',5-PeCB)	0.588 B (0.00129)	0.83 B (0.0018)	--	--	--	--	--	--	--
PCB-097 (2,2',3,4',5'-PeCB)	0.33 B (0.00127)	0.46 EMPC (0.0018)	0.498 EMPC (0.0421)	--	--	--	--	--	--
PCB-091 (2,2',3,4',6-PeCB)	0.15 (0.00153)	0.21 (0.0021)	0.183 C88 (0.0421)	--	--	--	--	--	--
PCB-098 (2,2',3,4',6'-PeCB)	0.0231 J (0.00143)	0.036 J (0.002)	0.0345 J (0.0421)	--	--	--	--	--	--
PCB-092 (2,2',3,5,5'-PeCB)	0.172 (0.00147)	0.23 (0.002)	0.204 (0.0421)	--	--	--	--	--	--
PCB-093 (2,2',3,5,6-PeCB)	0.0195 BJ (0.00147)	0.023 EMPC J (0.0021)	0.0159 EMPC J (0.0421)	--	--	--	--	--	--
PCB-094 (2,2',3,5,6'-PeCB)	0.0195 J (0.00166)	0.02 J (0.0023)	0.0191 J (0.0421)	--	--	--	--	--	--
PCB-095 (2,2',3,5',6-PeCB)	0.541 (0.00156)	0.9 (0.0022)	0.827 (0.0421)	--	--	--	--	--	--
PCB-096 (2,2',3,6,6'-PeCB)	0.0117 EMPC J (0.00124)	0.017 J (0.0017)	0.0113 J (0.0421)	--	--	--	--	--	--
PCB-099 (2,2',4,4',5-PeCB)	0.349 (0.00151)	0.48 (0.0021)	0.509 C83 (0.0421)	--	--	--	--	--	--
PCB-100 (2,2',4,4',6-PeCB)	0.0195 BJ (0.00147)	0.023 EMPC J (0.0021)	0.0159 EMPC J (0.0421)	--	--	--	--	--	--
PCB-101 (2,2',4,5,5'-PeCB)	0.588 B (0.00129)	0.83 B (0.0018)	0.861 C90 (0.0421)	--	--	--	--	--	--
PCB-102 (2,2',4,5,6'-PeCB)	0.0231 J (0.00143)	0.036 J (0.002)	0.0345 J (0.0421)	--	--	--	--	--	--
PCB-103 (2,2',4,5',6-PeCB)	0.0144 EMPC J (0.00145)	0.021 J (0.002)	0.0156 J (0.0421)	--	--	--	--	--	--
PCB-104 (2,2',4,6,6'-PeCB)	U (0.00111)	U (0.0015)	U (0.0421)	--	--	--	--	--	--
PCB-105 (2,3,3',4,4'-PeCB)	0.101 B (0.000762)	0.13 (0.0013)	0.193 (0.0421)	--	--	--	--	--	--
PCB-108 (2,3,3',4,5'-PeCB)	0.0168 BJ (0.000856)	0.014 J (0.0014)	0.0234 J (0.0421)	--	--	--	--	--	--
PCB-109 (2,3,3',4,6-PeCB)	0.33 B (0.00127)	0.46 EMPC (0.0018)	0.498 EMPC (0.0421)	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
Field Sample ID	MB-MW-02-20110411	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-02-20141030	MB-MW-02
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	MB-MW-02
Sample Date	4/11/2011	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	MB-MW-02
Comments									MB-MW-02
PCB Congeners [ng/L] (continued)									
PCB-107 (2,3,3',4',5-PeCB)	0.0392 BJ (0.000814)	0.043 (0.0013)	--	--	--	--	--	--	--
PCB-110 (2,3,3',4',6-PeCB)	0.672 (0.0011)	0.98 B (0.0015)	1.06 BC (0.0421)	--	--	--	--	--	--
PCB-111 (2,3,3',5,5'-PeCB)	U (0.00104)	U (0.0014)	U (0.0421)	--	--	--	--	--	--
PCB-113 (2,3,3',5',6-PeCB)	0.588 B (0.00129)	0.83 B (0.0018)	0.861 C90 (0.0421)	--	--	--	--	--	--
PCB-114 (2,3,4,4',5-PeCB)	UB (0.000793)	0.0084 J (0.0012)	--	--	--	--	--	--	--
PCB-115 (2,3,4,4',6-PeCB)	0.672 (0.0011)	0.98 B (0.0015)	1.06 BC110 (0.0421)	--	--	--	--	--	--
PCB-116 (2,3,4,5,6-PeCB)	0.0871 (0.00124)	0.11 Q (0.0017)	0.13 C85 (0.0421)	--	--	--	--	--	--
PCB-117 (2,3,4',5,6-PeCB)	0.0871 (0.00124)	0.11 EMPC (0.0017)	0.13 C85 (0.0421)	--	--	--	--	--	--
PCB-118 (2,3',4,4',5-PeCB)	0.392 (0.000798)	0.49 B (0.0013)	0.662 (0.0421)	--	--	--	--	--	--
PCB-119 (2,3',4,4',6-PeCB)	0.33 B (0.00127)	0.46 EMPC (0.0018)	0.498 EMPC (0.0421)	--	--	--	--	--	--
PCB-120 (2,3',4,5,5'-PeCB)	0.00355 EMPC J (0.00107)	0.0024 EMPC J (0.0015)	0.00395 J (0.0421)	--	--	--	--	--	--
PCB-121 (2,3',4,5',6-PeCB)	U (0.00108)	U (0.0015)	U (0.0421)	--	--	--	--	--	--
PCB-122 (2,3,3',4',5'-PeCB)	0.00454 J (0.000913)	0.0054 JQ (0.0015)	0.00651 EMPC J (0.0421)	--	--	--	--	--	--
PCB-123 (2,3',4,4',5'-PeCB)	UB (0.000876)	0.0061 J (0.0014)	0.00836 EMPC J (0.0421)	--	--	--	--	--	--
PCB-124 (2,3',4',5,5'-PeCB)	0.0168 BJ (0.000856)	0.014 J (0.0014)	0.0234 J (0.0421)	--	--	--	--	--	--
PCB-125 (2,3',4',5',6-PeCB)	0.33 B (0.00127)	0.46 EMPC (0.0018)	0.498 EMPC (0.0421)	--	--	--	--	--	--
PCB-126 (3,3',4,4',5-PeCB)	UB (0.0008)	U (0.0013)	U (0.0421)	--	--	--	--	--	--
PCB-127 (3,3',4,5,5'-PeCB)	U (0.000829)	U (0.0013)	U (0.0421)	--	--	--	--	--	--
PCB-040 (2,2',3,3'-TeCB)	0.179 B (0.00112)	0.29 (0.0018)	0.297 C (0.0421)	--	--	--	--	--	--
PCB-041 (2,2',3,4-TeCB)	0.179 B (0.00112)	0.29 (0.0018)	0.297 C40 (0.0421)	--	--	--	--	--	--
PCB-042 (2,2',3,4'-TeCB)	0.114 B (0.00114)	0.18 (0.0018)	--	--	--	--	--	--	--
PCB-043 (2,2',3,5-TeCB)	0.0324 BJ (0.00105)	0.017 EMPC J (0.0017)	0.0159 EMPC J (0.0421)	--	--	--	--	--	--
PCB-044 (2,2',3,5'-TeCB)	0.568 B (0.001)	0.97 B (0.0016)	0.739 BC (0.0421)	--	--	--	--	--	--
PCB-045 (2,2',3,6-TeCB)	0.181 (0.00116)	0.32 (0.0018)	0.209 BC (0.0421)	--	--	--	--	--	--
PCB-046 (2,2',3,6'-TeCB)	0.0908 (0.00138)	0.19 (0.0022)	0.1 (0.0421)	--	--	--	--	--	--
PCB-047 (2,2',4,4'-TeCB)	0.568 B (0.001)	0.97 B (0.0016)	0.739 BC44 (0.0421)	--	--	--	--	--	--
PCB-048 (2,2',4,5-TeCB)	0.0234 BJ (0.00111)	0.032 J (0.0018)	0.0587 (0.0421)	--	--	--	--	--	--
PCB-049 (2,2',4,5'-TeCB)	0.613 B (0.000926)	1 B (0.0015)	0.627 BC (0.0421)	--	--	--	--	--	--
PCB-050 (2,2',4,6-TeCB)	0.339 B (0.00108)	0.72 (0.0017)	0.315 C (0.0421)	--	--	--	--	--	--
PCB-051 (2,2',4,6'-TeCB)	0.181 (0.00116)	0.32 (0.0018)	0.209 BC45 (0.0421)	--	--	--	--	--	--
PCB-052 (2,2',5,5'-TeCB)	0.806 B (0.00108)	1.4 B (0.0017)	--	--	--	--	--	--	--
PCB-053 (2,2',5,6'-TeCB)	0.339 B (0.00108)	0.72 (0.0017)	0.315 C50 (0.0421)	--	--	--	--	--	--
PCB-054 (2,2',6,6'-TeCB)	0.0177 J (0.00162)	0.039 Q (0.0029)	0.0122 EMPC J (0.0421)	--	--	--	--	--	--
PCB-055 (2,3,3',4-TeCB)	UB (0.00087)	0.0061 EMPC J (0.0014)	0.00633 EMPC J (0.0421)	--	--	--	--	--	--
PCB-056 (2,3,3',4'-TeCB)	0.0311 BJ (0.000819)	0.046 B (0.0013)	0.108 (0.0421)	--	--	--	--	--	--
PCB-057 (2,3,3',5-TeCB)	0.0126 J (0.000829)	0.013 J (0.0013)	0.00887 J (0.0421)	--	--	--	--	--	--
PCB-058 (2,3,3',5'-TeCB)	UB (0.000825)	0.003 EMPC J (0.0013)	0.00327 EMPC J (0.0421)	--	--	--	--	--	--
PCB-059 (2,3,3',6-TeCB)	0.0462 B (0.0008)	0.048 (0.0013)	0.0559 C (0.0421)	--	--	--	--	--	--
PCB-060 (2,3,4,4'-TeCB)	UB (0.000844)	0.014 J (0.0013)	0.0584 (0.0421)	--	--	--	--	--	--
PCB-061 (2,3,4,5-TeCB)	0.242 B (0.000799)	0.39 B (0.0013)	--	--	--	--	--	--	--
PCB-062 (2,3,4,6-TeCB)	0.0462 B (0.0008)	0.048 (0.0013)	0.0559 C59 (0.0421)	--	--	--	--	--	--
PCB-063 (2,3,4',5-TeCB)	0.0163 J (0.000768)	0.021 J (0.0012)	0.0162 EMPC J (0.0421)	--	--	--	--	--	--
PCB-064 (2,3,4',6-TeCB)	0.0702 B (0.000758)	0.1 B (0.0012)	0.155 (0.0421)	--	--	--	--	--	--
PCB-065 (2,3,5,6-TeCB)	0.568 B (0.001)	0.97 B (0.0016)	0.739 BC44 (0.0421)	--	--	--	--	--	--
PCB-066 (2,3',4,4'-TeCB)	0.162 B (0.000794)	0.26 B (0.0013)	0.321 (0.0421)	--	--	--	--	--	--
PCB-067 (2,3',4,5-TeCB)	UB (0.000745)	0.0058 EMPC J (0.0012)	0.011 J (0.0421)	--	--	--	--	--	--
PCB-068 (2,3',4,5'-TeCB)	0.0147 BJ (0.000751)	0.018 J (0.0012)	0.0139 J (0.0421)	--	--	--	--	--	--
PCB-069 (2,3',4,6-TeCB)	0.613 B (0.000926)	1 B (0.0015)	0.627 BC49 (0.0421)	--	--	--	--	--	--
PCB-070 (2,3',4',5-TeCB)	0.242 B (0.000799)	0.39 B (0.0013)	0.487 BC61 (0.0421)	--	--	--	--	--	--
PCB-076 (2,3',4',5'-TeCB)	0.242 B (0.000799)	0.39 B (0.0013)	0.487 BC61 (0.0421)	--	--	--	--	--	--
PCB-071 (2,3',4',6-TeCB)	0.179 B (0.00112)	0.29 (0.0018)	0.297 C40 (0.0421)	--	--	--	--	--	--
PCB-072 (2,3',5,5'-TeCB)	0.0165 J (0.000806)	0.019 J (0.0013)	0.0128 J (0.0421)	--	--	--	--	--	--
PCB-073 (2,3',5',6-TeCB)	0.0324 BJ (0.00105)	0.017 EMPC J (0.0017)	0.0159 EMPC J (0.0421)	--	--	--	--	--	--
PCB-074 (2,4,4',5-TeCB)	0.242 B (0.000799)	0.39 B (0.0013)	0.487 BC61 (0.0421)	--	--	--	--	--	--
PCB-075 (2,4,4',6-TeCB)	0.0462 B (0.0008)	0.048 (0.0013)	0.0559 C59 (0.0421)	--	--	--	--	--	--
PCB-077 (3,3',4,4'-TeCB)	UB (0.000772)	0.0036 EMPC J (0.0013)	0.0189 J (0.0421)	--	--	--	--	--	--
PCB-078 (3,3',4,5-TeCB)	U (0.000857)	U (0.0014)	U (0.0421)	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
Field Sample ID	MB-MW-02-20110411	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-02-20141030	MB-MW-02
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	MB-MW-02
Sample Date	4/11/2011	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	MB-MW-02
Comments									MB-MW-02
PCB Congeners [ng/L] (continued)									
PCB-079 (3,3',4,5'-TeCB)	UB (0.000752)	0.0059 EMPC J (0.0012)	0.00589 EMPC J (0.0421)	--	--	--	--	--	--
PCB-081 (3,4,4',5'-TeCB)	UB (0.000781)	U (0.0012)	U (0.0421)	--	--	--	--	--	--
PCB-016 (2,2',3-TrCB)	0.0571 B (0.00189)	0.13 EMPC (0.0034)	0.119 (0.0421)	--	--	--	--	--	--
PCB-017 (2,2',4-TrCB)	0.23 B (0.00157)	0.67 (0.0028)	0.25 (0.0421)	--	--	--	--	--	--
PCB-018 (2,2',5-TrCB)	0.295 B (0.00139)	0.79 B (0.0025)	0.396 BC (0.0632)	--	--	--	--	--	--
PCB-019 (2,2',6-TrCB)	0.218 (0.00193)	0.74 (0.0034)	0.298 (0.0421)	--	--	--	--	--	--
PCB-020 (2,3,3'-TrCB)	0.19 B (0.000664)	0.38 B (0.001)	0.368 BC (0.0421)	--	--	--	--	--	--
PCB-021 (2,3,4-TrCB)	UB (0.000666)	0.058 EMPC (0.001)	0.0939 BC (0.0421)	--	--	--	--	--	--
PCB-022 (2,3,4'-TrCB)	UB (0.000676)	0.042 B (0.001)	0.08 B (0.0421)	--	--	--	--	--	--
PCB-023 (2,3,5-TrCB)	UB (0.00069)	U (0.0011)	U (0.0421)	--	--	--	--	--	--
PCB-024 (2,3,6-TrCB)	0.00566 EMPC J (0.00132)	0.013 J (0.0023)	--	--	--	--	--	--	--
PCB-025 (2,3',4-TrCB)	0.108 B (0.000615)	0.25 (0.00095)	0.126 (0.0421)	--	--	--	--	--	--
PCB-026 (2,3',5-TrCB)	0.203 B (0.000653)	0.45 B (0.001)	0.238 C (0.0421)	--	--	--	--	--	--
PCB-027 (2,3',6-TrCB)	0.352 (0.00114)	1.1 (0.002)	0.335 (0.0421)	--	--	--	--	--	--
PCB-028 (2,4,4'-TrCB)	0.19 B (0.000664)	0.38 B (0.001)	0.368 BC20 (0.0421)	--	--	--	--	--	--
PCB-030 (2,4,6-TrCB)	0.295 B (0.00139)	0.79 B (0.0025)	0.396 BC18 (0.0632)	--	--	--	--	--	--
PCB-029 (2,4,5-TrCB)	0.203 B (0.000653)	0.45 B (0.001)	0.238 C26 (0.0421)	--	--	--	--	--	--
PCB-031 (2,4',5-TrCB)	0.121 B (0.000649)	0.23 B (0.001)	0.277 B (0.0421)	--	--	--	--	--	--
PCB-032 (2,4',6-TrCB)	0.222 (0.00112)	0.49 (0.002)	0.233 (0.0421)	--	--	--	--	--	--
PCB-033 (2,3',4'-TrCB)	UB (0.000666)	0.058 EMPC (0.001)	0.0939 BC21 (0.0421)	--	--	--	--	--	--
PCB-034 (2,3',5'-TrCB)	UB (0.000679)	0.0039 EMPC J (0.0011)	0.00209 EMPC J (0.0421)	--	--	--	--	--	--
PCB-035 (3,3',4-TrCB)	UB (0.000698)	U (0.0011)	0.00438 EMPC J (0.0421)	--	--	--	--	--	--
PCB-036 (3,3',5-TrCB)	UB (0.000674)	U (0.001)	U (0.0421)	--	--	--	--	--	--
PCB-037 (3,4,4'-TrCB)	UB (0.000692)	0.013 J (0.0011)	0.108 (0.0421)	--	--	--	--	--	--
PCB-038 (3,4,5-TrCB)	UB (0.000712)	U (0.0011)	U (0.0421)	--	--	--	--	--	--
PCB-039 (3,4',5-TrCB)	UB (0.000633)	U (0.00098)	U (0.0421)	--	--	--	--	--	--
PCB									
PCBs (total)	U (0.00302)	U (0.0028)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.01)	
Aroclor-1016	U (0.00259)	U (0.0024)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.01)	
Aroclor-1242	U (0.00191)	U (0.0018)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.01)	
Aroclor-1248	U (0.00234)	U (0.0022)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.01)	
Aroclor-1254	U (0.00236)	U (0.0022)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.01)	
Aroclor-1260	U (0.0014)	U (0.0013)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.01)	
Aroclor-1268	U (0.0028)	U (0.0026)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.01)	
CDDF [pg/L]									
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	U (0.77)	--	--	--	--	--	--	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	U (0.75)	--	--	--	--	--	--	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	34 BJ (1.8)	--	--	--	--	--	--	
Octachlorodibenzo-p-dioxin	--	440 J (3.1)	--	--	--	--	--	--	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	U (0.5)	--	--	--	--	--	--	
1,2,3,7,8-Pentachlorodibenzofuran	--	U (0.61)	--	--	--	--	--	--	
1,2,3,4,7,8-Hexachlorodibenzofuran	--	UB (0.45)	--	--	--	--	--	--	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	UB (0.83)	--	--	--	--	--	--	
Octachlorodibenzofuran	--	49 BJ (1.2)	--	--	--	--	--	--	

Notes:

- 1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
- 2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-02-20150603	MB-MW-02-20170424	MB-MW-03-20100727	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6/3/2015	4/24/2017	7/27/2010	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	
Comments									
SVOC									
Acenaphthene	0.38 J (2.1)	U (1.9)	1.48 J (0.156)	--	--	U (0.167)	--	U (0.14)	
Acenaphthylene	U (2.1)	U (1.9)	U (0.164)	--	--	U (0.176)	--	U (0.14)	
Acetophenone	U (10)	U (19)	U (0.864)	--	--	U (0.928)	--	U (0.76)	
Anthracene	U (2.1)	U (1.9)	0.432 J (0.166)	--	--	U (0.179)	--	U (0.15)	
Benzaldehyde	U (10)	U (19)	U (1.62)	--	--	U (1.74)	--	U (1.4)	
Benzo(a)anthracene	U (2.1)	U (1.9)	U (0.159)	--	--	U (0.171)	--	U (0.14)	
Benzo(a)pyrene	U (2.1)	U (1.9)	U (0.145)	--	--	U (0.155)	--	U (0.13)	
Benzo(b)fluoranthene	U (2.1)	U (1.9)	U (0.17)	--	--	U (0.182)	--	U (0.15)	
Benzo(g,h,i)perylene	U (2.1)	U (1.9)	U (0.163)	--	--	U (0.175)	--	U (0.14)	
Benzo(k)fluoranthene	U (2.1)	U (1.9)	U (0.591)	--	--	U (0.635)	--	U (0.52)	
Biphenyl	U (10)	U (9.3)	U (0.448)	--	--	U (0.481)	--	U (0.4)	
bis(2-Chloroethyl) ether	U (2.1)	UL (1.9)	U (0.271)	--	--	U (0.291)	--	U (0.24)	
bis(2-Ethylhexyl)phthalate	U (21)	U (19)	U (13.5)	--	--	U (14.5)	--	U (12)	
Butylbenzylphthalate	U (10)	U (9.3)	U (1.54)	--	--	U (1.65)	--	U (1.4)	
Caprolactam	U (52)	UL (46)	30.5 J (12.9)	--	--	U (13.8)	--	29 J (48)	
Carbazole	U (2.1)	U (1.9)	0.801 J (0.171)	--	--	U (0.183)	--	U (0.15)	
4-Chloroaniline	U (10)	UL (9.3)	2.04 J (0.956)	--	--	U (1.03)	--	U (0.84)	
2-Chlorophenol	U (10)	UL (9.3)	U (1.78)	--	--	U (1.92)	--	U (1.6)	
4-Chlorophenyl-phenyl ether	U (10)	U (9.3)	U (0.543)	--	--	U (0.583)	--	U (0.48)	
Chrysene	U (2.1)	U (1.9)	U (0.151)	--	--	U (0.162)	--	U (0.13)	
Dibenz(a,h)anthracene	U (2.1)	U (1.9)	U (0.167)	--	--	U (0.18)	--	U (0.15)	
Dibenzofuran	U (10)	U (9.3)	0.672 J (0.666)	--	--	U (0.716)	--	U (0.59)	
2,4-Dichlorophenol	U (2.1)	UL (1.9)	U (0.361)	--	--	U (0.387)	--	U (0.32)	
Diethylphthalate	U (10)	U (9.3)	U (1.58)	--	--	U (1.69)	--	U (1.4)	
2,4-Dimethylphenol	9.8 J (10)	UL (9.3)	U (0.92)	--	--	U (0.988)	--	U (0.81)	
Dimethylphthalate	U (10)	U (9.3)	U (0.826)	--	--	U (0.887)	--	U (0.73)	
Di-n-butylphthalate	U (10)	U (9.3)	U (1.35)	--	--	U (1.45)	--	U (1.2)	
4,6-Dinitro-2-methylphenol	U (52)	U (46)	U (2.37)	--	--	U (2.55)	--	U (2.1)	
Di-n-octylphthalate	U (10)	U (9.3)	U (2.23)	--	--	U (2.4)	--	U (2)	
Fluoranthene	U (2.1)	U (1.9)	1.48 J (0.175)	--	--	0.416 J (0.188)	--	0.45 J (1.9)	
Fluorene	U (2.1)	U (1.9)	0.544 J (0.233)	--	--	U (0.251)	--	U (0.21)	
Indeno(1,2,3-cd)pyrene	U (2.1)	U (1.9)	U (0.215)	--	--	U (0.231)	--	U (0.19)	
Isophorone	U (10)	UL (9.3)	U (0.696)	--	--	U (0.747)	--	U (0.61)	
2-Methylnaphthalene	U (2.1)	U (1.9)	UB (0.132)	--	--	U (0.142)	--	U (0.12)	
2-Methylphenol	U (10)	UL (9.3)	U (0.931)	--	--	U (1)	--	U (0.82)	
3&4-Methylphenol	U (10)	UL (9.3)	--	--	--	--	--	--	
4-Methylphenol	--	--	13.7 (0.974)	--	--	U (1.05)	--	U (0.86)	
Naphthalene	0.88 J (2.1)	U (1.9)	1.08 J (0.151)	--	--	2.75 (0.162)	--	U (0.13)	
N-Nitrosodiphenylamine	U (10)	U (9.3)	U (0.921)	--	--	U (0.989)	--	U (0.81)	
Pentachlorophenol	U (10)	U (9.3)	6.49 J (0.716)	--	--	U (0.769)	--	U (0.63)	
Phenanthrene	U (2.1)	U (1.9)	1.16 J (0.461)	--	--	U (0.495)	--	U (0.41)	
Phenol	U (2.1)	UL (9.3)	1.91 J (0.627)	--	--	U (0.674)	--	U (0.55)	
Pyrene	U (2.1)	U (1.9)	1.34 J (0.17)	--	--	0.463 J (0.182)	--	0.45 J (1.9)	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	--	--	--	--	--	--	
PCB-001 (2-CB)	--	--	0.19 J (0.0022)	0.191 B (0.000669)	--	0.15 B (0.00068)	0.146 (0.000361)	0.15 B (0.00056)	
PCB-002 (3-CB)	--	--	0.0198 JQ (0.00259)	0.00931 EMPC J (0.000718)	--	0.0107 J (0.000768)	0.00943 EMPC J (0.000395)	0.0073 EMPC J (0.00055)	
PCB-003 (4-CB)	--	--	0.055 J (0.0031)	0.0257 BJ (0.000769)	--	0.0294 J (0.000874)	0.0314 BJ (0.000434)	0.019 EMPC J (0.00055)	
PCB-209 (DeCB)	--	--	16.9 (0.00671)	2.61 (0.00515)	--	7.24 (0.00224)	2.38 (0.00122)	1.5 (0.0011)	
PCB-004 (2,2'-DiCB)	--	--	1.75 B (0.0177)	2.34 B (0.00801)	--	1.39 (0.00364)	1.15 B (0.0021)	1.3 (0.0023)	
PCB-005 (2,3-DiCB)	--	--	0.0178 JQ (0.0149)	0.0156 EMPC J (0.00472)	--	0.00855 EMPC J (0.00285)	0.0112 EMPC J (0.0015)	0.0092 EMPC J (0.0017)	
PCB-006 (2,3'-DiCB)	--	--	0.29 Q (0.014)	0.29 B (0.00444)	--	0.215 EMPC (0.00268)	0.161 B (0.00141)	0.18 (0.0016)	
PCB-007 (2,4-DiCB)	--	--	0.0293 JQ (0.0144)	0.0294 EMPC J (0.00456)	--	0.0209 EMPC J (0.00276)	0.0148 EMPC J (0.00145)	0.016 EMPC J (0.0016)	
PCB-008 (2,4'-DiCB)	--	--	1.67 B (0.0137)	1.67 B (0.00435)	--	1.19 B (0.00263)	0.887 B (0.00138)	0.97 B (0.0016)	
PCB-009 (2,5-DiCB)	--	--	0.0729 JQ (0.0145)	0.0665 EMPC (0.00459)	--	0.0542 EMPC (0.00277)	0.0371 EMPC J (0.00146)	0.04 EMPC (0.0016)	
PCB-010 (2,6-DiCB)	--	--	0.0844 JQ (0.0156)	0.084 EMPC (0.00493)	--	0.0603 (0.00298)	0.037 EMPC J (0.00157)	0.048 (0.0018)	
PCB-011 (3,3'-DiCB)	--	--	UB (0.0138)	UB (0.00437)	--	UB (0.00264)	UB (0.00139)	UB (0.0016)	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-02 MB-MW-02-20150603 Bladder Pump 6/3/2015	MB-MW-02 MB-MW-02-20170424 Bladder Pump 4/24/2017	MB-MW-03 MB-MW-03-20100727 Micropurge 7/27/2010	MB-MW-03 MB-MW-03-20101018 Micropurge 10/18/2010	MB-MW-03 MB-MW-03-20101019 Micropurge 10/19/2010	MB-MW-03 MB-MW-03-20110111 Micropurge 1/11/2011	MB-MW-03 MB-MW-03-20110412 Micropurge 4/12/2011	MB-MW-03 MB-MW-03-20110726 Micropurge 7/26/2011
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	--	--	0.0495 JQ (0.0142)	0.0414 EMPC J (0.00448)	--	0.0266 EMPC J (0.00271)	UB (0.00142)	0.019 EMPC J (0.0016)
PCB-013 (3,4'-DiCB)	--	--	0.0495 JQ (0.0142)	0.0414 EMPC J (0.00448)	--	0.0266 EMPC J (0.00271)	UB (0.00142)	0.019 EMPC J (0.0016)
PCB-014 (3,5-DiCB)	--	--	U (0.0122)	0.00368 EMPC J (0.00386)	--	U (0.00233)	UB (0.00123)	U (0.0014)
PCB-015 (4,4'-DiCB)	--	--	0.669 (0.0156)	0.444 B (0.0039)	--	0.346 B (0.00281)	0.236 B (0.00138)	0.24 B (0.0016)
PCB-170 (2,2',3,3',4,4',5-HpCB)	--	--	1.5 (0.015)	0.351 (0.00393)	--	0.847 (0.00394)	UB (0.00189)	0.16 (0.0013)
PCB-171 (2,2',3,3',4,4',6-HpCB)	--	--	0.452 (0.0132)	0.129 (0.00372)	--	0.277 (0.00381)	UB (0.00174)	0.052 (0.0013)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	--	--	0.277 (0.0131)	0.0709 (0.00368)	--	0.14 (0.00378)	UB (0.00172)	0.025 EMPC J (0.0013)
PCB-173 (2,2',3,3',4,5,6-HpCB)	--	--	0.452 (0.0132)	0.129 (0.00372)	--	0.277 (0.00381)	UB (0.00174)	0.052 (0.0013)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	--	--	1.88 (0.0122)	0.481 (0.00345)	--	1.04 (0.00353)	UB (0.00161)	0.23 B (0.0012)
PCB-175 (2,2',3,3',4,5',6-HpCB)	--	--	0.0626 JQ (0.0117)	0.0205 J (0.00331)	--	0.0162 J (0.00339)	UB (0.00155)	0.0079 J (0.0012)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	--	--	1.03 (0.0125)	0.244 (0.00353)	--	0.569 (0.00362)	UB (0.00165)	0.12 B (0.0012)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	--	--	0.213 (0.00895)	0.0612 (0.00252)	--	0.131 (0.00259)	0.0394 J (0.00118)	0.028 J (0.00089)
PCB-178 (2,2',3,3',5,5',6-HpCB)	--	--	0.544 (0.0127)	0.125 (0.00358)	--	0.279 (0.00367)	0.0874 (0.00167)	0.064 (0.0013)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	--	--	1.14 (0.00943)	0.285 (0.00266)	--	0.354 J (0.00273)	0.192 (0.00124)	0.14 (0.00093)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	--	--	6.11 (0.00997)	1.4 (0.00281)	--	3.17 (0.00288)	0.964 B (0.00131)	0.69 B (0.00099)
PCB-181 (2,2',3,4,4',5,6-HpCB)	--	--	U (0.0117)	U (0.00331)	--	U (0.00339)	0.00294 EMPC J (0.00155)	U (0.0012)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	--	--	0.0214 J (0.0114)	0.0141 EMPC J (0.00321)	--	U (0.0033)	0.00418 EMPC J (0.0015)	0.0033 EMPC J (0.0011)
PCB-183 (2,2',3,4,4',5',6-HpCB)	--	--	1.66 (0.0117)	0.377 (0.00329)	--	0.896 (0.00337)	UB (0.00154)	0.2 (0.0012)
PCB-185 (2,2',3,4,5,5',6-HpCB)	--	--	1.66 (0.0117)	0.377 (0.00329)	--	0.896 (0.00337)	0.274 (0.00154)	0.2 (0.0012)
PCB-187 (2,2',3,4',5,5',6-HpCB)	--	--	9.58 (0.0109)	2.01 (0.00308)	--	4.43 (0.00315)	0.973 S (0.00144)	0.53 (0.0011)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	--	--	U (0.00794)	U (0.00233)	--	U (0.00242)	U (0.00107)	U (0.00084)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	--	--	0.047 J (0.00934)	0.00992 EMPC J (0.00132)	--	0.0232 J (0.0017)	UB (0.000917)	0.0033 EMPC J (0.00092)
PCB-190 (2,3,3',4,4',5,6-HpCB)	--	--	0.218 (0.00909)	0.059 EMPC (0.00256)	--	0.165 (0.00263)	UB (0.0012)	0.027 J (0.0009)
PCB-191 (2,3,3',4,4',5',6-HpCB)	--	--	0.0687 J (0.00894)	0.0209 J (0.00252)	--	0.0452 (0.00258)	UB (0.00118)	0.0071 J (0.00089)
PCB-193 (2,3,3',4',5,5',6-HpCB)	--	--	6.11 (0.00997)	1.4 (0.00281)	--	3.17 (0.00288)	0.964 B (0.00131)	0.69 B (0.00099)
PCB-128 (2,2',3,3',4,4'-HxCB)	--	--	0.965 (0.0133)	0.235 (0.00291)	--	0.699 (0.00364)	0.129 (0.00137)	0.093 (0.0013)
PCB-129 (2,2',3,3',4,5-HxCB)	--	--	5.72 B (0.0137)	1.42 B (0.00301)	--	4.73 B (0.00377)	0.962 B (0.00142)	0.77 B (0.0013)
PCB-130 (2,2',3,3',4,5'-HxCB)	--	--	0.269 (0.0177)	0.0853 (0.00388)	--	0.224 (0.00487)	0.0491 (0.00183)	0.033 EMPC J (0.0017)
PCB-131 (2,2',3,3',4,6-HxCB)	--	--	0.0578 JQ (0.0181)	0.0238 J (0.00398)	--	0.0622 (0.00498)	0.0125 J (0.00188)	0.0094 J (0.0018)
PCB-132 (2,2',3,3',4,6'-HxCB)	--	--	1.85 (0.0173)	0.536 (0.00379)	--	1.63 (0.00474)	0.342 (0.00179)	0.29 (0.0017)
PCB-133 (2,2',3,3',5,5'-HxCB)	--	--	0.0976 J (0.0166)	0.0288 JQ (0.00365)	--	0.0694 (0.00457)	0.0166 J (0.00172)	0.013 J (0.0016)
PCB-134 (2,2',3,3',5,6-HxCB)	--	--	0.322 (0.0177)	0.105 (0.00389)	--	0.263 (0.00487)	0.0568 (0.00183)	0.045 (0.0017)
PCB-135 (2,2',3,3',5,6'-HxCB)	--	--	2 (0.0132)	0.617 (0.00651)	--	1.18 (0.0033)	0.397 (0.00198)	0.34 (0.0018)
PCB-136 (2,2',3,3',6,6'-HxCB)	--	--	0.79 (0.00971)	0.256 (0.00478)	--	0.503 (0.00243)	0.16 (0.00145)	0.14 (0.0013)
PCB-137 (2,2',3,4,4',5-HxCB)	--	--	0.217 (0.0153)	0.0547 (0.00335)	--	0.173 (0.0042)	0.0362 J (0.00158)	0.024 JQ (0.0015)
PCB-138 (2,2',3,4,4',5'-HxCB)	--	--	5.72 B (0.0137)	1.42 B (0.00301)	--	4.73 B (0.00377)	0.962 B (0.00142)	0.77 B (0.0013)
PCB-139 (2,2',3,4,4',6-HxCB)	--	--	0.0726 JQ (0.0152)	0.0237 EMPC J (0.00333)	--	0.0673 (0.00417)	0.0135 EMPC J (0.00157)	0.01 EMPC J (0.0015)
PCB-140 (2,2',3,4,4',6'-HxCB)	--	--	0.0726 JQ (0.0152)	0.0237 EMPC J (0.00333)	--	0.0673 (0.00417)	0.0135 EMPC J (0.00157)	0.01 EMPC J (0.0015)
PCB-141 (2,2',3,4,5,5'-HxCB)	--	--	1.24 (0.0158)	0.331 (0.00347)	--	1.03 (0.00434)	0.207 (0.00164)	0.17 (0.0015)
PCB-143 (2,2',3,4,5,6'-HxCB)	--	--	0.322 (0.0177)	0.105 (0.00389)	--	0.263 (0.00487)	0.0568 (0.00183)	0.045 (0.0017)
PCB-144 (2,2',3,4,5',6-HxCB)	--	--	0.282 (0.0123)	0.0957 (0.00604)	--	0.166 (0.00307)	0.0542 (0.00183)	0.044 (0.0016)
PCB-146 (2,2',3,4',5,5'-HxCB)	--	--	0.765 (0.0144)	0.195 (0.00316)	--	0.56 (0.00396)	0.129 (0.00149)	0.099 (0.0014)
PCB-147 (2,2',3,4',5,6-HxCB)	--	--	4.67 B (0.0147)	1.26 B (0.00323)	--	3.94 (0.00405)	0.836 B (0.00153)	0.73 B (0.0014)
PCB-148 (2,2',3,4',5,6'-HxCB)	--	--	U (0.013)	U (0.00639)	--	U (0.00324)	U (0.00194)	U (0.0017)
PCB-149 (2,2',3,4',5',6-HxCB)	--	--	4.67 B (0.0147)	1.26 B (0.00323)	--	3.94 (0.00405)	0.836 B (0.00153)	0.73 B (0.0014)
PCB-150 (2,2',3,4',6,6'-HxCB)	--	--	U (0.00905)	U (0.00445)	--	U (0.00226)	0.00275 J (0.00135)	U (0.0012)
PCB-151 (2,2',3,5,5',6-HxCB)	--	--	2 (0.0132)	0.617 (0.00651)	--	1.18 (0.0033)	0.397 (0.00198)	0.34 (0.0018)
PCB-152 (2,2',3,5,6,6'-HxCB)	--	--	U (0.00923)	U (0.00454)	--	U (0.00231)	U (0.00138)	U (0.0012)
PCB-153 (2,2',4,4',5,5'-HxCB)	--	--	4.73 B (0.0119)	1.18 B (0.0026)	--	4.11 (0.00326)	0.808 B (0.00123)	0.65 B (0.0011)
PCB-154 (2,2',4,4',5,6'-HxCB)	--	--	0.0491 J (0.0108)	0.0101 EMPC J (0.00529)	--	0.024 J (0.00269)	0.01 J (0.00161)	0.0063 EMPC J (0.0014)
PCB-155 (2,2',4,4',6,6'-HxCB)	--	--	U (0.0088)	U (0.00433)	--	U (0.0022)	U (0.00131)	U (0.0012)
PCB-156 (2,3,3',4,4',5-HxCB)	--	--	0.526 (0.0143)	0.124 (0.00311)	--	0.278 S (0.00548)	0.0777 (0.00147)	0.047 (0.0013)
PCB-157 (2,3,3',4,4',5'-HxCB)	--	--	0.526 (0.0143)	0.124 (0.00311)	--	0.278 J (0.00548)	0.0777 (0.00147)	0.047 (0.0013)
PCB-158 (2,3,3',4,4',6-HxCB)	--	--	0.57 (0.0108)	0.153 (0.00237)	--	0.436 (0.00237)	0.0907 (0.00112)	0.071 (0.001)
PCB-159 (2,3,3',4,5,5'-HxCB)	--	--	0.052 J (0.0116)	0.0125 J (0.00255)	--	0.0394 EMPC J (0.00319)	UB (0.0012)	0.0072 J (0.0011)
PCB-160 (2,3,3',4,5,6-HxCB)	--	--	5.72 B (0.0137)	1.42 B (0.00301)	--	4.73 B (0.00377)	0.962 B (0.00142)	0.77 B (0.0013)
PCB-162 (2,3,3',4',5,5'-HxCB)	--	--	0.00849 J (0.0115)	0.0034 EMPC J (0.00251)	--	0.00743 EMPC J (0.00315)	0.00304 EMPC J (0.00119)	U (0.0011)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-02-20150603	MB-MW-02-20170424	MB-MW-03-20100727	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03-20110726
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6/3/2015	4/24/2017	7/27/2010	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	7/26/2011
Comments									
PCB Congeners [ng/L] (continued)									
PCB-163 (2,3,3',4',5,6-HxCB)	--	--	5.72 B (0.0137)	1.42 B (0.00301)	--	4.73 B (0.00377)	0.962 B (0.00142)	0.77 B (0.0013)	
PCB-164 (2,3,3',4',5',6-HxCB)	--	--	0.37 (0.0121)	0.1 (0.00265)	--	0.301 (0.00332)	0.0626 (0.00125)	0.052 (0.0012)	
PCB-166 (2,3,4,4',5,6-HxCB)	--	--	0.965 (0.0133)	0.235 (0.00291)	--	0.699 (0.00364)	0.129 (0.00137)	0.093 (0.0013)	
PCB-167 (2,3',4,4',5,5'-HxCB)	--	--	0.181 J (0.00849)	0.0481 (0.00191)	--	0.106 (0.00201)	0.0275 J (0.000932)	0.016 EMPC J (0.00087)	
PCB-168 (2,3',4,4',5',6-HxCB)	--	--	4.73 B (0.0119)	1.18 B (0.0026)	--	4.11 (0.00326)	0.808 B (0.00123)	0.65 B (0.0011)	
PCB-169 (3,3',4,4',5,5'-HxCB)	--	--	0.62 Q (0.00929)	0.102 EMPC (0.002)	--	U (0.00211)	U (0.000911)	0.082 EMPC (0.00088)	
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	--	--	68.6 (0.0111)	11.6 (0.00335)	--	32 (0.00338)	9.72 (0.00191)	7 (0.0013)	
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	--	--	5.33 (0.00763)	0.987 (0.00222)	--	2.09 J (0.00219)	0.768 (0.00135)	0.55 (0.00091)	
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	--	--	25.4 (0.00778)	4.41 (0.00221)	--	12.4 (0.00215)	3.57 (0.00139)	2.7 (0.00096)	
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	--	--	9.16 (0.0103)	2.03 (0.00273)	--	3.82 (0.00281)	1.23 (0.0012)	0.9 (0.0011)	
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	--	--	0.578 (0.0112)	0.141 (0.00297)	--	0.308 (0.00305)	0.0824 (0.0013)	0.056 (0.0012)	
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	--	--	3.47 (0.0106)	0.655 (0.0046)	--	1.65 (0.00348)	0.484 (0.00169)	0.39 (0.0016)	
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	--	--	0.112 J (0.0079)	0.0261 J (0.00342)	--	0.0439 (0.00259)	UB (0.00125)	0.0017 EMPC J (0.0012)	
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	--	--	36.5 (0.011)	6.86 (0.00475)	--	4.01 J (0.00359)	5.1 (0.00174)	3.4 J (0.0016)	
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	--	--	36.5 (0.011)	6.86 (0.00475)	--	4.01 J (0.00359)	5.1 (0.00174)	3.4 (0.0016)	
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	--	--	1.41 (0.00776)	0.271 (0.00336)	--	0.599 (0.00254)	0.195 (0.00123)	0.13 S (0.0011)	
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	--	--	2.24 (0.00749)	0.425 (0.00325)	--	1.02 (0.00245)	0.31 (0.00119)	0.27 (0.0011)	
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	--	--	11 (0.00844)	1.96 (0.00366)	--	5.26 (0.00276)	1.53 (0.00134)	1.4 (0.0012)	
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	--	--	27.8 (0.00979)	4.56 (0.00424)	--	12.4 (0.00321)	3.77 (0.00155)	3.3 (0.0014)	
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	--	--	U (0.00822)	U (0.00356)	--	U (0.00269)	U (0.0013)	U (0.0012)	
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	--	--	0.073 J (0.00871)	0.0189 J (0.0023)	--	0.0299 J (0.00236)	0.012 J (0.00101)	0.0075 EMPC J (0.00094)	
PCB-24/27	--	--	--	--	--	--	--	--	
PCB-42/59	--	--	--	--	--	--	--	--	
PCB-52/69	--	--	--	--	--	--	--	--	
PCB-61/70	--	--	--	--	--	--	--	--	
PCB-90/101	--	--	--	--	--	--	--	--	
PCB-107/109	--	--	--	--	--	--	--	--	
PCB-132/161	--	--	--	--	--	--	--	--	
PCB-133/142	--	--	--	--	--	--	--	--	
PCB-138/163/164	--	--	--	--	--	--	--	--	
PCB-196/203	--	--	--	--	--	--	--	--	
PCB-082 (2,2',3,3',4-PeCB)	--	--	0.525 Q (0.0132)	0.255 (0.00629)	--	0.27 (0.00332)	0.111 (0.00173)	0.092 (0.0017)	
PCB-083 (2,2',3,3',5-PeCB)	--	--	2.29 (0.0111)	0.826 (0.00529)	--	1.26 (0.00279)	0.43 (0.00145)	0.36 (0.0014)	
PCB-084 (2,2',3,3',6-PeCB)	--	--	1.45 Q (0.0126)	0.659 (0.00601)	--	0.863 (0.00317)	0.351 (0.00165)	0.33 (0.0016)	
PCB-085 (2,2',3,4,4'-PeCB)	--	--	0.641 (0.00914)	0.276 (0.00435)	--	0.352 (0.0023)	0.135 (0.0012)	0.1 (0.0011)	
PCB-086 (2,2',3,4,5-PeCB)	--	--	2.91 B (0.00936)	1.14 (0.00446)	--	1.46 (0.00235)	0.57 B (0.00122)	0.46 (0.0012)	
PCB-087 (2,2',3,4,5'-PeCB)	--	--	2.91 B (0.00936)	1.14 (0.00446)	--	1.46 (0.00235)	0.57 B (0.00122)	0.46 (0.0012)	
PCB-088 (2,2',3,4,6-PeCB)	--	--	0.655 (0.0113)	0.273 (0.00536)	--	0.369 (0.00283)	0.146 (0.00147)	0.13 (0.0014)	
PCB-089 (2,2',3,4,6'-PeCB)	--	--	0.0393 JQ (0.0122)	0.0301 J (0.00582)	--	0.03 J (0.00307)	0.0108 EMPC J (0.0016)	0.011 EMPC J (0.0015)	
PCB-090 (2,2',3,4',5-PeCB)	--	--	5 B (0.00952)	1.71 B (0.00453)	--	2.85 B (0.00239)	0.966 B (0.00125)	0.83 B (0.0012)	
PCB-097 (2,2',3,4',5'-PeCB)	--	--	2.91 B (0.00936)	1.14 (0.00446)	--	1.46 (0.00235)	0.57 B (0.00122)	0.46 (0.0012)	
PCB-091 (2,2',3,4',6-PeCB)	--	--	0.655 (0.0113)	0.273 (0.00536)	--	0.369 (0.00283)	0.146 (0.00147)	0.13 (0.0014)	
PCB-098 (2,2',3,4',6'-PeCB)	--	--	0.155 J (0.0105)	0.0829 (0.00501)	--	0.0873 EMPC (0.00264)	0.0313 EMPC J (0.00138)	0.035 EMPC J (0.0013)	
PCB-092 (2,2',3,5,5'-PeCB)	--	--	0.803 (0.0108)	0.296 (0.00515)	--	0.46 (0.00272)	0.172 (0.00141)	0.15 (0.0014)	
PCB-093 (2,2',3,5,6-PeCB)	--	--	0.0364 JQ (0.0109)	0.0195 EMPC J (0.00517)	--	0.035 EMPC J (0.00273)	UB (0.00142)	0.0065 EMPC J (0.0014)	
PCB-094 (2,2',3,5,6'-PeCB)	--	--	U (0.0122)	0.0138 J (0.00582)	--	0.0118 J (0.00307)	UB (0.0016)	0.0069 J (0.0015)	
PCB-095 (2,2',3,5',6-PeCB)	--	--	4.85 (0.0115)	1.97 (0.00548)	--	2.93 (0.00289)	1.18 (0.0015)	1.1 (0.0014)	
PCB-096 (2,2',3,6,6'-PeCB)	--	--	0.0405 J (0.00914)	0.0207 J (0.00435)	--	0.0242 J (0.0023)	UB (0.0012)	0.0087 EMPC J (0.0011)	
PCB-099 (2,2',4,4',5-PeCB)	--	--	2.29 (0.0111)	0.826 (0.00529)	--	1.26 (0.00279)	0.43 (0.00145)	0.36 (0.0014)	
PCB-100 (2,2',4,4',6-PeCB)	--	--	0.0364 JQ (0.0109)	0.0195 EMPC J (0.00517)	--	0.035 EMPC J (0.00273)	UB (0.00142)	0.0065 EMPC J (0.0014)	
PCB-101 (2,2',4,5,5'-PeCB)	--	--	5 B (0.00952)	1.71 B (0.00453)	--	2.85 B (0.00239)	0.966 B (0.00125)	0.83 B (0.0012)	
PCB-102 (2,2',4,5,6'-PeCB)	--	--	0.155 J (0.0105)	0.0829 (0.00501)	--	0.0873 Q (0.00264)	0.0313 JQ (0.00138)	0.035 JQ (0.0013)	
PCB-103 (2,2',4,5',6-PeCB)	--	--	U (0.0107)	0.0125 EMPC J (0.0051)	--	0.0109 EMPC J (0.00269)	UB (0.0014)	0.006 J (0.0013)	
PCB-104 (2,2',4,6,6'-PeCB)	--	--	U (0.00814)	U (0.00388)	--	U (0.00205)	0.00215 EMPC J (0.00106)	U (0.001)	
PCB-105 (2,3,3',4,4'-PeCB)	--	--	1.28 (0.00813)	0.304 (0.00135)	--	0.672 (0.00154)	0.202 BS (0.000737)	0.12 (0.00089)	
PCB-108 (2,3,3',4,5'-PeCB)	--	--	0.147 J (0.00858)	0.0437 (0.0015)	--	0.0762 (0.00165)	0.0253 BJ (0.000833)	0.015 J (0.00091)	
PCB-109 (2,3,3',4,6-PeCB)	--	--	2.91 B (0.00936)	1.14 (0.00446)	--	1.46 (0.00235)	0.57 B (0.00122)	0.46 (0.0012)	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-02-20150603	MB-MW-02-20170424	MB-MW-03-20100727	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6/3/2015	4/24/2017	7/27/2010	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	
Comments									
PCB Congeners [ng/L] (continued)									
PCB-107 (2,3,3',4',5-PeCB)	--	--	0.247 (0.00816)	0.0612 (0.00143)	--	0.114 (0.00156)	0.0363 BJ (0.000792)	0.02 J (0.00086)	
PCB-110 (2,3,3',4',6-PeCB)	--	--	5.52 B (0.00808)	2.12 B (0.00385)	--	3.05 B (0.00203)	1.08 (0.00106)	0.99 B (0.001)	
PCB-111 (2,3,3',5,5'-PeCB)	--	--	U (0.00765)	U (0.00364)	--	U (0.00192)	U (0.001)	U (0.00096)	
PCB-113 (2,3,3',5',6-PeCB)	--	--	5 B (0.00952)	1.71 B (0.00453)	--	2.85 B (0.00239)	0.966 B (0.00125)	0.83 B (0.0012)	
PCB-114 (2,3,4,4',5-PeCB)	--	--	0.0844 J (0.00795)	0.0231 J (0.00138)	--	0.0387 J (0.00148)	0.0119 J (0.000783)	0.0052 EMPC J (0.00081)	
PCB-115 (2,3,4,4',6-PeCB)	--	--	5.52 B (0.00808)	2.12 B (0.00385)	--	3.05 B (0.00203)	1.08 (0.00106)	0.99 B (0.001)	
PCB-116 (2,3,4,5,6-PeCB)	--	--	0.641 (0.00914)	0.276 (0.00435)	--	0.352 (0.0023)	0.135 (0.0012)	0.1 (0.0011)	
PCB-117 (2,3,4',5,6-PeCB)	--	--	0.641 (0.00914)	0.276 (0.00435)	--	0.352 (0.0023)	0.135 (0.0012)	0.1 (0.0011)	
PCB-118 (2,3',4,4',5-PeCB)	--	--	3.53 B (0.00784)	0.867 B (0.0014)	--	1.85 B (0.00148)	0.541 (0.000799)	0.34 B (0.00085)	
PCB-119 (2,3',4,4',6-PeCB)	--	--	2.91 B (0.00936)	1.14 (0.00446)	--	1.46 (0.00235)	0.57 B (0.00122)	0.46 (0.0012)	
PCB-120 (2,3',4,5,5'-PeCB)	--	--	U (0.00787)	U (0.00375)	--	U (0.00198)	U (0.00103)	U (0.00099)	
PCB-121 (2,3',4,5',6-PeCB)	--	--	U (0.00793)	U (0.00378)	--	U (0.00199)	0.00183 EMPC J (0.00104)	U (0.00099)	
PCB-122 (2,3,3',4',5'-PeCB)	--	--	0.0561 J (0.00916)	0.0174 J (0.0016)	--	0.026 JQ (0.00176)	0.00647 JQ (0.000889)	0.0064 J (0.00097)	
PCB-123 (2,3',4,4',5'-PeCB)	--	--	0.0481 JQ (0.0086)	0.0129 EMPC J (0.00144)	--	0.0308 EMPC J (0.00163)	0.0094 BJ (0.000854)	0.0065 EMPC J (0.0009)	
PCB-124 (2,3',4',5,5'-PeCB)	--	--	0.147 J (0.00858)	0.0437 (0.0015)	--	0.0762 (0.00165)	0.0253 BJ (0.000833)	0.015 J (0.00091)	
PCB-125 (2,3',4',5',6-PeCB)	--	--	2.91 B (0.00936)	1.14 (0.00446)	--	1.46 (0.00235)	0.57 B (0.00122)	0.46 (0.0012)	
PCB-126 (3,3',4,4',5-PeCB)	--	--	0.0962 JQ (0.00789)	0.015 EMPC J (0.00149)	--	0.0277 EMPC J (0.0016)	0.00225 J (0.000754)	U (0.00082)	
PCB-127 (3,3',4,5,5'-PeCB)	--	--	U (0.00832)	U (0.00145)	--	0.00357 EMPC J (0.00159)	U (0.000807)	U (0.00088)	
PCB-040 (2,2',3,3'-TeCB)	--	--	1.61 (0.0105)	0.811 (0.00266)	--	0.941 (0.0023)	0.429 B (0.00102)	0.39 (0.0011)	
PCB-041 (2,2',3,4-TeCB)	--	--	1.61 (0.0105)	0.811 (0.00266)	--	0.941 (0.0023)	0.429 B (0.00102)	0.39 (0.0011)	
PCB-042 (2,2',3,4'-TeCB)	--	--	0.709 (0.0107)	0.33 (0.00271)	--	0.391 (0.00234)	0.17 B (0.00104)	0.16 (0.0011)	
PCB-043 (2,2',3,5-TeCB)	--	--	0.123 J (0.00981)	0.0562 (0.00249)	--	0.0802 (0.00215)	0.0267 BJ (0.000951)	0.021 J (0.0011)	
PCB-044 (2,2',3,5'-TeCB)	--	--	3.03 B (0.00939)	1.44 B (0.00238)	--	2 B (0.00206)	0.8 B (0.000911)	0.74 B (0.001)	
PCB-045 (2,2',3,6-TeCB)	--	--	0.794 B (0.0109)	0.467 B (0.00276)	--	0.526 (0.00239)	0.268 (0.00106)	0.27 (0.0012)	
PCB-046 (2,2',3,6'-TeCB)	--	--	0.285 (0.0129)	0.193 (0.00326)	--	0.215 (0.00282)	0.106 (0.00125)	0.1 (0.0014)	
PCB-047 (2,2',4,4'-TeCB)	--	--	3.03 B (0.00939)	1.44 B (0.00238)	--	2 B (0.00206)	0.8 B (0.000911)	0.74 B (0.001)	
PCB-048 (2,2',4,5-TeCB)	--	--	0.526 (0.0104)	0.251 (0.00264)	--	0.338 (0.00229)	0.134 B (0.00101)	0.12 (0.0011)	
PCB-049 (2,2',4,5'-TeCB)	--	--	1.79 (0.00865)	0.776 B (0.00219)	--	1.09 (0.0019)	0.441 B (0.000839)	0.39 B (0.00093)	
PCB-050 (2,2',4,6-TeCB)	--	--	0.668 (0.0101)	0.397 (0.00256)	--	0.471 (0.00222)	0.24 B (0.00098)	0.24 (0.0011)	
PCB-051 (2,2',4,6'-TeCB)	--	--	0.794 B (0.0109)	0.467 B (0.00276)	--	0.526 (0.00239)	0.268 (0.00106)	0.27 (0.0012)	
PCB-052 (2,2',5,5'-TeCB)	--	--	4.75 B (0.0101)	2.41 B (0.00257)	--	2.88 B (0.00222)	1.31 B (0.000982)	1.2 B (0.0011)	
PCB-053 (2,2',5,6'-TeCB)	--	--	0.668 (0.0101)	0.397 (0.00256)	--	0.471 (0.00222)	0.24 B (0.00098)	0.24 (0.0011)	
PCB-054 (2,2',6,6'-TeCB)	--	--	U (0.0111)	0.0126 J (0.00301)	--	0.0111 JQ (0.00207)	0.0105 J (0.0014)	0.0088 J (0.0016)	
PCB-055 (2,3,3',4-TeCB)	--	--	0.0404 JQ (0.00813)	0.0222 EMPC J (0.00206)	--	0.0353 J (0.00178)	UB (0.000789)	0.0074 J (0.00087)	
PCB-056 (2,3,3',4'-TeCB)	--	--	0.907 (0.00765)	0.354 B (0.00194)	--	0.521 (0.00168)	0.19 B (0.000742)	0.16 B (0.00082)	
PCB-057 (2,3,3',5-TeCB)	--	--	0.01 JQ (0.00774)	0.00612 J (0.00197)	--	0.00225 EMPC J (0.0017)	UB (0.000751)	U (0.00083)	
PCB-058 (2,3,3',5'-TeCB)	--	--	U (0.0077)	U (0.00196)	--	U (0.00169)	UB (0.000747)	0.00076 EMPC J (0.00083)	
PCB-059 (2,3,3',6-TeCB)	--	--	0.254 (0.00747)	0.125 B (0.0019)	--	0.147 (0.00164)	0.0702 B (0.000725)	0.06 (0.0008)	
PCB-060 (2,3,4,4'-TeCB)	--	--	0.448 (0.00788)	0.175 (0.002)	--	0.278 (0.00173)	0.0958 (0.000764)	0.073 (0.00085)	
PCB-061 (2,3,4,5-TeCB)	--	--	3.78 B (0.00747)	1.5 B (0.0019)	--	2.23 B (0.00164)	0.782 B (0.000724)	0.63 B (0.0008)	
PCB-062 (2,3,4,6-TeCB)	--	--	0.254 (0.00747)	0.125 B (0.0019)	--	0.147 (0.00164)	0.0702 B (0.000725)	0.06 (0.0008)	
PCB-063 (2,3,4',5-TeCB)	--	--	0.0686 J (0.00718)	0.0312 J (0.00182)	--	0.0379 J (0.00158)	0.0164 J (0.000696)	0.01 J (0.00077)	
PCB-064 (2,3,4',6-TeCB)	--	--	1.11 B (0.00708)	0.52 (0.0018)	--	0.641 (0.00155)	0.269 B (0.000686)	0.25 B (0.00076)	
PCB-065 (2,3,5,6-TeCB)	--	--	3.03 B (0.00939)	1.44 B (0.00238)	--	2 B (0.00206)	0.8 B (0.000911)	0.74 B (0.001)	
PCB-066 (2,3',4,4'-TeCB)	--	--	1.96 (0.00742)	0.739 B (0.00188)	--	1.11 B (0.00163)	0.389 B (0.00072)	0.32 B (0.0008)	
PCB-067 (2,3',4,5-TeCB)	--	--	0.056 J (0.00696)	0.032 J (0.00177)	--	0.0356 J (0.00153)	0.0161 BJ (0.000675)	0.0096 EMPC J (0.00075)	
PCB-068 (2,3',4,5'-TeCB)	--	--	U (0.00702)	0.00804 BJ (0.00178)	--	UB (0.00154)	UB (0.000681)	UB (0.00075)	
PCB-069 (2,3',4,6-TeCB)	--	--	1.79 (0.00865)	0.776 B (0.00219)	--	1.09 (0.0019)	0.441 B (0.000839)	0.39 B (0.00093)	
PCB-070 (2,3',4',5-TeCB)	--	--	3.78 B (0.00747)	1.5 B (0.0019)	--	2.23 B (0.00164)	0.782 B (0.000724)	0.63 B (0.0008)	
PCB-076 (2,3',4',5'-TeCB)	--	--	3.78 B (0.00747)	1.5 B (0.0019)	--	2.23 B (0.00164)	0.782 B (0.000724)	0.63 B (0.0008)	
PCB-071 (2,3',4',6-TeCB)	--	--	1.61 (0.0105)	0.811 (0.00266)	--	0.941 (0.0023)	0.429 B (0.00102)	0.39 (0.0011)	
PCB-072 (2,3',5,5'-TeCB)	--	--	0.0157 JQ (0.00753)	0.00867 J (0.00191)	--	0.00845 J (0.00165)	UB (0.000731)	0.0029 EMPC J (0.00081)	
PCB-073 (2,3',5',6-TeCB)	--	--	0.123 J (0.00981)	0.0562 (0.00249)	--	0.0802 (0.00215)	0.0267 BJ (0.000951)	0.021 J (0.0011)	
PCB-074 (2,4,4',5-TeCB)	--	--	3.78 B (0.00747)	1.5 B (0.0019)	--	2.23 B (0.00164)	0.782 B (0.000724)	0.63 B (0.0008)	
PCB-075 (2,4,4',6-TeCB)	--	--	0.254 (0.00747)	0.125 B (0.0019)	--	0.147 (0.00164)	0.0702 B (0.000725)	0.06 (0.0008)	
PCB-077 (3,3',4,4'-TeCB)	--	--	0.231 Q (0.0071)	0.0699 (0.00186)	--	0.0874 (0.00165)	0.0313 BJ (0.00071)	0.021 J (0.00081)	
PCB-078 (3,3',4,5-TeCB)	--	--	U (0.008)	U (0.00203)	--	0.008 J (0.00176)	U (0.000776)	U (0.00086)	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-02-20150603	MB-MW-02-20170424	MB-MW-03-20100727	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6/3/2015	4/24/2017	7/27/2010	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	
Comments									
PCB Congeners [ng/L] (continued)									
PCB-079 (3,3',4,5'-TeCB)	--	--	0.0446 J (0.00702)	0.0204 J (0.00178)	--	0.0272 J (0.00154)	0.00849 J (0.000681)	0.0032 EMPC J (0.00076)	
PCB-081 (3,4,4',5'-TeCB)	--	--	0.0084 J (0.00741)	U (0.00182)	--	0.00298 EMPC J (0.00154)	UB (0.000698)	0.0014 EMPC J (0.00075)	
PCB-016 (2,2',3-TrCB)	--	--	1.42 (0.0124)	1.21 (0.00552)	--	1.18 (0.00347)	0.746 B (0.00194)	0.81 (0.002)	
PCB-017 (2,2',4-TrCB)	--	--	1.32 (0.0104)	0.927 (0.0046)	--	1.07 (0.00289)	0.64 B (0.00162)	0.68 (0.0017)	
PCB-018 (2,2',5-TrCB)	--	--	3.33 (0.00919)	2.66 B (0.00407)	--	2.78 B (0.00256)	1.8 B (0.00143)	1.9 B (0.0015)	
PCB-019 (2,2',6-TrCB)	--	--	0.817 (0.0127)	0.741 (0.00564)	--	0.694 (0.00354)	0.493 (0.00198)	0.53 (0.0021)	
PCB-020 (2,3,3'-TrCB)	--	--	3.34 B (0.00854)	1.74 B (0.00111)	--	2.27 B (0.00167)	1.06 B (0.000658)	0.93 B (0.00082)	
PCB-021 (2,3,4-TrCB)	--	--	1.61 B (0.00856)	0.89 B (0.00111)	--	1.14 B (0.00167)	0.537 B (0.000659)	0.47 B (0.00082)	
PCB-022 (2,3,4'-TrCB)	--	--	1.04 (0.0087)	0.576 B (0.00113)	--	0.746 B (0.0017)	0.351 B (0.00067)	0.31 B (0.00083)	
PCB-023 (2,3,5-TrCB)	--	--	U (0.00887)	0.00254 J (0.00115)	--	0.00228 EMPC J (0.00173)	UB (0.000683)	0.00094 EMPC J (0.00085)	
PCB-024 (2,3,6-TrCB)	--	--	0.0483 JQ (0.00869)	0.0251 EMPC J (0.00385)	--	0.0441 (0.00242)	0.0271 J (0.00135)	0.026 EMPC J (0.0014)	
PCB-025 (2,3',4-TrCB)	--	--	0.266 (0.00791)	0.137 (0.00103)	--	0.178 (0.00154)	0.0856 B (0.000609)	0.077 (0.00076)	
PCB-026 (2,3',5-TrCB)	--	--	0.627 (0.0084)	0.342 B (0.00109)	--	0.42 (0.00164)	0.211 B (0.000647)	0.19 B (0.0008)	
PCB-027 (2,3',6-TrCB)	--	--	0.262 (0.0075)	0.213 (0.00333)	--	0.216 (0.00209)	0.143 (0.00117)	0.15 (0.0012)	
PCB-028 (2,4,4'-TrCB)	--	--	3.34 B (0.00854)	1.74 B (0.00111)	--	2.27 B (0.00167)	1.06 B (0.000658)	0.93 B (0.00082)	
PCB-030 (2,4,6-TrCB)	--	--	3.33 (0.00919)	2.66 B (0.00407)	--	2.78 B (0.00256)	1.8 B (0.00143)	1.9 B (0.0015)	
PCB-029 (2,4,5-TrCB)	--	--	0.627 (0.0084)	0.342 B (0.00109)	--	0.42 (0.00164)	0.211 B (0.000647)	0.19 B (0.0008)	
PCB-031 (2,4',5-TrCB)	--	--	2.88 B (0.00834)	1.61 B (0.00108)	--	2.01 B (0.00163)	0.957 B (0.000642)	0.88 B (0.0008)	
PCB-032 (2,4',6-TrCB)	--	--	1.06 (0.00735)	0.842 (0.00326)	--	0.936 (0.00205)	0.534 (0.00115)	0.57 (0.0012)	
PCB-033 (2,3',4'-TrCB)	--	--	1.61 B (0.00856)	0.89 B (0.00111)	--	1.14 B (0.00167)	0.537 B (0.000659)	0.47 B (0.00082)	
PCB-034 (2,3',5'-TrCB)	--	--	0.0143 J (0.00873)	0.00807 EMPC J (0.00114)	--	0.00924 J (0.0017)	UB (0.000673)	0.0029 EMPC J (0.00083)	
PCB-035 (3,3',4-TrCB)	--	--	0.0309 JQ (0.00898)	0.0177 J (0.00117)	--	0.0224 J (0.00175)	UB (0.000691)	0.0056 J (0.00086)	
PCB-036 (3,3',5-TrCB)	--	--	U (0.00867)	U (0.00113)	--	0.0302 J (0.00169)	UB (0.000668)	U (0.00083)	
PCB-037 (3,4,4'-TrCB)	--	--	0.925 (0.0089)	0.338 B (0.00116)	--	0.449 (0.00174)	0.193 B (0.000685)	0.16 (0.00085)	
PCB-038 (3,4,5-TrCB)	--	--	U (0.00915)	U (0.00119)	--	U (0.00178)	UB (0.000705)	U (0.00087)	
PCB-039 (3,4',5-TrCB)	--	--	0.0129 JQ (0.00813)	U (0.00106)	--	U (0.00159)	UB (0.000626)	0.0026 EMPC J (0.00078)	
PCB									
PCBs (total)	U (0.01)	U (0.01)	U (0.00299)	--	U (0.00296)	0.2683 J (0.00311)	U (0.0189)	U (0.0028)	
Aroclor-1016	U (0.01)	UL (0.01)	U (0.00257)	--	U (0.00254)	UJ (0.00267)	U (0.00262)	U (0.0024)	
Aroclor-1242	U (0.01)	UL (0.01)	U (0.00189)	--	U (0.00188)	UJ (0.00197)	U (0.00193)	U (0.0018)	
Aroclor-1248	U (0.01)	UL (0.01)	U (0.00232)	--	U (0.0023)	0.0663 J (0.00241)	U (0.00236)	U (0.0022)	
Aroclor-1254	U (0.01)	U (0.01)	U (0.00233)	--	U (0.00231)	UJ (0.00243)	U (0.0189)	U (0.0022)	
Aroclor-1260	U (0.01)	U (0.01)	U (0.00138)	--	U (0.00137)	UJ (0.00144)	U (0.00141)	U (0.0013)	
Aroclor-1268	U (0.01)	U (0.01)	U (0.00277)	--	U (0.00274)	0.202 J (0.00288)	U (0.00283)	U (0.0026)	
CDDF [pg/L]									
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	U (1.67)	--	--	1.13 EMPC J (0.484)	--	U (0.53)	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	U (1.36)	--	--	UB (0.397)	--	U (0.49)	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	--	17.9 J (2.33)	--	--	UB (0.795)	--	UB (0.81)	
Octachlorodibenzo-p-dioxin	--	--	120 (2.27)	--	--	76.1 EMPC J (0.621)	--	UB (1.2)	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	--	U (3.67)	--	--	U (0.29)	--	U (0.41)	
1,2,3,7,8-Pentachlorodibenzofuran	--	--	U (1.47)	--	--	UB (0.424)	--	U (0.47)	
1,2,3,4,7,8-Hexachlorodibenzofuran	--	--	1.29 EMPC J (0.912)	--	--	UB (0.404)	--	UB (0.43)	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	--	8.8 J (1.29)	--	--	UB (0.314)	--	UB (0.6)	
Octachlorodibenzofuran	--	--	10.7 JQ (2.27)	--	--	12.2 BJQ (0.445)	--	5.9 BJQ (0.93)	

- Notes:
- All concentrations are presented in ug/L (ppb) unless otherwise noted.
 - Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-03-20111026	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-03-20141030	MB-MW-03-20150603	MB-MW-03-20161003	MB-MW-03-20161003
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump
Sample Date	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	6/3/2015	10/3/2016	10/3/2016
Comments									
SVOC									
Acenaphthene	--	1.2 (0.2)	0.44 J (2.3)	U (2.2)	0.24 J (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Acenaphthylene	--	U (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Acetophenone	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (19)	U (19)
Anthracene	--	0.37 (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Benzaldehyde	--	U (1)	U (11)	8.6 J (11)	U (9.6)	U (11)	U (11)	U (19)	U (19)
Benzo(a)anthracene	--	0.13 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Benzo(a)pyrene	--	0.048 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Benzo(b)fluoranthene	--	0.67 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Benzo(g,h,i)perylene	--	0.08 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Benzo(k)fluoranthene	--	U (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Biphenyl	--	0.14 B (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
bis(2-Chloroethyl) ether	--	U (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (9.3)	U (9.3)
bis(2-Ethylhexyl)phthalate	--	U (2)	U (23)	U (22)	U (19)	U (22)	U (21)	U (19)	U (19)
Butylbenzylphthalate	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
Caprolactam	--	U (5.1)	U (57)	U (56)	15 J (48)	U (56)	U (53)	U (46)	U (46)
Carbazole	--	0.28 (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (9.3)	U (9.3)
4-Chloroaniline	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
2-Chlorophenol	--	UL (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
4-Chlorophenyl-phenyl ether	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
Chrysene	--	0.15 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Dibenz(a,h)anthracene	--	0.51 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Dibenzofuran	--	0.15 J (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
2,4-Dichlorophenol	--	UL (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (9.3)	U (9.3)
Diethylphthalate	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
2,4-Dimethylphenol	--	UL (1)	U (11)	1.3 J (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
Dimethylphthalate	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
Di-n-butylphthalate	--	0.14 J (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
4,6-Dinitro-2-methylphenol	--	UL (5.1)	U (57)	U (56)	U (48)	U (56)	U (53)	U (46)	U (46)
Di-n-octylphthalate	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
Fluoranthene	--	1.1 (0.2)	0.83 J (2.3)	U (2.2)	0.37 J (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Fluorene	--	0.43 (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Indeno(1,2,3-cd)pyrene	--	0.38 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Isophorone	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
2-Methylnaphthalene	--	0.39 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
2-Methylphenol	--	UL (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
3&4-Methylphenol	--	UL (1)	U (11)	3.9 J (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
4-Methylphenol	--	--	--	--	--	--	--	--	--
Naphthalene	--	3.7 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
N-Nitrosodiphenylamine	--	U (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
Pentachlorophenol	--	UL (1)	U (11)	U (11)	U (9.6)	U (11)	U (11)	U (9.3)	U (9.3)
Phenanthrene	--	0.43 (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
Phenol	--	UL (0.2)	U (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (9.3)	U (9.3)
Pyrene	--	0.54 (0.2)	0.68 J (2.3)	U (2.2)	U (1.9)	U (2.2)	U (2.1)	U (1.9)	U (1.9)
PCB Congeners [ng/L]									
13C12-PCB 114	0.0121 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-001 (2-CB)	0.212 B (0.0421)	--	--	--	--	--	--	--	--
PCB-002 (3-CB)	0.0318 B (0.0421)	--	--	--	--	--	--	--	--
PCB-003 (4-CB)	0.0427 B (0.0421)	--	--	--	--	--	--	--	--
PCB-209 (DeCB)	4.48 (0.0421)	--	--	--	--	--	--	--	--
PCB-004 (2,2'-DiCB)	1.47 B (0.0632)	--	--	--	--	--	--	--	--
PCB-005 (2,3-DiCB)	0.0188 B (0.0421)	--	--	--	--	--	--	--	--
PCB-006 (2,3'-DiCB)	0.199 EMPC (0.0421)	--	--	--	--	--	--	--	--
PCB-007 (2,4-DiCB)	0.0209 B (0.0421)	--	--	--	--	--	--	--	--
PCB-008 (2,4'-DiCB)	1.11 B (0.0632)	--	--	--	--	--	--	--	--
PCB-009 (2,5-DiCB)	0.0524 B (0.0421)	--	--	--	--	--	--	--	--
PCB-010 (2,6-DiCB)	0.0624 EMPC (0.0421)	--	--	--	--	--	--	--	--
PCB-011 (3,3'-DiCB)	0.0205 B (0.0632)	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-03-20111026	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-03-20141030	MB-MW-03-20150603	MB-MW-03-20161003	MB-MW-03
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	6/3/2015	10/3/2016	
Comments									
PCB Congeners [ng/L] (continued)									
PCB-012 (3,4-DiCB)	0.0327 B (0.0632)	--	--	--	--	--	--	--	--
PCB-013 (3,4'-DiCB)	0.0327 B (0.0632)	--	--	--	--	--	--	--	--
PCB-014 (3,5-DiCB)	0.00413 B (0.0421)	--	--	--	--	--	--	--	--
PCB-015 (4,4'-DiCB)	0.281 (0.0421)	--	--	--	--	--	--	--	--
PCB-170 (2,2',3,3',4,4',5-HpCB)	0.294 (0.0421)	--	--	--	--	--	--	--	--
PCB-171 (2,2',3,3',4,4',6-HpCB)	0.101 C (0.0421)	--	--	--	--	--	--	--	--
PCB-172 (2,2',3,3',4,5,5'-HpCB)	0.0514 (0.0421)	--	--	--	--	--	--	--	--
PCB-173 (2,2',3,3',4,5,6-HpCB)	0.101 C171 (0.0421)	--	--	--	--	--	--	--	--
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.37 (0.0421)	--	--	--	--	--	--	--	--
PCB-175 (2,2',3,3',4,5',6-HpCB)	0.0153 J (0.0421)	--	--	--	--	--	--	--	--
PCB-177 (2,2',3,3',4,5',6'-HpCB)	0.198 (0.0421)	--	--	--	--	--	--	--	--
PCB-176 (2,2',3,3',4,6,6'-HpCB)	0.0488 (0.0421)	--	--	--	--	--	--	--	--
PCB-178 (2,2',3,3',5,5',6-HpCB)	0.111 (0.0421)	--	--	--	--	--	--	--	--
PCB-179 (2,2',3,3',5,6,6'-HpCB)	0.256 (0.0421)	--	--	--	--	--	--	--	--
PCB-180 (2,2',3,4,4',5,5'-HpCB)	1.06 C (0.0421)	--	--	--	--	--	--	--	--
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-183 (2,2',3,4,4',5',6-HpCB)	0.33 C (0.0421)	--	--	--	--	--	--	--	--
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.33 C183 (0.0421)	--	--	--	--	--	--	--	--
PCB-187 (2,2',3,4',5,5',6-HpCB)	1.64 (0.0421)	--	--	--	--	--	--	--	--
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-189 (2,3,3',4,4',5,5'-HpCB)	0.00984 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-190 (2,3,3',4,4',5,6-HpCB)	0.0589 (0.0421)	--	--	--	--	--	--	--	--
PCB-191 (2,3,3',4,4',5',6-HpCB)	0.0129 J (0.0421)	--	--	--	--	--	--	--	--
PCB-193 (2,3,3',4',5,5',6-HpCB)	1.06 C180 (0.0421)	--	--	--	--	--	--	--	--
PCB-128 (2,2',3,3',4,4'-HxCB)	0.179 C (0.0421)	--	--	--	--	--	--	--	--
PCB-129 (2,2',3,3',4,5-HxCB)	1.17 C (0.0421)	--	--	--	--	--	--	--	--
PCB-130 (2,2',3,3',4,5'-HxCB)	0.0647 EMPC (0.0421)	--	--	--	--	--	--	--	--
PCB-131 (2,2',3,3',4,6-HxCB)	0.0172 J (0.0421)	--	--	--	--	--	--	--	--
PCB-132 (2,2',3,3',4,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-133 (2,2',3,3',5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-134 (2,2',3,3',5,6-HxCB)	0.0897 C (0.0421)	--	--	--	--	--	--	--	--
PCB-135 (2,2',3,3',5,6'-HxCB)	0.491 C (0.0421)	--	--	--	--	--	--	--	--
PCB-136 (2,2',3,3',6,6'-HxCB)	0.208 (0.0421)	--	--	--	--	--	--	--	--
PCB-137 (2,2',3,4,4',5-HxCB)	0.0459 (0.0421)	--	--	--	--	--	--	--	--
PCB-138 (2,2',3,4,4',5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-139 (2,2',3,4,4',6-HxCB)	0.0196 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-140 (2,2',3,4,4',6'-HxCB)	0.0196 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-141 (2,2',3,4,5,5'-HxCB)	0.266 (0.0421)	--	--	--	--	--	--	--	--
PCB-143 (2,2',3,4,5,6'-HxCB)	0.0897 C134 (0.0421)	--	--	--	--	--	--	--	--
PCB-144 (2,2',3,4,5',6-HxCB)	0.0638 (0.0421)	--	--	--	--	--	--	--	--
PCB-146 (2,2',3,4',5,5'-HxCB)	0.17 (0.0421)	--	--	--	--	--	--	--	--
PCB-147 (2,2',3,4',5,6-HxCB)	1.07 C (0.0421)	--	--	--	--	--	--	--	--
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-149 (2,2',3,4',5',6-HxCB)	1.07 C147 (0.0421)	--	--	--	--	--	--	--	--
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-151 (2,2',3,5,5',6-HxCB)	0.491 C135 (0.0421)	--	--	--	--	--	--	--	--
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-153 (2,2',4,4',5,5'-HxCB)	0.969 C (0.0421)	--	--	--	--	--	--	--	--
PCB-154 (2,2',4,4',5,6'-HxCB)	0.0143 J (0.0421)	--	--	--	--	--	--	--	--
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-156 (2,3,3',4,4',5-HxCB)	0.0952 EMPC (0.0421)	--	--	--	--	--	--	--	--
PCB-157 (2,3,3',4,4',5'-HxCB)	0.0952 EMPC (0.0421)	--	--	--	--	--	--	--	--
PCB-158 (2,3,3',4,4',6-HxCB)	0.117 (0.0421)	--	--	--	--	--	--	--	--
PCB-159 (2,3,3',4,5,5'-HxCB)	0.00895 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-160 (2,3,3',4,5,6-HxCB)	1.17 C129 (0.0421)	--	--	--	--	--	--	--	--
PCB-162 (2,3,3',4',5,5'-HxCB)	0.00439 EMPC J (0.0421)	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-03-20111026	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-03-20141030	MB-MW-03-20150603	MB-MW-03-20161003	MB-MW-03
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	6/3/2015	10/3/2016	
Comments									
PCB Congeners [ng/L] (continued)									
PCB-163 (2,3,3',4',5,6-HxCB)	1.17 C129 (0.0421)	--	--	--	--	--	--	--	--
PCB-164 (2,3,3',4',5',6-HxCB)	0.0798 (0.0421)	--	--	--	--	--	--	--	--
PCB-166 (2,3,4,4',5,6-HxCB)	0.179 C128 (0.0421)	--	--	--	--	--	--	--	--
PCB-167 (2,3',4,4',5,5'-HxCB)	0.0383 J (0.0421)	--	--	--	--	--	--	--	--
PCB-168 (2,3',4,4',5',6-HxCB)	0.969 C153 (0.0421)	--	--	--	--	--	--	--	--
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	16.9 (0.0421)	--	--	--	--	--	--	--	--
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	1.34 (0.0421)	--	--	--	--	--	--	--	--
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	6.69 (0.0421)	--	--	--	--	--	--	--	--
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	1.57 (0.0421)	--	--	--	--	--	--	--	--
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	0.135 (0.0421)	--	--	--	--	--	--	--	--
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	0.0255 J (0.0421)	--	--	--	--	--	--	--	--
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	5.8 C (0.0421)	--	--	--	--	--	--	--	--
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.303 (0.0421)	--	--	--	--	--	--	--	--
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	0.438 (0.0421)	--	--	--	--	--	--	--	--
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	5.8 C198 (0.0421)	--	--	--	--	--	--	--	--
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	2.24 (0.0421)	--	--	--	--	--	--	--	--
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	4.82 (0.0421)	--	--	--	--	--	--	--	--
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	0.0137 J (0.0421)	--	--	--	--	--	--	--	--
PCB-24/27	0.0398 J (0.0421)	--	--	--	--	--	--	--	--
PCB-42/59	0.24 (0.0421)	--	--	--	--	--	--	--	--
PCB-52/69	1.57 B (0.0421)	--	--	--	--	--	--	--	--
PCB-61/70	0.957 BC (0.0421)	--	--	--	--	--	--	--	--
PCB-90/101	1.1 C (0.0421)	--	--	--	--	--	--	--	--
PCB-107/109	0.0392 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-132/161	0.437 (0.0421)	--	--	--	--	--	--	--	--
PCB-133/142	0.0218 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-138/163/164	1.17 C129 (0.0421)	--	--	--	--	--	--	--	--
PCB-196/203	0.674 (0.0421)	--	--	--	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	0.143 (0.0421)	--	--	--	--	--	--	--	--
PCB-083 (2,2',3,3',5-PeCB)	0.496 C (0.0421)	--	--	--	--	--	--	--	--
PCB-084 (2,2',3,3',6-PeCB)	0.44 (0.0421)	--	--	--	--	--	--	--	--
PCB-085 (2,2',3,4,4'-PeCB)	0.153 C (0.0421)	--	--	--	--	--	--	--	--
PCB-086 (2,2',3,4,5-PeCB)	0.65 C (0.0421)	--	--	--	--	--	--	--	--
PCB-087 (2,2',3,4,5'-PeCB)	0.65 C86 (0.0421)	--	--	--	--	--	--	--	--
PCB-088 (2,2',3,4,6-PeCB)	0.184 C (0.0421)	--	--	--	--	--	--	--	--
PCB-089 (2,2',3,4,6'-PeCB)	0.0243 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-090 (2,2',3,4',5-PeCB)	--	--	--	--	--	--	--	--	--
PCB-097 (2,2',3,4',5'-PeCB)	0.65 C86 (0.0421)	--	--	--	--	--	--	--	--
PCB-091 (2,2',3,4',6-PeCB)	0.184 C88 (0.0421)	--	--	--	--	--	--	--	--
PCB-098 (2,2',3,4',6'-PeCB)	0.0589 C (0.0421)	--	--	--	--	--	--	--	--
PCB-092 (2,2',3,5,5'-PeCB)	0.198 (0.0421)	--	--	--	--	--	--	--	--
PCB-093 (2,2',3,5,6-PeCB)	0.00775 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-094 (2,2',3,5,6'-PeCB)	0.0101 J (0.0421)	--	--	--	--	--	--	--	--
PCB-095 (2,2',3,5',6-PeCB)	1.42 (0.0421)	--	--	--	--	--	--	--	--
PCB-096 (2,2',3,6,6'-PeCB)	0.0175 J (0.0421)	--	--	--	--	--	--	--	--
PCB-099 (2,2',4,4',5-PeCB)	0.496 C83 (0.0421)	--	--	--	--	--	--	--	--
PCB-100 (2,2',4,4',6-PeCB)	0.00775 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-101 (2,2',4,5,5'-PeCB)	1.1 C90 (0.0421)	--	--	--	--	--	--	--	--
PCB-102 (2,2',4,5,6'-PeCB)	0.0589 C98 (0.0421)	--	--	--	--	--	--	--	--
PCB-103 (2,2',4,5',6-PeCB)	0.00784 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-104 (2,2',4,6,6'-PeCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-105 (2,3,3',4,4'-PeCB)	0.243 (0.0421)	--	--	--	--	--	--	--	--
PCB-108 (2,3,3',4,5'-PeCB)	0.0332 J (0.0421)	--	--	--	--	--	--	--	--
PCB-109 (2,3,3',4,6-PeCB)	0.65 C86 (0.0421)	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-03-20111026	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-03-20141030	MB-MW-03-20150603	MB-MW-03-20161003	MB-MW-03
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	6/3/2015	10/3/2016	
Comments									
PCB Congeners [ng/L] (continued)									
PCB-107 (2,3,3',4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-110 (2,3,3',4',6'-PeCB)	1.29 BC (0.0421)	--	--	--	--	--	--	--	--
PCB-111 (2,3,3',5,5'-PeCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-113 (2,3,3',5',6'-PeCB)	1.1 C90 (0.0421)	--	--	--	--	--	--	--	--
PCB-114 (2,3,4,4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-115 (2,3,4,4',6'-PeCB)	1.29 BC110 (0.0421)	--	--	--	--	--	--	--	--
PCB-116 (2,3,4,5,6'-PeCB)	0.153 C85 (0.0421)	--	--	--	--	--	--	--	--
PCB-117 (2,3,4',5,6'-PeCB)	0.153 C85 (0.0421)	--	--	--	--	--	--	--	--
PCB-118 (2,3',4,4',5'-PeCB)	0.584 EMPC (0.0421)	--	--	--	--	--	--	--	--
PCB-119 (2,3',4,4',6'-PeCB)	0.65 C86 (0.0421)	--	--	--	--	--	--	--	--
PCB-120 (2,3',4,5,5'-PeCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-121 (2,3',4,5',6'-PeCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-122 (2,3,3',4',5'-PeCB)	0.0151 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-123 (2,3',4,4',5'-PeCB)	0.0128 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-124 (2,3',4',5,5'-PeCB)	0.0332 J (0.0421)	--	--	--	--	--	--	--	--
PCB-125 (2,3',4',5',6'-PeCB)	0.65 C86 (0.0421)	--	--	--	--	--	--	--	--
PCB-126 (3,3',4,4',5'-PeCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-127 (3,3',4,5,5'-PeCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-040 (2,2',3,3'-TeCB)	0.576 C (0.0421)	--	--	--	--	--	--	--	--
PCB-041 (2,2',3,4'-TeCB)	0.576 C40 (0.0421)	--	--	--	--	--	--	--	--
PCB-042 (2,2',3,4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-043 (2,2',3,5'-TeCB)	0.0362 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-044 (2,2',3,5'-TeCB)	1.01 BC (0.0421)	--	--	--	--	--	--	--	--
PCB-045 (2,2',3,6'-TeCB)	0.36 BC (0.0421)	--	--	--	--	--	--	--	--
PCB-046 (2,2',3,6'-TeCB)	0.153 (0.0421)	--	--	--	--	--	--	--	--
PCB-047 (2,2',4,4'-TeCB)	1.01 BC44 (0.0421)	--	--	--	--	--	--	--	--
PCB-048 (2,2',4,5'-TeCB)	0.17 (0.0421)	--	--	--	--	--	--	--	--
PCB-049 (2,2',4,5'-TeCB)	0.511 BC (0.0421)	--	--	--	--	--	--	--	--
PCB-050 (2,2',4,6'-TeCB)	0.325 C (0.0421)	--	--	--	--	--	--	--	--
PCB-051 (2,2',4,6'-TeCB)	0.36 BC45 (0.0421)	--	--	--	--	--	--	--	--
PCB-052 (2,2',5,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-053 (2,2',5,6'-TeCB)	0.325 C50 (0.0421)	--	--	--	--	--	--	--	--
PCB-054 (2,2',6,6'-TeCB)	0.0137 J (0.0421)	--	--	--	--	--	--	--	--
PCB-055 (2,3,3',4'-TeCB)	0.00878 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-056 (2,3,3',4'-TeCB)	0.247 (0.0421)	--	--	--	--	--	--	--	--
PCB-057 (2,3,3',5'-TeCB)	0.00334 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-058 (2,3,3',5'-TeCB)	0.00376 J (0.0421)	--	--	--	--	--	--	--	--
PCB-059 (2,3,3',6'-TeCB)	0.0883 C (0.0421)	--	--	--	--	--	--	--	--
PCB-060 (2,3,4,4'-TeCB)	0.135 (0.0421)	--	--	--	--	--	--	--	--
PCB-061 (2,3,4,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-062 (2,3,4,6'-TeCB)	0.0883 C59 (0.0421)	--	--	--	--	--	--	--	--
PCB-063 (2,3,4',5'-TeCB)	0.0211 J (0.0421)	--	--	--	--	--	--	--	--
PCB-064 (2,3,4',6'-TeCB)	0.349 (0.0421)	--	--	--	--	--	--	--	--
PCB-065 (2,3,5,6'-TeCB)	1.01 BC44 (0.0421)	--	--	--	--	--	--	--	--
PCB-066 (2,3',4,4'-TeCB)	0.498 (0.0421)	--	--	--	--	--	--	--	--
PCB-067 (2,3',4,5'-TeCB)	0.0167 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-068 (2,3',4,5'-TeCB)	0.00557 B (0.0421)	--	--	--	--	--	--	--	--
PCB-069 (2,3',4,6'-TeCB)	0.511 BC49 (0.0421)	--	--	--	--	--	--	--	--
PCB-070 (2,3',4',5'-TeCB)	0.957 BC61 (0.0421)	--	--	--	--	--	--	--	--
PCB-076 (2,3',4',5'-TeCB)	0.957 BC61 (0.0421)	--	--	--	--	--	--	--	--
PCB-071 (2,3',4',6'-TeCB)	0.576 C40 (0.0421)	--	--	--	--	--	--	--	--
PCB-072 (2,3',5,5'-TeCB)	0.00589 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-073 (2,3',5',6'-TeCB)	0.0362 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-074 (2,4,4',5'-TeCB)	0.957 BC61 (0.0421)	--	--	--	--	--	--	--	--
PCB-075 (2,4,4',6'-TeCB)	0.0883 C59 (0.0421)	--	--	--	--	--	--	--	--
PCB-077 (3,3',4,4'-TeCB)	0.0391 J (0.0421)	--	--	--	--	--	--	--	--
PCB-078 (3,3',4,5'-TeCB)	U (0.0421)	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
Field Sample ID	MB-MW-03-20111026	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-03-20141030	MB-MW-03-20150603	MB-MW-03-20161003	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	10/30/2014	6/3/2015	10/3/2016	
Comments									
PCB Congeners [ng/L] (continued)									
PCB-079 (3,3',4,5'-TeCB)	0.00664 J (0.0421)	--	--	--	--	--	--	--	--
PCB-081 (3,4,4',5'-TeCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-016 (2,2',3-TrCB)	1 (0.0421)	--	--	--	--	--	--	--	--
PCB-017 (2,2',4-TrCB)	0.854 (0.0421)	--	--	--	--	--	--	--	--
PCB-018 (2,2',5-TrCB)	2.35 BC (0.0632)	--	--	--	--	--	--	--	--
PCB-019 (2,2',6-TrCB)	0.694 (0.0421)	--	--	--	--	--	--	--	--
PCB-020 (2,3,3'-TrCB)	1.31 BC (0.0421)	--	--	--	--	--	--	--	--
PCB-021 (2,3,4-TrCB)	0.688 BC (0.0421)	--	--	--	--	--	--	--	--
PCB-022 (2,3,4'-TrCB)	0.459 B (0.0421)	--	--	--	--	--	--	--	--
PCB-023 (2,3,5-TrCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-024 (2,3,6-TrCB)	--	--	--	--	--	--	--	--	--
PCB-025 (2,3',4-TrCB)	0.107 (0.0421)	--	--	--	--	--	--	--	--
PCB-026 (2,3',5-TrCB)	0.271 C (0.0421)	--	--	--	--	--	--	--	--
PCB-027 (2,3',6-TrCB)	0.19 (0.0421)	--	--	--	--	--	--	--	--
PCB-028 (2,4,4'-TrCB)	1.31 BC20 (0.0421)	--	--	--	--	--	--	--	--
PCB-030 (2,4,6-TrCB)	2.35 BC18 (0.0632)	--	--	--	--	--	--	--	--
PCB-029 (2,4,5-TrCB)	0.271 C26 (0.0421)	--	--	--	--	--	--	--	--
PCB-031 (2,4',5-TrCB)	1.23 B (0.0421)	--	--	--	--	--	--	--	--
PCB-032 (2,4',6-TrCB)	0.704 (0.0421)	--	--	--	--	--	--	--	--
PCB-033 (2,3',4'-TrCB)	0.688 BC21 (0.0421)	--	--	--	--	--	--	--	--
PCB-034 (2,3',5'-TrCB)	0.00514 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB-035 (3,3',4-TrCB)	0.0152 J (0.0421)	--	--	--	--	--	--	--	--
PCB-036 (3,3',5-TrCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-037 (3,4,4'-TrCB)	0.268 (0.0421)	--	--	--	--	--	--	--	--
PCB-038 (3,4,5-TrCB)	U (0.0421)	--	--	--	--	--	--	--	--
PCB-039 (3,4',5-TrCB)	0.00507 EMPC J (0.0421)	--	--	--	--	--	--	--	--
PCB									
PCBs (total)	U (0.51)	U (0.01)	0.027 (0.01)	0.033 (0.011)	U (0.0095)	U (0.01)	0.0072 J (0.01)	U (0.011)	
Aroclor-1016	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.0095)	U (0.01)	U (0.01)	U (0.011)	
Aroclor-1242	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.0095)	U (0.01)	U (0.01)	U (0.011)	
Aroclor-1248	U (0.51)	U (0.01)	0.027 (0.01)	U (0.011)	U (0.0095)	U (0.01)	U (0.01)	U (0.011)	
Aroclor-1254	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.0095)	U (0.01)	0.0072 J (0.01)	U (0.011)	
Aroclor-1260	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.0095)	U (0.01)	U (0.01)	U (0.011)	
Aroclor-1268	U (0.51)	U (0.01)	U (0.01)	0.033 (0.011)	U (0.0095)	U (0.01)	U (0.01)	U (0.011)	
CDDF [pg/L]									
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--	
Octachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--	
1,2,3,7,8-Pentachlorodibenzofuran	--	--	--	--	--	--	--	--	
1,2,3,4,7,8-Hexachlorodibenzofuran	--	--	--	--	--	--	--	--	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	--	--	--	--	--	--	--	
Octachlorodibenzofuran	--	--	--	--	--	--	--	--	

- Notes:
- 1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
 - 2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
Field Sample ID	MB-MW-03-20170424	MB-MW-04-20100729	DUP-20100729	MB-MW-04-20101019	DUP-20101019	MB-MW-04-20110113	DUP-20110113	MB-MW-04-20110413	
Sample Method	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	
Sample Date	4/24/2017	7/29/2010	7/29/2010	10/19/2010	10/19/2010	1/13/2011	1/13/2011	4/13/2011	
Comments			Field Duplicate		Field Duplicate		Field Duplicate		
SVOC									
Acenaphthene	U (2.1)	4.32 (0.015)	4.41 (0.0151)	--	--	1.67 J (0.164)	2.29 J (0.167)	--	
Acenaphthylene	U (2.1)	0.301 (0.0158)	0.318 (0.016)	--	--	U (0.173)	U (0.176)	--	
Acetophenone	U (21)	0.334 J (0.0832)	U (0.084)	--	--	U (0.912)	U (0.928)	--	
Anthracene	U (2.1)	0.801 (0.016)	0.867 (0.0162)	--	--	U (0.176)	U (0.179)	--	
Benzaldehyde	U (21)	1.26 (0.156)	1.26 (0.158)	--	--	U (1.71)	U (1.74)	--	
Benzo(a)anthracene	U (2.1)	U (0.0153)	U (0.0154)	--	--	U (0.168)	U (0.171)	--	
Benzo(a)pyrene	U (2.1)	U (0.0139)	U (0.0141)	--	--	U (0.153)	U (0.155)	--	
Benzo(b)fluoranthene	U (2.1)	U (0.0163)	U (0.0165)	--	--	U (0.179)	U (0.182)	--	
Benzo(g,h,i)perylene	U (2.1)	U (0.0157)	U (0.0159)	--	--	U (0.172)	U (0.175)	--	
Benzo(k)fluoranthene	U (2.1)	U (0.0569)	U (0.0574)	--	--	U (0.624)	U (0.635)	--	
Biphenyl	U (10)	U (0.0432)	U (0.0436)	--	--	U (0.473)	U (0.481)	--	
bis(2-Chloroethyl) ether	U (2.1)	U (0.0261)	U (0.0264)	--	--	U (0.286)	U (0.291)	--	
bis(2-Ethylhexyl)phthalate	U (21)	U (1.3)	5.35 (1.32)	--	--	U (14.3)	U (14.5)	--	
Butylbenzylphthalate	U (10)	U (0.148)	U (0.149)	--	--	U (1.62)	U (1.65)	--	
Caprolactam	U (52)	U (1.24)	U (1.25)	--	--	U (13.6)	U (13.8)	--	
Carbazole	U (2.1)	19.5 J (0.0164)	11.5 J (0.0166)	--	--	U (0.18)	U (0.183)	--	
4-Chloroaniline	U (10)	0.119 J (0.092)	U (0.0929)	--	--	U (1.01)	U (1.03)	--	
2-Chlorophenol	U (10)	U (0.172)	U (0.173)	--	--	U (1.88)	U (1.92)	--	
4-Chlorophenyl-phenyl ether	U (10)	U (0.0523)	U (0.0528)	--	--	U (0.573)	U (0.583)	--	
Chrysene	U (2.1)	U (0.0146)	U (0.0147)	--	--	U (0.16)	U (0.162)	--	
Dibenz(a,h)anthracene	U (2.1)	U (0.0161)	U (0.0163)	--	--	U (0.177)	U (0.18)	--	
Dibenzofuran	U (10)	0.307 J (0.0642)	0.258 J (0.0648)	--	--	U (0.703)	U (0.716)	--	
2,4-Dichlorophenol	U (2.1)	U (0.0347)	U (0.0351)	--	--	U (0.381)	U (0.387)	--	
Diethylphthalate	U (10)	0.501 J (0.152)	U (0.153)	--	--	U (1.66)	U (1.69)	--	
2,4-Dimethylphenol	U (10)	0.332 J (0.0886)	0.265 J (0.0895)	--	--	U (0.971)	U (0.988)	--	
Dimethylphthalate	U (10)	U (0.0796)	U (0.0803)	--	--	U (0.872)	U (0.887)	--	
Di-n-butylphthalate	U (10)	U (0.13)	U (0.131)	--	--	U (1.42)	U (1.45)	--	
4,6-Dinitro-2-methylphenol	U (52)	U (0.228)	U (0.231)	--	--	U (2.5)	U (2.55)	--	
Di-n-octylphthalate	U (10)	U (0.215)	U (0.217)	--	--	U (2.36)	U (2.4)	--	
Fluoranthene	U (2.1)	U (0.0168)	0.263 (0.017)	--	--	U (0.185)	U (0.188)	--	
Fluorene	U (2.1)	2.87 (0.0225)	3.19 (0.0227)	--	--	1.3 J (0.246)	1.34 J (0.251)	--	
Indeno(1,2,3-cd)pyrene	U (2.1)	U (0.0207)	U (0.0209)	--	--	U (0.227)	U (0.231)	--	
Isophorone	U (10)	U (0.067)	U (0.0676)	--	--	U (0.734)	U (0.747)	--	
2-Methylnaphthalene	U (2.1)	0.167 J (0.0127)	0.151 J (0.0128)	--	--	U (0.139)	U (0.142)	--	
2-Methylphenol	U (10)	0.151 J (0.0896)	0.152 J (0.0905)	--	--	U (0.983)	U (1)	--	
3&4-Methylphenol	U (10)	--	--	--	--	--	--	--	
4-Methylphenol	--	0.804 J (0.0938)	0.904 J (0.0947)	--	--	U (1.03)	U (1.05)	--	
Naphthalene	U (2.1)	1.04 (0.0146)	1.06 (0.0147)	--	--	U (0.16)	U (0.162)	--	
N-Nitrosodiphenylamine	U (10)	UJ (0.0887)	0.619 J (0.0896)	--	--	U (0.972)	U (0.989)	--	
Pentachlorophenol	U (10)	U (0.069)	U (0.0696)	--	--	U (0.756)	U (0.769)	--	
Phenanthrene	U (2.1)	0.728 (0.0444)	0.765 (0.0448)	--	--	U (0.487)	U (0.495)	--	
Phenol	U (10)	6.53 (0.0604)	7.02 (0.061)	--	--	U (0.662)	U (0.674)	--	
Pyrene	U (2.1)	0.163 J (0.0163)	0.137 J (0.0165)	--	--	U (0.179)	U (0.182)	--	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	--	--	--	--	--	--	
PCB-001 (2-CB)	--	17.5 (0.000828)	15.5 (0.000951)	14 B (0.00137)	15 B (0.00183)	17.4 B (0.0011)	15.9 B (0.00148)	22.2 (0.00292)	
PCB-002 (3-CB)	--	0.455 (0.000902)	0.404 (0.00107)	0.187 (0.00147)	0.264 (0.00195)	0.492 (0.00119)	0.431 (0.0016)	0.478 (0.00314)	
PCB-003 (4-CB)	--	2.35 (0.000984)	2.14 (0.00121)	1.47 B (0.00158)	1.69 B (0.00207)	2.49 (0.00129)	2.24 (0.00173)	2.62 B (0.00337)	
PCB-209 (DeCB)	--	0.119 (0.00113)	0.12 (0.000929)	0.197 (0.00239)	0.196 (0.00445)	0.294 (0.00103)	0.258 (0.00182)	0.247 J (0.00934)	
PCB-004 (2,2'-DiCB)	--	38.3 B (0.00425)	36.2 B (0.00391)	43.3 B (0.00961)	44.4 B (0.013)	39.3 (0.00422)	35.6 (0.00383)	50.9 B (0.0237)	
PCB-005 (2,3-DiCB)	--	0.101 Q (0.00276)	0.103 (0.00264)	0.114 (0.00647)	0.13 EMPC (0.0086)	0.11 EMPC (0.0029)	0.101 (0.0029)	0.158 EMPC J (0.017)	
PCB-006 (2,3'-DiCB)	--	5.14 (0.00259)	4.92 (0.00248)	5.44 B (0.00608)	5.31 B (0.00808)	5.5 (0.00273)	5.08 (0.00273)	6.1 B (0.016)	
PCB-007 (2,4-DiCB)	--	0.266 (0.00266)	0.257 (0.00255)	0.301 B (0.00625)	0.286 B (0.00831)	0.301 B (0.0028)	0.259 B (0.0028)	0.294 EMPC J (0.0164)	
PCB-008 (2,4'-DiCB)	--	11.7 B (0.00254)	11.6 B (0.00243)	13.1 B (0.00595)	12.7 B (0.00791)	13 B (0.00267)	11.5 B (0.00267)	14.2 B (0.0156)	
PCB-009 (2,5-DiCB)	--	0.528 (0.00268)	0.502 (0.00256)	0.561 B (0.00628)	0.576 B (0.00835)	0.575 (0.00282)	0.501 (0.00282)	0.624 B (0.0165)	
PCB-010 (2,6-DiCB)	--	0.937 (0.00288)	0.841 (0.00276)	0.893 (0.00675)	0.904 (0.00897)	0.876 (0.00303)	0.921 (0.00303)	0.965 EMPC (0.0177)	
PCB-011 (3,3'-DiCB)	--	UB (0.00255)	UB (0.00244)	0.235 B (0.00598)	0.194 B (0.00795)	0.177 B (0.00268)	0.162 B (0.00268)	UB (0.0157)	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-03 MB-MW-03-20170424 Bladder Pump 4/24/2017	MB-MW-04 MB-MW-04-20100729 Micropurge 7/29/2010	MB-MW-04 DUP-20100729 Micropurge 7/29/2010 Field Duplicate	MB-MW-04 MB-MW-04-20101019 Micropurge 10/19/2010	MB-MW-04 DUP-20101019 Micropurge 10/19/2010 Field Duplicate	MB-MW-04 MB-MW-04-20110113 Micropurge 1/13/2011	MB-MW-04 DUP-20110113 Micropurge 1/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110413 Micropurge 4/13/2011
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	--	0.419 (0.00261)	0.401 (0.0025)	0.46 (0.00613)	0.444 (0.00815)	0.451 (0.00275)	0.389 (0.00275)	0.495 EMPC J (0.0161)
PCB-013 (3,4'-DiCB)	--	0.419 (0.00261)	0.401 (0.0025)	0.46 (0.00613)	0.444 (0.00815)	0.451 (0.00275)	0.389 (0.00275)	0.495 EMPC J (0.0161)
PCB-014 (3,5-DiCB)	--	U (0.00225)	U (0.00216)	U (0.00529)	U (0.00703)	U (0.00237)	U (0.00237)	U (0.0139)
PCB-015 (4,4'-DiCB)	--	2.27 (0.00239)	2.12 (0.00234)	2.32 B (0.00573)	2.27 B (0.00752)	2.4 B (0.0026)	2.19 B (0.00278)	2.76 B (0.0157)
PCB-170 (2,2',3,3',4,4',5-HpCB)	--	0.091 (0.00152)	0.0834 (0.00142)	0.149 (0.00275)	0.188 (0.0049)	0.189 (0.00154)	0.184 (0.00211)	UB (0.0123)
PCB-171 (2,2',3,3',4,4',6-HpCB)	--	0.0257 JQ (0.0014)	0.0248 J (0.00128)	0.0437 J (0.00252)	0.0577 J (0.00446)	0.0548 (0.00139)	0.0567 (0.00183)	UB (0.0113)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	--	0.0117 JQ (0.00139)	0.0133 J (0.00127)	0.0214 J (0.0025)	0.0285 J (0.00442)	0.0295 J (0.00138)	0.0327 J (0.00181)	UB (0.0111)
PCB-173 (2,2',3,3',4,5,6-HpCB)	--	0.0257 JQ (0.0014)	0.0248 J (0.00128)	0.0437 J (0.00252)	0.0577 J (0.00446)	0.0548 (0.00139)	0.0567 (0.00183)	UB (0.0113)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	--	0.105 (0.0013)	0.0987 (0.00119)	0.164 (0.00234)	0.19 (0.00413)	0.212 (0.00129)	0.192 (0.0017)	UB (0.0104)
PCB-175 (2,2',3,3',4,5',6-HpCB)	--	0.00294 JQ (0.00125)	0.00296 J (0.00114)	0.00454 J (0.00224)	U (0.00397)	0.00578 EMPC J (0.00124)	0.00864 J (0.00163)	U (0.01)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	--	0.0547 (0.00133)	0.0507 (0.00122)	0.0838 (0.00239)	0.11 (0.00424)	0.115 (0.00132)	0.101 (0.00174)	UB (0.0107)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	--	0.0129 JQ (0.000951)	0.0126 J (0.000871)	0.0213 J (0.00171)	0.0225 J (0.00302)	0.0258 J (0.000945)	0.0282 J (0.00124)	UB (0.00763)
PCB-178 (2,2',3,3',5,5',6-HpCB)	--	0.0243 J (0.00135)	0.0213 J (0.00124)	0.0295 J (0.00243)	0.0447 EMPC J (0.00429)	0.0453 (0.00134)	0.0448 (0.00176)	UB (0.0108)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	--	0.0548 (0.001)	0.0527 (0.000918)	0.0834 (0.0018)	0.0936 (0.00319)	0.101 (0.000997)	0.1 (0.00131)	UB (0.00804)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	--	0.211 (0.00106)	0.197 (0.00097)	0.4 (0.00191)	0.421 (0.00337)	0.475 (0.00105)	0.406 (0.00138)	UB (0.0085)
PCB-181 (2,2',3,4,4',5,6-HpCB)	--	U (0.00125)	U (0.00114)	U (0.00224)	U (0.00397)	U (0.00124)	U (0.00163)	U (0.01)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	--	U (0.00121)	U (0.00111)	U (0.00218)	U (0.00386)	0.0025 J (0.00121)	U (0.00158)	U (0.00973)
PCB-183 (2,2',3,4,4',5',6-HpCB)	--	0.0724 (0.00124)	0.0672 (0.00113)	0.12 (0.00223)	0.142 (0.00394)	0.148 (0.00123)	0.142 (0.00162)	UB (0.00994)
PCB-185 (2,2',3,4,5,5',6-HpCB)	--	0.0724 (0.00124)	0.0672 (0.00113)	0.12 (0.00223)	0.142 (0.00394)	0.148 (0.00123)	0.142 (0.00162)	0.189 J (0.00994)
PCB-187 (2,2',3,4',5,5',6-HpCB)	--	0.193 (0.00116)	0.183 (0.00106)	0.293 (0.00209)	0.325 (0.00369)	0.372 (0.00115)	0.314 (0.00151)	UB (0.00931)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	--	U (0.000868)	U (0.000783)	U (0.00155)	U (0.00274)	U (0.000852)	U (0.00109)	U (0.00692)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	--	0.00212 J (0.000844)	0.00215 J (0.000835)	0.0021 EMPC J (0.00155)	0.00391 J (0.00257)	0.00388 J (0.00105)	0.00682 EMPC J (0.00189)	U (0.00581)
PCB-190 (2,3,3',4,4',5,6-HpCB)	--	0.0135 J (0.000967)	0.0151 J (0.000885)	0.0226 J (0.00174)	0.055 EMPC J (0.00307)	0.0496 (0.000961)	0.0446 (0.00126)	UB (0.00776)
PCB-191 (2,3,3',4,4',5',6-HpCB)	--	0.00406 J (0.00095)	0.00326 JQ (0.00087)	0.00418 J (0.00171)	0.00741 EMPC J (0.00302)	0.00893 J (0.000945)	0.0109 J (0.00124)	U (0.00762)
PCB-193 (2,3,3',4',5,5',6-HpCB)	--	0.211 (0.00106)	0.197 (0.00097)	0.4 (0.00191)	0.421 (0.00337)	0.475 (0.00105)	0.406 (0.00138)	UB (0.0085)
PCB-128 (2,2',3,3',4,4',5-HxCB)	--	0.0492 (0.00127)	0.0474 (0.00128)	0.0432 J (0.00212)	0.0529 J (0.00395)	0.06 (0.0014)	0.0621 (0.00214)	0.0786 J (0.00883)
PCB-129 (2,2',3,3',4,5-HxCB)	--	0.389 B (0.00131)	0.374 B (0.00132)	0.433 B (0.0022)	0.451 B (0.00408)	0.531 B (0.00144)	0.477 B (0.00221)	0.804 B (0.00913)
PCB-130 (2,2',3,3',4,5'-HxCB)	--	0.019 J (0.00169)	0.0196 J (0.0017)	0.017 J (0.00284)	0.0217 J (0.00527)	0.0241 J (0.00186)	0.0278 J (0.00285)	0.0279 EMPC J (0.0118)
PCB-131 (2,2',3,3',4,6-HxCB)	--	0.00576 JQ (0.00174)	0.00475 J (0.00174)	U (0.0029)	U (0.0054)	0.00455 EMPC J (0.00191)	0.008 J (0.00292)	U (0.0121)
PCB-132 (2,2',3,3',4,6'-HxCB)	--	0.155 (0.00165)	0.152 (0.00166)	0.151 (0.00276)	0.164 (0.00514)	0.188 (0.00182)	0.183 (0.00278)	0.265 J (0.0115)
PCB-133 (2,2',3,3',5,5'-HxCB)	--	0.00775 J (0.00159)	0.00716 J (0.0016)	0.00754 J (0.00266)	0.00661 JQ (0.00495)	0.0084 J (0.00175)	0.0126 JQ (0.00268)	U (0.0111)
PCB-134 (2,2',3,3',5,6-HxCB)	--	0.0289 J (0.0017)	0.0248 JQ (0.00171)	0.0251 J (0.00284)	0.0326 EMPC J (0.00527)	0.0384 J (0.00187)	0.0384 J (0.00286)	0.0518 J (0.0118)
PCB-135 (2,2',3,3',5,6'-HxCB)	--	0.181 (0.00148)	0.165 (0.00148)	0.194 (0.00352)	0.237 (0.00648)	0.27 (0.00177)	0.277 (0.00178)	0.314 J (0.0131)
PCB-136 (2,2',3,3',6,6'-HxCB)	--	0.0832 (0.00109)	0.0818 (0.00109)	0.0781 J (0.00259)	0.0954 (0.00476)	0.108 (0.0013)	0.112 (0.00131)	0.14 J (0.00963)
PCB-137 (2,2',3,4,4',5-HxCB)	--	0.0115 J (0.00146)	0.0103 JQ (0.00147)	0.0078 JQ (0.00245)	0.00848 JQ (0.00454)	0.00907 JQ (0.00161)	0.0149 JQ (0.00246)	U (0.0102)
PCB-138 (2,2',3,4,4',5'-HxCB)	--	0.389 B (0.00131)	0.374 B (0.00132)	0.433 B (0.0022)	0.451 B (0.00408)	0.531 B (0.00144)	0.477 B (0.00221)	0.804 B (0.00913)
PCB-139 (2,2',3,4,4',6-HxCB)	--	0.00628 J (0.00145)	0.00536 J (0.00146)	0.00239 EMPC J (0.00243)	0.0059 EMPC J (0.00452)	0.00509 EMPC J (0.0016)	0.00794 EMPC J (0.00245)	U (0.0101)
PCB-140 (2,2',3,4,4',6'-HxCB)	--	0.00628 J (0.00145)	0.00536 J (0.00146)	0.00239 EMPC J (0.00243)	0.0059 EMPC J (0.00452)	0.00509 EMPC J (0.0016)	0.00794 EMPC J (0.00245)	U (0.0101)
PCB-141 (2,2',3,4,5,5'-HxCB)	--	0.0805 (0.00151)	0.0731 (0.00152)	0.0995 (0.00253)	0.117 (0.0047)	0.123 (0.00166)	0.117 (0.00255)	0.165 J (0.0105)
PCB-143 (2,2',3,4,5,6'-HxCB)	--	0.0289 J (0.0017)	0.0248 JQ (0.00171)	0.0251 J (0.00284)	0.0326 EMPC J (0.00527)	0.0384 J (0.00187)	0.0384 J (0.00286)	0.0518 J (0.0118)
PCB-144 (2,2',3,4,5',6-HxCB)	--	0.0187 J (0.00138)	0.0189 J (0.00138)	0.0199 J (0.00327)	0.0305 EMPC J (0.00601)	0.0258 J (0.00164)	0.0339 J (0.00166)	0.0405 J (0.0122)
PCB-146 (2,2',3,4',5,5'-HxCB)	--	0.0576 (0.00138)	0.0566 (0.00139)	0.0642 J (0.00231)	0.0719 J (0.00429)	0.0746 (0.00152)	0.0785 (0.00232)	0.0984 EMPC J (0.0096)
PCB-147 (2,2',3,4',5,6-HxCB)	--	0.413 B (0.00141)	0.39 B (0.00142)	0.434 B (0.00236)	0.451 B (0.00439)	0.542 (0.00155)	0.464 (0.00238)	0.816 B (0.00982)
PCB-148 (2,2',3,4',5,6'-HxCB)	--	U (0.00146)	U (0.00145)	U (0.00346)	U (0.00636)	U (0.00174)	U (0.00175)	U (0.0129)
PCB-149 (2,2',3,4',5',6-HxCB)	--	0.413 B (0.00141)	0.39 B (0.00142)	0.434 B (0.00236)	0.451 B (0.00439)	0.542 (0.00155)	0.464 (0.00238)	0.816 B (0.00982)
PCB-150 (2,2',3,4',6,6'-HxCB)	--	U (0.00101)	U (0.00101)	U (0.00241)	U (0.00443)	U (0.00121)	U (0.00122)	U (0.00897)
PCB-151 (2,2',3,5,5',6-HxCB)	--	0.181 (0.00148)	0.165 (0.00148)	0.194 (0.00352)	0.237 (0.00648)	0.27 (0.00177)	0.277 (0.00178)	0.314 J (0.0131)
PCB-152 (2,2',3,5,6,6'-HxCB)	--	U (0.00103)	U (0.00103)	U (0.00246)	U (0.00452)	U (0.00124)	U (0.00124)	U (0.00915)
PCB-153 (2,2',4,4',5,5'-HxCB)	--	0.327 B (0.00113)	0.308 B (0.00114)	0.416 B (0.0019)	0.414 B (0.00353)	0.486 (0.00125)	0.434 (0.00191)	0.73 B (0.00789)
PCB-154 (2,2',4,4',5,6'-HxCB)	--	0.00576 J (0.00121)	0.00703 JQ (0.00121)	0.00308 EMPC J (0.00287)	U (0.00527)	0.00312 EMPC J (0.00144)	0.00309 EMPC J (0.00145)	U (0.0107)
PCB-155 (2,2',4,4',6,6'-HxCB)	--	U (0.000987)	U (0.000986)	U (0.00234)	U (0.00431)	U (0.00118)	U (0.00119)	U (0.00872)
PCB-156 (2,3,3',4,4',5-HxCB)	--	0.0301 J (0.00135)	0.0302 J (0.00138)	0.0284 J (0.00222)	0.0329 J (0.00425)	0.0429 J (0.00159)	0.0482 (0.00216)	0.0442 JQ (0.00953)
PCB-157 (2,3,3',4,4',5'-HxCB)	--	0.0301 J (0.00135)	0.0302 J (0.00138)	0.0284 J (0.00222)	0.0329 J (0.00425)	0.0429 J (0.00159)	0.0482 (0.00216)	0.0442 EMPC J (0.00953)
PCB-158 (2,3,3',4,4',6-HxCB)	--	0.0327 J (0.00104)	0.0313 JQ (0.00104)	0.0369 J (0.00173)	0.0473 J (0.00322)	0.0458 (0.00114)	0.0487 (0.00174)	0.0557 EMPC J (0.00721)
PCB-159 (2,3,3',4,5,5'-HxCB)	--	0.00362 J (0.00111)	0.00208 JQ (0.00112)	0.00448 EMPC J (0.00186)	0.00489 EMPC J (0.00345)	0.00528 J (0.00122)	0.00721 J (0.00187)	U (0.00773)
PCB-160 (2,3,3',4,5,6-HxCB)	--	0.389 B (0.00131)	0.374 B (0.00132)	0.433 B (0.0022)	0.451 B (0.00408)	0.531 B (0.00144)	0.477 B (0.00221)	0.804 B (0.00913)
PCB-162 (2,3,3',4',5,5'-HxCB)	--	U (0.0011)	U (0.0011)	U (0.00184)	U (0.00341)	0.0025 EMPC J (0.00121)	0.00189 EMPC J (0.00185)	U (0.00763)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-03 MB-MW-03-20170424 Bladder Pump 4/24/2017	MB-MW-04 MB-MW-04-20100729 Micropurge 7/29/2010	MB-MW-04 DUP-20100729 Micropurge 7/29/2010 Field Duplicate	MB-MW-04 MB-MW-04-20101019 Micropurge 10/19/2010	MB-MW-04 DUP-20101019 Micropurge 10/19/2010 Field Duplicate	MB-MW-04 MB-MW-04-20110113 Micropurge 1/13/2011	MB-MW-04 DUP-20110113 Micropurge 1/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110413 Micropurge 4/13/2011
PCB Congeners [ng/L] (continued)								
PCB-163 (2,3,3',4',5,6-HxCB)	--	0.389 B (0.00131)	0.374 B (0.00132)	0.433 B (0.0022)	0.451 B (0.00408)	0.531 B (0.00144)	0.477 B (0.00221)	0.804 B (0.00913)
PCB-164 (2,3,3',4',5',6-HxCB)	--	0.0271 J (0.00116)	0.0266 J (0.00116)	0.0269 J (0.00193)	0.0362 J (0.00359)	0.0366 J (0.00127)	0.0391 J (0.00195)	0.0382 EMPC J (0.00804)
PCB-166 (2,3,4,4',5,6-HxCB)	--	0.0492 (0.00127)	0.0474 (0.00128)	0.0432 J (0.00212)	0.0529 J (0.00395)	0.06 (0.0014)	0.0621 (0.00214)	0.0786 J (0.00883)
PCB-167 (2,3',4,4',5,5'-HxCB)	--	0.0101 J (0.000829)	0.0109 J (0.000826)	0.00944 J (0.00131)	0.0135 J (0.0025)	0.013 J (0.000876)	0.0174 J (0.00149)	0.0184 J (0.00609)
PCB-168 (2,3',4,4',5',6-HxCB)	--	0.327 B (0.00113)	0.308 B (0.00114)	0.416 B (0.0019)	0.414 B (0.00353)	0.486 (0.00125)	0.434 (0.00191)	0.73 B (0.00789)
PCB-169 (3,3',4,4',5,5'-HxCB)	--	0.000745 J (0.000884)	0.00336 JQ (0.000883)	U (0.00164)	U (0.0028)	U (0.00093)	U (0.00149)	U (0.0057)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	--	0.541 (0.00117)	0.541 (0.00112)	0.775 (0.00174)	0.731 (0.00372)	1.09 (0.00104)	0.977 (0.00168)	1.27 (0.0158)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	--	0.0459 (0.000838)	0.0465 (0.00077)	0.058 J (0.00126)	0.0694 J (0.0027)	0.0884 (0.000745)	0.0984 (0.00123)	0.106 J (0.0112)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	--	0.206 (0.000876)	0.211 (0.000783)	0.283 (0.00132)	0.283 (0.00285)	0.407 (0.000777)	0.383 (0.0013)	0.47 (0.0116)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	--	0.112 (0.00107)	0.11 (0.00114)	0.148 (0.00153)	0.2 (0.00314)	0.214 (0.000986)	0.213 (0.00215)	0.251 J (0.00618)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	--	0.016 J (0.00116)	0.0161 J (0.00123)	0.0239 EMPC J (0.00166)	0.0337 EMPC J (0.00341)	0.0332 J (0.00107)	0.0439 J (0.00234)	UB (0.00671)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	--	0.0459 Q (0.00124)	0.0433 Q (0.00125)	0.07 J (0.00246)	0.0836 EMPC (0.00483)	0.103 (0.00121)	0.108 (0.00175)	0.101 J (0.00922)
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	--	0.00149 JQ (0.000922)	0.00175 JQ (0.000932)	0.0184 J (0.00183)	U (0.0036)	0.00344 J (0.000902)	0.00631 EMPC J (0.0013)	U (0.00686)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	--	0.347 (0.00128)	0.336 (0.00129)	0.463 (0.00254)	0.515 (0.00499)	0.631 (0.00125)	0.633 (0.0018)	0.754 (0.00952)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	--	0.347 (0.00128)	0.336 (0.00129)	0.463 (0.00254)	0.515 (0.00499)	0.631 (0.00125)	0.633 (0.0018)	0.754 (0.00952)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	--	0.0178 J (0.000905)	0.0182 J (0.000915)	U (0.0018)	0.0261 EMPC J (0.00353)	0.0339 J (0.000886)	0.0382 J (0.00128)	0.0351 J (0.00674)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	--	0.0252 J (0.000874)	0.0258 J (0.000884)	0.0266 J (0.00174)	0.0342 EMPC J (0.00341)	0.0468 (0.000855)	0.0517 (0.00123)	0.0476 J (0.0065)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	--	0.112 (0.000985)	0.108 (0.000995)	0.124 (0.00195)	0.156 (0.00384)	0.191 (0.000963)	0.182 (0.00139)	0.211 J (0.00733)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	--	0.258 (0.00114)	0.251 (0.00116)	0.323 (0.00227)	0.339 (0.00445)	0.489 (0.00112)	0.449 (0.00161)	0.516 (0.0085)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	--	U (0.000958)	U (0.000969)	0.00303 EMPC J (0.0019)	U (0.00374)	U (0.000938)	U (0.00135)	U (0.00713)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	--	0.00194 JQ (0.000901)	0.0019 JQ (0.000957)	0.00388 J (0.00128)	U (0.00265)	0.00404 EMPC J (0.000831)	0.00527 EMPC J (0.00181)	U (0.00521)
PCB-24/27	--	--	--	--	--	--	--	--
PCB-42/59	--	--	--	--	--	--	--	--
PCB-52/69	--	--	--	--	--	--	--	--
PCB-61/70	--	--	--	--	--	--	--	--
PCB-90/101	--	--	--	--	--	--	--	--
PCB-107/109	--	--	--	--	--	--	--	--
PCB-132/161	--	--	--	--	--	--	--	--
PCB-133/142	--	--	--	--	--	--	--	--
PCB-138/163/164	--	--	--	--	--	--	--	--
PCB-196/203	--	--	--	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	--	0.0496 (0.00156)	0.0477 (0.00174)	0.0349 EMPC J (0.00356)	0.0529 J (0.006)	0.0605 (0.0021)	0.0524 (0.00198)	0.0336 EMPC J (0.0122)
PCB-083 (2,2',3,3',5-PeCB)	--	0.26 (0.00131)	0.265 (0.00146)	0.218 (0.00299)	0.241 (0.00504)	0.346 (0.00177)	0.283 (0.00166)	0.353 J (0.0103)
PCB-084 (2,2',3,3',6-PeCB)	--	0.195 (0.00149)	0.195 (0.00166)	0.165 (0.0034)	0.176 (0.00573)	0.229 (0.00201)	0.224 (0.00189)	0.264 J (0.0117)
PCB-085 (2,2',3,4,4'-PeCB)	--	0.0537 (0.00108)	0.0559 (0.0012)	0.0498 J (0.00247)	0.0677 J (0.00415)	0.0726 (0.00145)	0.0635 (0.00137)	0.0691 J (0.00845)
PCB-086 (2,2',3,4,5-PeCB)	--	0.272 B (0.0011)	0.278 B (0.00123)	0.237 (0.00252)	0.277 (0.00425)	0.349 (0.00149)	0.291 EMPC (0.0014)	UB (0.00864)
PCB-087 (2,2',3,4,5'-PeCB)	--	0.272 B (0.0011)	0.278 B (0.00123)	0.237 (0.00252)	0.277 (0.00425)	0.349 (0.00149)	0.291 Q (0.0014)	0.331 BJQ (0.00864)
PCB-088 (2,2',3,4,6-PeCB)	--	0.0936 (0.00133)	0.0972 (0.00148)	0.0762 J (0.00303)	0.0836 (0.00511)	0.105 (0.00179)	0.107 (0.00168)	0.122 J (0.0104)
PCB-089 (2,2',3,4,6'-PeCB)	--	0.00524 J (0.00144)	0.00448 JQ (0.00161)	0.00576 EMPC J (0.00329)	U (0.00555)	0.00618 J (0.00194)	0.0105 J (0.00183)	U (0.0113)
PCB-090 (2,2',3,4',5-PeCB)	--	0.537 B (0.00112)	0.539 B (0.00125)	0.484 B (0.00257)	0.496 B (0.00432)	0.697 B (0.00151)	0.569 B (0.00143)	0.776 B (0.0088)
PCB-097 (2,2',3,4',5'-PeCB)	--	0.272 B (0.0011)	0.278 B (0.00123)	0.237 (0.00252)	0.277 (0.00425)	0.349 (0.00149)	0.291 EMPC (0.0014)	UB (0.00864)
PCB-091 (2,2',3,4',6-PeCB)	--	0.0936 (0.00133)	0.0972 (0.00148)	0.0762 J (0.00303)	0.0836 (0.00511)	0.105 (0.00179)	0.107 (0.00168)	0.122 J (0.0104)
PCB-098 (2,2',3,4',6'-PeCB)	--	0.0299 J (0.00124)	0.0294 J (0.00138)	0.0201 J (0.00284)	0.0241 J (0.00478)	0.0366 J (0.00167)	0.0384 J (0.00157)	0.0302 EMPC J (0.00972)
PCB-092 (2,2',3,5,5'-PeCB)	--	0.114 (0.00128)	0.112 (0.00142)	0.0867 (0.00291)	0.106 (0.00491)	0.137 (0.00172)	0.127 (0.00162)	0.137 J (0.00999)
PCB-093 (2,2',3,5,6-PeCB)	--	0.019 JQ (0.00128)	0.0208 J (0.00143)	0.00544 J (0.00293)	0.00583 EMPC J (0.00493)	0.0159 J (0.00173)	0.00815 EMPC J (0.00162)	U (0.01)
PCB-094 (2,2',3,5,6'-PeCB)	--	0.0129 J (0.00144)	0.0121 J (0.00161)	U (0.00329)	0.0103 EMPC J (0.00555)	0.0139 J (0.00194)	0.0158 J (0.00183)	U (0.0113)
PCB-095 (2,2',3,5',6-PeCB)	--	0.645 (0.00136)	0.646 (0.00151)	0.608 (0.0031)	0.607 (0.00522)	0.859 (0.00183)	0.729 (0.00172)	0.982 (0.0106)
PCB-096 (2,2',3,6,6'-PeCB)	--	0.00935 JQ (0.00108)	0.0101 J (0.0012)	0.00881 J (0.00246)	0.00932 EMPC J (0.00415)	0.0113 EMPC J (0.00145)	0.0179 J (0.00137)	0.018 J (0.00844)
PCB-099 (2,2',4,4',5-PeCB)	--	0.26 (0.00131)	0.265 (0.00146)	0.218 (0.00299)	0.241 (0.00504)	0.346 (0.00177)	0.283 (0.00166)	0.353 J (0.0103)
PCB-100 (2,2',4,4',6-PeCB)	--	0.019 JQ (0.00128)	0.0208 J (0.00143)	0.00544 J (0.00293)	0.00583 EMPC J (0.00493)	0.0159 J (0.00173)	0.00815 EMPC J (0.00162)	U (0.01)
PCB-101 (2,2',4,5,5'-PeCB)	--	0.537 B (0.00112)	0.539 B (0.00125)	0.484 B (0.00257)	0.496 B (0.00432)	0.697 B (0.00151)	0.569 B (0.00143)	0.776 B (0.0088)
PCB-102 (2,2',4,5,6'-PeCB)	--	0.0299 J (0.00124)	0.0294 J (0.00138)	0.0201 J (0.00284)	0.0241 J (0.00478)	0.0366 J (0.00167)	0.0384 J (0.00157)	0.0302 JQ (0.00972)
PCB-103 (2,2',4,5',6-PeCB)	--	0.0111 J (0.00126)	0.00903 JQ (0.00141)	0.00671 J (0.00289)	0.00942 EMPC J (0.00486)	0.0102 J (0.0017)	0.0156 J (0.0016)	U (0.0099)
PCB-104 (2,2',4,6,6'-PeCB)	--	U (0.000961)	U (0.00107)	U (0.00219)	U (0.0037)	U (0.00129)	U (0.00122)	U (0.00752)
PCB-105 (2,3,3',4,4'-PeCB)	--	0.0781 (0.000863)	0.0799 (0.000948)	0.0633 J (0.00155)	0.0757 J (0.00255)	0.0961 (0.00121)	0.105 (0.00217)	UB (0.00559)
PCB-108 (2,3,3',4,5'-PeCB)	--	0.00875 J (0.000928)	0.00841 J (0.00102)	0.0048 EMPC J (0.0017)	0.00976 EMPC J (0.00279)	0.0096 EMPC J (0.00127)	0.0146 J (0.00229)	UB (0.00593)
PCB-109 (2,3,3',4,6-PeCB)	--	0.272 B (0.0011)	0.278 B (0.00123)	0.237 (0.00252)	0.277 (0.00425)	0.349 (0.00149)	0.291 EMPC (0.0014)	UB (0.00864)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-03 MB-MW-03-20170424 Bladder Pump 4/24/2017	MB-MW-04 MB-MW-04-20100729 Micropurge 7/29/2010	MB-MW-04 DUP-20100729 Micropurge 7/29/2010 Field Duplicate	MB-MW-04 MB-MW-04-20101019 Micropurge 10/19/2010	MB-MW-04 DUP-20101019 Micropurge 10/19/2010 Field Duplicate	MB-MW-04 MB-MW-04-20110113 Micropurge 1/13/2011	MB-MW-04 DUP-20110113 Micropurge 1/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110413 Micropurge 4/13/2011
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5-PeCB)	--	0.0236 J (0.000883)	0.0237 J (0.000971)	0.0149 EMPC J (0.00162)	0.019 J (0.00265)	0.0241 EMPC J (0.00121)	0.0339 J (0.00217)	UB (0.00564)
PCB-110 (2,3,3',4',6-PeCB)	--	0.535 B (0.000953)	0.524 B (0.00106)	0.478 B (0.00218)	0.487 B (0.00367)	0.68 B (0.00128)	0.539 B (0.00121)	0.725 (0.00746)
PCB-111 (2,3,3',5',5-PeCB)	--	U (0.000903)	U (0.00101)	U (0.00206)	U (0.00347)	U (0.00122)	0.00237 J (0.00115)	U (0.00707)
PCB-113 (2,3,3',5',6-PeCB)	--	0.537 B (0.00112)	0.539 B (0.00125)	0.484 B (0.00257)	0.496 B (0.00432)	0.697 B (0.00151)	0.569 B (0.00143)	0.776 B (0.0088)
PCB-114 (2,3,4,4',5-PeCB)	--	0.0037 JQ (0.000828)	0.00432 J (0.000929)	0.00391 EMPC J (0.00151)	U (0.00244)	0.00637 J (0.00109)	0.00689 EMPC J (0.00199)	U (0.00527)
PCB-115 (2,3,4,4',6-PeCB)	--	0.535 B (0.000953)	0.524 B (0.00106)	0.478 B (0.00218)	0.487 B (0.00367)	0.68 B (0.00128)	0.539 B (0.00121)	0.725 (0.00746)
PCB-116 (2,3,4,5,6-PeCB)	--	0.0537 (0.00108)	0.0559 (0.0012)	0.0498 J (0.00247)	0.0677 J (0.00415)	0.0726 (0.00145)	0.0635 (0.00137)	0.0691 J (0.00845)
PCB-117 (2,3,4',5,6-PeCB)	--	0.0537 (0.00108)	0.0559 (0.0012)	0.0498 J (0.00247)	0.0677 J (0.00415)	0.0726 (0.00145)	0.0635 (0.00137)	0.0691 J (0.00845)
PCB-118 (2,3',4,4',5-PeCB)	--	0.282 B (0.000865)	0.282 B (0.000961)	0.223 B (0.00151)	0.223 B (0.00247)	0.33 B (0.00113)	0.335 B (0.00201)	0.435 (0.00556)
PCB-119 (2,3',4,4',6-PeCB)	--	0.272 B (0.0011)	0.278 B (0.00123)	0.237 (0.00252)	0.277 (0.00425)	0.349 (0.00149)	0.291 EMPC (0.0014)	UB (0.00864)
PCB-120 (2,3',4,5,5'-PeCB)	--	U (0.000929)	0.00167 JQ (0.00103)	U (0.00212)	U (0.00358)	0.00222 EMPC J (0.00125)	0.00264 EMPC J (0.00118)	U (0.00727)
PCB-121 (2,3',4,5',6-PeCB)	--	U (0.000936)	U (0.00104)	U (0.00214)	U (0.0036)	U (0.00126)	U (0.00119)	U (0.00733)
PCB-122 (2,3,3',4',5'-PeCB)	--	0.00336 J (0.000991)	0.00332 J (0.00109)	U (0.00181)	U (0.00298)	0.00354 JQ (0.00135)	0.00484 JQ (0.00244)	U (0.00633)
PCB-123 (2,3',4,4',5'-PeCB)	--	0.00519 J (0.000917)	0.00467 J (0.000994)	0.00197 EMPC J (0.00162)	0.00317 EMPC J (0.0028)	0.00388 EMPC J (0.00121)	0.0053 J (0.00223)	U (0.00579)
PCB-124 (2,3',4',5,5'-PeCB)	--	0.00875 J (0.000928)	0.00841 J (0.00102)	0.0048 EMPC J (0.0017)	0.00976 EMPC J (0.00279)	0.0096 EMPC J (0.00127)	0.0146 J (0.00229)	UB (0.00593)
PCB-125 (2,3',4',5',6-PeCB)	--	0.272 B (0.0011)	0.278 B (0.00123)	0.237 (0.00252)	0.277 (0.00425)	0.349 (0.00149)	0.291 EMPC (0.0014)	UB (0.00864)
PCB-126 (3,3',4,4',5-PeCB)	--	0.00281 JQ (0.000893)	0.00307 J (0.000968)	U (0.00183)	U (0.00291)	U (0.00134)	0.00606 J (0.00237)	U (0.00569)
PCB-127 (3,3',4,5,5'-PeCB)	--	U (0.000899)	U (0.000989)	U (0.00165)	U (0.0027)	U (0.00123)	U (0.00221)	U (0.00574)
PCB-040 (2,2',3,3'-TeCB)	--	0.645 (0.00151)	0.627 (0.00151)	0.621 (0.00297)	0.609 (0.00422)	0.747 (0.00171)	0.693 (0.00276)	0.963 B (0.0106)
PCB-041 (2,2',3,4-TeCB)	--	0.645 (0.00151)	0.627 (0.00151)	0.621 (0.00297)	0.609 (0.00422)	0.747 (0.00171)	0.693 (0.00276)	0.963 B (0.0106)
PCB-042 (2,2',3,4'-TeCB)	--	0.29 (0.00154)	0.283 (0.00153)	0.283 (0.00302)	0.263 (0.00429)	0.356 (0.00174)	0.363 (0.00281)	0.455 B (0.0108)
PCB-043 (2,2',3,5-TeCB)	--	0.0564 (0.00141)	0.0606 (0.00141)	0.0584 J (0.00277)	0.0496 EMPC J (0.00394)	0.0688 (0.00159)	0.0827 (0.00258)	UB (0.00995)
PCB-044 (2,2',3,5'-TeCB)	--	1.45 B (0.00135)	1.43 B (0.00135)	1.37 B (0.00266)	1.2 B (0.00377)	1.86 B (0.00153)	1.89 B (0.00247)	2.21 B (0.00952)
PCB-045 (2,2',3,6-TeCB)	--	0.731 B (0.00157)	0.713 B (0.00156)	0.642 B (0.00308)	0.599 B (0.00437)	0.924 (0.00177)	0.89 (0.00287)	1.1 (0.011)
PCB-046 (2,2',3,6'-TeCB)	--	0.351 (0.00185)	0.338 (0.00184)	0.31 (0.00364)	0.308 (0.00517)	0.416 (0.00209)	0.441 (0.00339)	0.493 (0.013)
PCB-047 (2,2',4,4'-TeCB)	--	1.45 B (0.00135)	1.43 B (0.00135)	1.37 B (0.00266)	1.2 B (0.00377)	1.86 B (0.00153)	1.89 B (0.00247)	2.21 B (0.00952)
PCB-048 (2,2',4,5-TeCB)	--	0.191 (0.0015)	0.187 (0.00149)	0.194 (0.00295)	0.192 (0.00419)	0.212 (0.00169)	0.224 (0.00274)	0.255 BJ (0.0106)
PCB-049 (2,2',4,5'-TeCB)	--	1.08 (0.00125)	1.06 (0.00124)	0.973 B (0.00245)	0.886 B (0.00348)	1.43 (0.00141)	1.51 (0.00228)	1.74 B (0.00877)
PCB-050 (2,2',4,6-TeCB)	--	1.17 (0.00146)	1.14 (0.00145)	1.05 (0.00286)	0.93 (0.00406)	1.54 (0.00164)	1.5 (0.00266)	1.74 B (0.0102)
PCB-051 (2,2',4,6'-TeCB)	--	0.731 B (0.00157)	0.713 B (0.00156)	0.642 B (0.00308)	0.599 B (0.00437)	0.924 (0.00177)	0.89 (0.00287)	1.1 (0.011)
PCB-052 (2,2',5,5'-TeCB)	--	1.99 B (0.00146)	1.93 B (0.00145)	1.87 B (0.00286)	1.65 B (0.00407)	2.6 B (0.00165)	2.68 B (0.00267)	3.08 B (0.0103)
PCB-053 (2,2',5,6'-TeCB)	--	1.17 (0.00146)	1.14 (0.00145)	1.05 (0.00286)	0.93 (0.00406)	1.54 (0.00164)	1.5 (0.00266)	1.74 B (0.0102)
PCB-054 (2,2',6,6'-TeCB)	--	0.159 (0.00183)	0.156 (0.00177)	0.129 (0.00338)	0.14 (0.00481)	0.189 (0.0019)	0.196 (0.00194)	0.157 J (0.0126)
PCB-055 (2,3,3',4-TeCB)	--	U (0.00117)	0.00794 JQ (0.00117)	0.00808 EMPC J (0.0023)	0.00795 EMPC J (0.00327)	0.0155 J (0.00132)	0.0187 EMPC J (0.00214)	0.0228 J (0.00825)
PCB-056 (2,3,3',4'-TeCB)	--	0.186 (0.0011)	0.178 (0.0011)	0.199 B (0.00216)	0.189 B (0.00308)	0.201 (0.00124)	0.198 (0.00201)	0.281 BJ (0.00776)
PCB-057 (2,3,3',5-TeCB)	--	0.00525 J (0.00112)	0.00457 JQ (0.00111)	0.00321 EMPC J (0.00219)	0.0076 J (0.00311)	0.00634 J (0.00126)	0.00954 J (0.00204)	U (0.00785)
PCB-058 (2,3,3',5'-TeCB)	--	U (0.00111)	U (0.00111)	0.00116 EMPC J (0.00218)	0.00278 EMPC J (0.0031)	0.00261 J (0.00125)	0.0038 EMPC J (0.00203)	U (0.00782)
PCB-059 (2,3,3',6-TeCB)	--	0.109 (0.00108)	0.106 (0.00107)	0.108 B (0.00211)	0.105 B (0.003)	0.125 (0.00122)	0.133 (0.00197)	UB (0.00758)
PCB-060 (2,3,4,4'-TeCB)	--	0.0788 (0.00114)	0.0692 (0.00113)	0.0929 (0.00223)	0.0853 (0.00317)	0.0894 (0.00128)	0.0951 (0.00208)	0.113 J (0.00799)
PCB-061 (2,3,4,5-TeCB)	--	0.76 B (0.00108)	0.749 B (0.00107)	0.791 B (0.00211)	0.685 B (0.003)	0.924 B (0.00121)	0.839 B (0.00197)	1.22 B (0.00758)
PCB-062 (2,3,4,6-TeCB)	--	0.109 (0.00108)	0.106 (0.00107)	0.108 B (0.00211)	0.105 B (0.003)	0.125 (0.00122)	0.133 (0.00197)	UB (0.00758)
PCB-063 (2,3,4',5-TeCB)	--	0.0237 J (0.00104)	0.0244 J (0.00103)	0.0188 J (0.00203)	0.0261 J (0.00289)	0.0291 J (0.00117)	0.0346 J (0.00189)	0.0386 J (0.00728)
PCB-064 (2,3,4',6-TeCB)	--	0.318 B (0.00102)	0.308 B (0.00101)	0.326 (0.002)	0.322 (0.00284)	0.366 (0.00115)	0.345 (0.00186)	0.494 B (0.00718)
PCB-065 (2,3,5,6-TeCB)	--	1.45 B (0.00135)	1.43 B (0.00135)	1.37 B (0.00266)	1.2 B (0.00377)	1.86 B (0.00153)	1.89 B (0.00247)	2.21 B (0.00952)
PCB-066 (2,3',4,4'-TeCB)	--	0.395 (0.00107)	0.39 (0.00106)	0.407 B (0.0021)	0.384 B (0.00298)	0.465 B (0.00121)	0.447 B (0.00195)	0.643 B (0.00753)
PCB-067 (2,3',4,5-TeCB)	--	0.0182 J (0.001)	0.017 J (0.000998)	0.0154 J (0.00197)	0.02 J (0.0028)	0.0181 J (0.00113)	0.0232 J (0.00183)	UB (0.00706)
PCB-068 (2,3',4,5'-TeCB)	--	0.0126 J (0.00101)	0.0135 J (0.00101)	UB (0.00198)	UB (0.00282)	0.0158 BJ (0.00114)	0.0224 BJ (0.00185)	U (0.00712)
PCB-069 (2,3',4,6-TeCB)	--	1.08 (0.00125)	1.06 (0.00124)	0.973 B (0.00245)	0.886 B (0.00348)	1.43 (0.00141)	1.51 (0.00228)	1.74 B (0.00877)
PCB-070 (2,3',4',5-TeCB)	--	0.76 B (0.00108)	0.749 B (0.00107)	0.791 B (0.00211)	0.685 B (0.003)	0.924 B (0.00121)	0.839 B (0.00197)	1.22 B (0.00758)
PCB-076 (2,3',4',5'-TeCB)	--	0.76 B (0.00108)	0.749 B (0.00107)	0.791 B (0.00211)	0.685 B (0.003)	0.924 B (0.00121)	0.839 B (0.00197)	1.22 B (0.00758)
PCB-071 (2,3',4',6-TeCB)	--	0.645 (0.00151)	0.627 (0.00151)	0.621 (0.00297)	0.609 (0.00422)	0.747 (0.00171)	0.693 (0.00276)	0.963 B (0.0106)
PCB-072 (2,3',5,5'-TeCB)	--	0.012 J (0.00109)	0.0139 J (0.00108)	0.00985 J (0.00213)	0.0115 EMPC J (0.00303)	0.0161 J (0.00122)	0.0205 EMPC J (0.00198)	0.022 J (0.00764)
PCB-073 (2,3',5',6-TeCB)	--	0.0564 (0.00141)	0.0606 (0.00141)	0.0584 J (0.00277)	0.0496 EMPC J (0.00394)	0.0688 (0.00159)	0.0827 (0.00258)	UB (0.00995)
PCB-074 (2,4,4',5-TeCB)	--	0.76 B (0.00108)	0.749 B (0.00107)	0.791 B (0.00211)	0.685 B (0.003)	0.924 B (0.00121)	0.839 B (0.00197)	1.22 B (0.00758)
PCB-075 (2,4,4',6-TeCB)	--	0.109 (0.00108)	0.106 (0.00107)	0.108 B (0.00211)	0.105 B (0.003)	0.125 (0.00122)	0.133 (0.00197)	UB (0.00758)
PCB-077 (3,3',4,4'-TeCB)	--	0.0226 J (0.00105)	0.0224 J (0.00103)	0.0223 J (0.00213)	0.0266 J (0.00298)	0.0229 J (0.00119)	0.0292 J (0.00199)	UB (0.0073)
PCB-078 (3,3',4,5-TeCB)	--	U (0.00115)	U (0.00115)	U (0.00226)	U (0.00322)	U (0.0013)	U (0.00211)	U (0.00812)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-03 MB-MW-03-20170424 Bladder Pump 4/24/2017	MB-MW-04 MB-MW-04-20100729 Micropurge 7/29/2010	MB-MW-04 DUP-20100729 Micropurge 7/29/2010 Field Duplicate	MB-MW-04 MB-MW-04-20101019 Micropurge 10/19/2010	MB-MW-04 DUP-20101019 Micropurge 10/19/2010 Field Duplicate	MB-MW-04 MB-MW-04-20110113 Micropurge 1/13/2011	MB-MW-04 DUP-20110113 Micropurge 1/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110413 Micropurge 4/13/2011
PCB Congeners [ng/L] (continued)								
PCB-079 (3,3',4,5'-TeCB)	--	0.0048 JQ (0.00101)	0.00473 J (0.00101)	0.00481 EMPC J (0.00199)	U (0.00282)	0.00557 J (0.00114)	0.00612 EMPC J (0.00185)	U (0.00712)
PCB-081 (3,4,4',5'-TeCB)	--	U (0.00104)	U (0.00105)	U (0.00198)	U (0.00285)	U (0.00117)	U (0.00184)	U (0.00742)
PCB-016 (2,2',3-TrCB)	--	3.56 (0.00274)	3.41 (0.00263)	3.23 (0.00609)	3.12 (0.00885)	3.58 (0.00301)	3.64 (0.00335)	3.44 B (0.0156)
PCB-017 (2,2',4-TrCB)	--	4.27 (0.00229)	4.15 (0.00219)	4.09 (0.00508)	3.88 (0.00738)	4.52 (0.00251)	4.88 (0.00279)	4.56 B (0.013)
PCB-018 (2,2',5-TrCB)	--	8.72 (0.00203)	8.27 (0.00194)	8.54 B (0.0045)	8.17 B (0.00654)	9.26 B (0.00223)	9.45 B (0.00247)	8.91 B (0.0115)
PCB-019 (2,2',6-TrCB)	--	4.16 (0.0028)	3.95 (0.00268)	3.69 (0.00623)	3.64 (0.00905)	4.37 (0.00308)	4.42 (0.00342)	4.22 (0.016)
PCB-020 (2,3,3'-TrCB)	--	2.77 B (0.00129)	2.78 B (0.00127)	2.69 B (0.00218)	2.29 B (0.00302)	3.14 B (0.00154)	3.53 B (0.00296)	3.62 B (0.00519)
PCB-021 (2,3,4-TrCB)	--	1.38 B (0.00129)	1.35 B (0.00127)	1.28 B (0.00219)	1.07 B (0.00303)	1.38 B (0.00155)	1.54 B (0.00297)	1.5 B (0.0052)
PCB-022 (2,3,4'-TrCB)	--	0.902 (0.00131)	0.874 (0.00129)	0.806 B (0.00223)	0.739 B (0.00307)	0.95 B (0.00157)	1.06 B (0.00302)	1.04 B (0.00528)
PCB-023 (2,3,5-TrCB)	--	0.00262 J (0.00134)	0.00362 J (0.00132)	U (0.00227)	0.00583 EMPC J (0.00313)	0.00454 EMPC J (0.0016)	U (0.00308)	U (0.00539)
PCB-024 (2,3,6-TrCB)	--	0.124 J (0.00192)	UJ (0.00184)	0.139 (0.00426)	0.104 EMPC (0.00618)	0.153 (0.00211)	0.148 (0.00234)	0.0942 J (0.0109)
PCB-025 (2,3',4-TrCB)	--	0.53 (0.00119)	0.513 (0.00118)	0.466 (0.00202)	0.42 (0.0028)	0.654 (0.00143)	0.688 (0.00274)	0.676 B (0.0048)
PCB-026 (2,3',5-TrCB)	--	1.01 (0.00127)	0.981 (0.00125)	0.926 B (0.00215)	0.785 B (0.00297)	1.22 (0.00152)	1.24 (0.00291)	1.23 B (0.0051)
PCB-027 (2,3',6-TrCB)	--	4.13 (0.00165)	4.11 (0.00158)	3.87 (0.00367)	3.78 (0.00534)	4.5 (0.00182)	4.8 (0.00202)	4.42 (0.00941)
PCB-028 (2,4,4'-TrCB)	--	2.77 B (0.00129)	2.78 B (0.00127)	2.69 B (0.00218)	2.29 B (0.00302)	3.14 B (0.00154)	3.53 B (0.00296)	3.62 B (0.00519)
PCB-030 (2,4,6-TrCB)	--	8.72 (0.00203)	8.27 (0.00194)	8.54 B (0.0045)	8.17 B (0.00654)	9.26 B (0.00223)	9.45 B (0.00247)	8.91 B (0.0115)
PCB-029 (2,4,5-TrCB)	--	1.01 (0.00127)	0.981 (0.00125)	0.926 B (0.00215)	0.785 B (0.00297)	1.22 (0.00152)	1.24 (0.00291)	1.23 B (0.0051)
PCB-031 (2,4',5-TrCB)	--	2.81 B (0.00126)	2.74 B (0.00124)	2.68 B (0.00213)	2.27 B (0.00295)	3.46 B (0.00151)	3.39 B (0.00289)	3.54 B (0.00506)
PCB-032 (2,4',6-TrCB)	--	2.5 (0.00162)	2.39 (0.00155)	2.41 (0.0036)	2.3 (0.00523)	2.78 (0.00178)	2.86 (0.00198)	2.62 (0.00923)
PCB-033 (2,3',4'-TrCB)	--	1.38 B (0.00129)	1.35 B (0.00127)	1.28 B (0.00219)	1.07 B (0.00303)	1.38 B (0.00155)	1.54 B (0.00297)	1.5 B (0.0052)
PCB-034 (2,3',5'-TrCB)	--	0.0214 J (0.00132)	0.0217 J (0.0013)	0.0158 J (0.00223)	0.0216 J (0.00309)	0.0261 J (0.00158)	0.0324 J (0.00303)	UB (0.0053)
PCB-035 (3,3',4-TrCB)	--	0.0151 J (0.00135)	0.0149 J (0.00133)	0.0119 EMPC J (0.0023)	0.0165 EMPC J (0.00317)	0.0149 EMPC J (0.00162)	0.0203 J (0.00311)	UB (0.00545)
PCB-036 (3,3',5-TrCB)	--	U (0.00131)	U (0.00129)	U (0.00222)	U (0.00306)	0.0359 J (0.00157)	0.044 EMPC J (0.00301)	U (0.00527)
PCB-037 (3,4,4'-TrCB)	--	0.33 (0.00134)	0.316 (0.00132)	0.287 B (0.00228)	0.302 B (0.00315)	0.34 (0.00161)	0.34 (0.00309)	0.403 BJ (0.0054)
PCB-038 (3,4,5-TrCB)	--	0.00146 JQ (0.00138)	U (0.00136)	U (0.00234)	U (0.00323)	U (0.00165)	U (0.00317)	U (0.00556)
PCB-039 (3,4',5-TrCB)	--	0.00486 J (0.00123)	0.00598 JQ (0.00121)	U (0.00208)	U (0.00287)	U (0.00147)	0.00298 EMPC J (0.00282)	UB (0.00494)
PCB								
PCBs (total)	U (0.011)	0.0211 (0.00299)	0.0231 (0.00299)	U (0.00299)	U (0.00296)	0.0286 (0.00317)	0.0249 (0.00317)	U (0.0561)
Aroclor-1016	U (0.011)	0.0211 (0.00257)	0.0231 (0.00257)	U (0.00257)	U (0.00254)	0.0286 (0.00272)	0.0249 (0.00272)	U (0.0373)
Aroclor-1242	U (0.011)	U (0.00189)	U (0.00189)	U (0.00189)	U (0.00188)	U (0.00201)	U (0.00201)	U (0.0231)
Aroclor-1248	U (0.011)	U (0.00232)	U (0.00232)	U (0.00232)	U (0.0023)	U (0.00245)	U (0.00245)	U (0.0424)
Aroclor-1254	U (0.011)	U (0.00233)	U (0.00233)	U (0.00233)	U (0.00231)	U (0.00247)	U (0.00247)	U (0.0164)
Aroclor-1260	U (0.011)	U (0.00138)	U (0.00138)	U (0.00138)	U (0.00137)	U (0.00146)	U (0.00146)	U (0.00142)
Aroclor-1268	U (0.011)	U (0.00277)	U (0.00277)	U (0.00277)	U (0.00274)	U (0.00293)	U (0.00293)	U (0.00285)
CDDF [pg/L]								
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	U (2.03)	U (3.29)	--	--	U (0.309)	U (0.344)	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	U (1.62)	U (2.51)	--	--	U (0.245)	0.604 EMPC J (0.277)	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	U (2.06)	U (3.63)	--	--	UB (0.256)	UB (0.482)	--
Octachlorodibenzo-p-dioxin	--	21.1 J (2.27)	8.58 J (2.96)	--	--	UB (0.301)	UB (0.677)	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	U (3.95)	U (6.26)	--	--	U (0.134)	U (0.172)	--
1,2,3,7,8-Pentachlorodibenzofuran	--	U (1.49)	U (2.55)	--	--	UB (0.18)	U (0.213)	--
1,2,3,4,7,8-Hexachlorodibenzofuran	--	U (0.886)	U (1.54)	--	--	UB (0.197)	U (0.255)	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	U (1.18)	U (1.84)	--	--	UB (0.156)	U (0.244)	--
Octachlorodibenzofuran	--	U (2.21)	U (3.48)	--	--	2.74 BJQ (0.274)	2.82 BJQ (0.417)	--

Notes:
1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
	DUP-20110413	MB-MW-04-20110727	DUP-20110727	MB-MW-04-20111027	DUP-20111027	MB-MW-04-20120425	DUP-20120425	MB-MW-04-20121018	
	Micropurge 4/13/2011	Micropurge 7/27/2011	Micropurge 7/27/2011	Micropurge 10/27/2011	Micropurge 10/27/2011	Micropurge 4/25/2012	Micropurge 4/25/2012	Micropurge 10/18/2012	
	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		
SVOC									
Acenaphthene	--	3 (2.1)	2.9 (2.1)	--	--	3.5 (0.2)	3 (0.2)	3.4 (2.2)	
Acenaphthylene	--	U (0.16)	U (0.16)	--	--	0.18 J (0.2)	0.16 J (0.2)	U (2.2)	
Acetophenone	--	U (0.85)	U (0.85)	--	--	0.18 B (1)	0.17 B (1)	U (11)	
Anthracene	--	U (0.16)	U (0.16)	--	--	0.67 J (0.2)	0.44 J (0.2)	0.41 J (2.2)	
Benzaldehyde	--	U (1.6)	U (1.6)	--	--	0.8 J (1)	0.8 J (1)	U (11)	
Benzo(a)anthracene	--	U (0.16)	U (0.16)	--	--	U (0.2)	U (0.2)	U (2.2)	
Benzo(a)pyrene	--	U (0.14)	U (0.14)	--	--	U (0.2)	U (0.2)	U (2.2)	
Benzo(b)fluoranthene	--	U (0.17)	U (0.17)	--	--	UL (0.2)	UL (0.2)	U (2.2)	
Benzo(g,h,i)perylene	--	U (0.16)	U (0.16)	--	--	0.038 J (0.2)	U (0.2)	U (2.2)	
Benzo(k)fluoranthene	--	U (0.58)	U (0.58)	--	--	U (0.2)	U (0.2)	U (2.2)	
Biphenyl	--	U (0.44)	U (0.44)	--	--	0.11 B (1)	0.085 B (1)	U (11)	
bis(2-Chloroethyl) ether	--	U (0.27)	U (0.27)	--	--	U (0.2)	0.11 J (0.2)	U (2.2)	
bis(2-Ethylhexyl)phthalate	--	U (13)	U (13)	--	--	U (2)	U (2)	U (22)	
Butylbenzylphthalate	--	U (1.5)	U (1.5)	--	--	U (1)	U (1)	U (11)	
Caprolactam	--	U (13)	U (13)	--	--	U (5.1)	U (5.1)	U (55)	
Carbazole	--	U (0.17)	U (0.17)	--	--	2.9 J (0.2)	1.5 J (0.2)	U (2.2)	
4-Chloroaniline	--	U (0.94)	U (0.94)	--	--	U (1)	U (1)	U (11)	
2-Chlorophenol	--	U (1.8)	U (1.8)	--	--	UL (1)	UL (1)	U (11)	
4-Chlorophenyl-phenyl ether	--	U (0.54)	U (0.54)	--	--	U (1)	U (1)	U (11)	
Chrysene	--	U (0.15)	U (0.15)	--	--	U (0.2)	U (0.2)	U (2.2)	
Dibenz(a,h)anthracene	--	U (0.16)	U (0.16)	--	--	U (0.2)	U (0.2)	U (2.2)	
Dibenzofuran	--	U (0.66)	U (0.66)	--	--	U (1)	0.12 J (1)	U (11)	
2,4-Dichlorophenol	--	U (0.36)	U (0.36)	--	--	UL (0.2)	UL (0.2)	U (2.2)	
Diethylphthalate	--	U (1.6)	U (1.6)	--	--	U (1)	U (1)	U (11)	
2,4-Dimethylphenol	--	U (0.91)	U (0.91)	--	--	0.26 J (1)	UL (1)	U (11)	
Dimethylphthalate	--	U (0.81)	U (0.81)	--	--	U (1)	U (1)	U (11)	
Di-n-butylphthalate	--	U (1.3)	U (1.3)	--	--	U (1)	U (1)	U (11)	
4,6-Dinitro-2-methylphenol	--	U (2.3)	U (2.3)	--	--	UL (5.1)	UL (5.1)	U (55)	
Di-n-octylphthalate	--	U (2.2)	U (2.2)	--	--	U (1)	U (1)	U (11)	
Fluoranthene	--	U (0.17)	U (0.17)	--	--	0.23 (0.2)	0.15 J (0.2)	U (2.2)	
Fluorene	--	2.3 (2.1)	1.9 J (2.1)	--	--	2.7 (0.2)	2.5 (0.2)	6.8 (2.2)	
Indeno(1,2,3-cd)pyrene	--	U (0.21)	U (0.21)	--	--	0.37 J (0.2)	UJ (0.2)	U (2.2)	
Isophorone	--	U (0.69)	U (0.69)	--	--	U (1)	U (1)	U (11)	
2-Methylnaphthalene	--	U (0.13)	U (0.13)	--	--	0.088 B (0.2)	0.066 B (0.2)	U (2.2)	
2-Methylphenol	--	U (0.92)	U (0.92)	--	--	UL (1)	UL (1)	U (11)	
3&4-Methylphenol	--	--	--	--	--	0.21 J (1)	UL (1)	U (11)	
4-Methylphenol	--	U (0.96)	U (0.96)	--	--	--	--	--	
Naphthalene	--	U (0.15)	U (0.15)	--	--	0.29 B (0.2)	0.19 B (0.2)	U (2.2)	
N-Nitrosodiphenylamine	--	U (0.91)	U (0.91)	--	--	U (1)	0.42 J (1)	U (11)	
Pentachlorophenol	--	U (0.71)	U (0.71)	--	--	UL (1)	UL (1)	U (11)	
Phenanthrene	--	U (0.45)	U (0.45)	--	--	0.37 (0.2)	0.23 (0.2)	U (2.2)	
Phenol	--	U (0.62)	U (0.62)	--	--	0.44 L (0.2)	0.38 L (0.2)	U (2.2)	
Pyrene	--	U (0.17)	U (0.17)	--	--	0.17 J (0.2)	U (0.2)	U (2.2)	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	--	0.00754 EMPC J (0.0421)	0.0139 J (0.0421)	--	--	--	
PCB-001 (2-CB)	22.1 (0.00215)	19 B (0.0022)	19 B (0.002)	15.9 B (0.0421)	17.9 B (0.0421)	--	--	--	
PCB-002 (3-CB)	0.487 (0.00236)	0.48 (0.0025)	0.46 (0.0023)	0.397 B (0.0421)	0.457 B (0.0421)	--	--	--	
PCB-003 (4-CB)	2.65 B (0.00259)	2.6 (0.0029)	2.5 (0.0025)	2.3 B (0.0421)	2.54 B (0.0421)	--	--	--	
PCB-209 (DeCB)	0.189 J (0.00653)	0.087 J (0.0096)	0.11 J (0.0053)	0.455 (0.0421)	0.469 (0.0421)	--	--	--	
PCB-004 (2,2'-DiCB)	47.7 B (0.0184)	45 (0.015)	45 (0.012)	32.6 B (0.0632)	34.9 B (0.0632)	--	--	--	
PCB-005 (2,3-DiCB)	0.181 EMPC J (0.0132)	0.18 J (0.012)	0.19 J (0.0092)	0.128 B (0.0421)	0.161 B (0.0421)	--	--	--	
PCB-006 (2,3'-DiCB)	5.88 B (0.0124)	6.5 (0.011)	6.5 (0.0087)	4.88 B (0.0421)	5.35 B (0.0421)	--	--	--	
PCB-007 (2,4-DiCB)	0.293 EMPC J (0.0127)	0.32 EMPC (0.012)	0.33 (0.0089)	0.25 B (0.0421)	0.277 B (0.0421)	--	--	--	
PCB-008 (2,4'-DiCB)	13.3 B (0.0121)	15 B (0.011)	15 B (0.0085)	11.3 B (0.0632)	12.5 B (0.0632)	--	--	--	
PCB-009 (2,5-DiCB)	0.569 B (0.0128)	0.64 (0.012)	0.63 (0.009)	0.473 B (0.0421)	0.539 B (0.0421)	--	--	--	
PCB-010 (2,6-DiCB)	0.924 (0.0138)	1.2 (0.013)	1.1 (0.0096)	0.706 (0.0421)	0.754 (0.0421)	--	--	--	
PCB-011 (3,3'-DiCB)	UB (0.0122)	UB (0.011)	UB (0.0085)	0.0559 B (0.0632)	0.0754 B (0.0632)	--	--	--	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-04 DUP-20110413 Micropurge 4/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110727 Micropurge 7/27/2011	MB-MW-04 DUP-20110727 Micropurge 7/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20111027 Micropurge 10/27/2011	MB-MW-04 DUP-20111027 Micropurge 10/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20120425 Micropurge 4/25/2012	MB-MW-04 DUP-20120425 Micropurge 4/25/2012 Field Duplicate	MB-MW-04 MB-MW-04-20121018 Micropurge 10/18/2012
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	0.5 BJ (0.0125)	0.52 (0.011)	0.54 (0.0087)	0.416 BC (0.0632)	0.469 BC (0.0632)	--	--	--
PCB-013 (3,4'-DiCB)	0.5 BJ (0.0125)	0.52 (0.011)	0.54 (0.0087)	0.416 BC12 (0.0632)	0.469 BC12 (0.0632)	--	--	--
PCB-014 (3,5-DiCB)	U (0.0108)	U (0.0098)	0.0066 EMPC J (0.0075)	0.00521 B (0.0421)	0.00609 B (0.0421)	--	--	--
PCB-015 (4,4'-DiCB)	2.69 B (0.0122)	2.9 B (0.012)	2.9 B (0.0088)	2.36 (0.0421)	2.65 (0.0421)	--	--	--
PCB-170 (2,2',3,3',4,4',5-HpCB)	UB (0.00984)	0.055 EMPC J (0.0084)	0.063 EMPC J (0.0052)	0.294 (0.0421)	0.322 (0.0421)	--	--	--
PCB-171 (2,2',3,3',4,4',6-HpCB)	UB (0.00906)	0.022 EMPC J (0.0082)	0.028 J (0.0047)	0.0924 C (0.0421)	0.113 C (0.0421)	--	--	--
PCB-172 (2,2',3,3',4,5,5'-HpCB)	UB (0.00897)	U (0.0081)	U (0.0047)	0.0421 EMPC (0.0421)	0.0534 EMPC (0.0421)	--	--	--
PCB-173 (2,2',3,3',4,5,6-HpCB)	UB (0.00906)	0.022 EMPC J (0.0082)	0.028 J (0.0047)	0.0924 C171 (0.0421)	0.113 C171 (0.0421)	--	--	--
PCB-174 (2,2',3,3',4,5,6'-HpCB)	UB (0.00839)	0.074 BJ (0.0076)	0.076 BJ (0.0044)	0.368 (0.0421)	0.41 (0.0421)	--	--	--
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.00806)	U (0.0073)	U (0.0042)	0.00925 EMPC J (0.0421)	0.0149 EMPC J (0.0421)	--	--	--
PCB-177 (2,2',3,3',4,5',6'-HpCB)	UB (0.0086)	0.04 BJ (0.0078)	0.031 EMPC J (0.0045)	0.19 (0.0421)	0.208 (0.0421)	--	--	--
PCB-176 (2,2',3,3',4,6,6'-HpCB)	UB (0.00614)	0.0098 EMPC J (0.0056)	0.012 EMPC J (0.0032)	0.0427 (0.0421)	0.0529 (0.0421)	--	--	--
PCB-178 (2,2',3,3',5,5',6-HpCB)	UB (0.00871)	U (0.0079)	0.022 J (0.0045)	0.0647 EMPC (0.0421)	0.0883 (0.0421)	--	--	--
PCB-179 (2,2',3,3',5,6,6'-HpCB)	UB (0.00647)	0.032 EMPC J (0.0059)	0.042 J (0.0034)	0.179 (0.0421)	0.196 (0.0421)	--	--	--
PCB-180 (2,2',3,4,4',5,5'-HpCB)	UB (0.00684)	0.13 EMPC J (0.0062)	0.14 BJ (0.0036)	0.78 C (0.0421)	0.794 C (0.0421)	--	--	--
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.00805)	U (0.0073)	U (0.0042)	U (0.0421)	U (0.0421)	--	--	--
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.00783)	U (0.0071)	U (0.0041)	U (0.0421)	U (0.0421)	--	--	--
PCB-183 (2,2',3,4,4',5',6-HpCB)	UB (0.008)	0.061 J (0.0072)	0.052 J (0.0042)	0.246 C (0.0421)	0.292 C (0.0421)	--	--	--
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.152 J (0.008)	0.061 J (0.0072)	0.052 J (0.0042)	0.246 C183 (0.0421)	0.292 C183 (0.0421)	--	--	--
PCB-187 (2,2',3,4',5,5',6-HpCB)	UB (0.00749)	0.11 EMPC J (0.0068)	0.13 J (0.0039)	0.603 (0.0421)	0.597 (0.0421)	--	--	--
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.00559)	U (0.0052)	U (0.0029)	U (0.0421)	U (0.0421)	--	--	--
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.00461)	U (0.0058)	U (0.0037)	0.00745 EMPC J (0.0421)	0.0131 J (0.0421)	--	--	--
PCB-190 (2,3,3',4,4',5,6-HpCB)	UB (0.00624)	0.012 EMPC J (0.0056)	0.0094 EMPC J (0.0033)	0.0586 (0.0421)	0.0602 (0.0421)	--	--	--
PCB-191 (2,3,3',4,4',5',6-HpCB)	U (0.00613)	U (0.0055)	U (0.0032)	0.0114 EMPC J (0.0421)	0.0126 EMPC J (0.0421)	--	--	--
PCB-193 (2,3,3',4',5,5',6-HpCB)	UB (0.00684)	0.13 BJ (0.0062)	0.14 BJ (0.0036)	0.78 C180 (0.0421)	0.794 C180 (0.0421)	--	--	--
PCB-128 (2,2',3,3',4,4'-HxCB)	0.0647 JQ (0.00715)	0.04 J (0.0079)	0.034 JQ (0.0048)	0.0981 C (0.0421)	0.113 C (0.0421)	--	--	--
PCB-129 (2,2',3,3',4,5-HxCB)	0.634 B (0.00739)	0.34 B (0.0081)	0.32 B (0.0049)	0.948 C (0.0421)	0.954 C (0.0421)	--	--	--
PCB-130 (2,2',3,3',4,5'-HxCB)	0.0179 EMPC J (0.00954)	0.016 EMPC J (0.011)	0.0098 EMPC J (0.0064)	0.0388 J (0.0421)	0.0403 EMPC J (0.0421)	--	--	--
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.00977)	U (0.011)	U (0.0065)	0.00574 EMPC J (0.0421)	0.0137 EMPC J (0.0421)	--	--	--
PCB-132 (2,2',3,3',4,6'-HxCB)	0.216 J (0.0093)	0.13 J (0.01)	0.13 J (0.0062)	--	--	--	--	--
PCB-133 (2,2',3,3',5,5'-HxCB)	U (0.00897)	U (0.0099)	U (0.006)	--	--	--	--	--
PCB-134 (2,2',3,3',5,6-HxCB)	0.0353 J (0.00955)	0.018 EMPC J (0.011)	0.027 J (0.0064)	0.0458 EMPC (0.0421)	0.0602 EMPC (0.0421)	--	--	--
PCB-135 (2,2',3,3',5,6'-HxCB)	0.265 J (0.0101)	0.18 J (0.011)	0.17 J (0.0064)	0.493 C (0.0421)	0.527 C (0.0421)	--	--	--
PCB-136 (2,2',3,3',6,6'-HxCB)	0.112 J (0.00744)	0.058 EMPC J (0.0078)	0.071 J (0.0047)	0.193 (0.0421)	0.214 (0.0421)	--	--	--
PCB-137 (2,2',3,4,4',5-HxCB)	0.00929 JQ (0.00823)	U (0.0091)	U (0.0055)	0.0209 J (0.0421)	0.025 J (0.0421)	--	--	--
PCB-138 (2,2',3,4,4',5'-HxCB)	0.634 B (0.00739)	0.34 B (0.0081)	0.32 B (0.0049)	--	--	--	--	--
PCB-139 (2,2',3,4,4',6-HxCB)	UB (0.00818)	U (0.009)	U (0.0055)	0.00888 J (0.0421)	0.00915 EMPC J (0.0421)	--	--	--
PCB-140 (2,2',3,4,4',6'-HxCB)	UB (0.00818)	U (0.009)	U (0.0055)	0.00888 J (0.0421)	0.00915 EMPC J (0.0421)	--	--	--
PCB-141 (2,2',3,4,5,5'-HxCB)	0.136 J (0.00852)	0.067 J (0.0094)	0.066 J (0.0057)	0.222 (0.0421)	0.238 (0.0421)	--	--	--
PCB-143 (2,2',3,4,5,6'-HxCB)	0.0353 J (0.00955)	0.018 EMPC J (0.011)	0.027 J (0.0064)	0.0458 EMPC (0.0421)	0.0602 EMPC (0.0421)	--	--	--
PCB-144 (2,2',3,4,5',6-HxCB)	0.0266 EMPC J (0.0094)	0.026 J (0.0098)	0.017 EMPC J (0.0059)	0.0521 (0.0421)	0.0748 (0.0421)	--	--	--
PCB-146 (2,2',3,4',5,5'-HxCB)	0.0881 J (0.00777)	0.05 EMPC J (0.0086)	0.048 J (0.0052)	0.137 (0.0421)	0.159 (0.0421)	--	--	--
PCB-147 (2,2',3,4',5,6-HxCB)	0.698 B (0.00795)	0.33 B (0.0088)	0.33 B (0.0053)	0.936 C (0.0421)	1.02 C (0.0421)	--	--	--
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.00994)	U (0.01)	U (0.0063)	U (0.0421)	U (0.0421)	--	--	--
PCB-149 (2,2',3,4',5',6-HxCB)	0.698 B (0.00795)	0.33 B (0.0088)	0.33 B (0.0053)	0.936 C147 (0.0421)	1.02 C147 (0.0421)	--	--	--
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.00693)	U (0.0072)	U (0.0044)	U (0.0421)	U (0.0421)	--	--	--
PCB-151 (2,2',3,5,5',6-HxCB)	0.265 J (0.0101)	0.18 J (0.011)	0.17 J (0.0064)	0.493 C135 (0.0421)	0.527 C135 (0.0421)	--	--	--
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.00707)	U (0.0074)	U (0.0045)	U (0.0421)	U (0.0421)	--	--	--
PCB-153 (2,2',4,4',5,5'-HxCB)	0.612 B (0.00639)	0.28 B (0.007)	0.24 B (0.0043)	0.888 C (0.0421)	0.892 C (0.0421)	--	--	--
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.00824)	U (0.0086)	U (0.0052)	0.00978 J (0.0421)	0.0176 EMPC J (0.0421)	--	--	--
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.00674)	U (0.007)	U (0.0042)	U (0.0421)	U (0.0421)	--	--	--
PCB-156 (2,3,3',4,4',5-HxCB)	0.0394 J (0.00755)	0.018 JQ (0.0083)	0.019 JQ (0.0049)	0.059 C (0.0421)	0.0747 C (0.0421)	--	--	--
PCB-157 (2,3,3',4,4',5'-HxCB)	0.0394 J (0.00755)	0.018 EMPC J (0.0083)	0.019 EMPC J (0.0049)	0.059 C156 (0.0421)	0.0747 C156 (0.0421)	--	--	--
PCB-158 (2,3,3',4,4',6-HxCB)	0.0495 J (0.00583)	0.033 EMPC J (0.0064)	0.027 J (0.0039)	0.0778 (0.0421)	0.0915 (0.0421)	--	--	--
PCB-159 (2,3,3',4,5,5'-HxCB)	U (0.00625)	U (0.0069)	U (0.0042)	0.00866 J (0.0421)	0.012 EMPC J (0.0421)	--	--	--
PCB-160 (2,3,3',4,5,6-HxCB)	0.634 B (0.00739)	0.34 B (0.0081)	0.32 B (0.0049)	0.948 C129 (0.0421)	0.954 C129 (0.0421)	--	--	--
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.00618)	U (0.0068)	U (0.0041)	U (0.0421)	U (0.0421)	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-04 DUP-20110413 Micropurge 4/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110727 Micropurge 7/27/2011	MB-MW-04 DUP-20110727 Micropurge 7/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20111027 Micropurge 10/27/2011	MB-MW-04 DUP-20111027 Micropurge 10/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20120425 Micropurge 4/25/2012	MB-MW-04 DUP-20120425 Micropurge 4/25/2012 Field Duplicate	MB-MW-04 MB-MW-04-20121018 Micropurge 10/18/2012
PCB Congeners [ng/L] (continued)								
PCB-163 (2,3,3',4',5,6-HxCB)	0.634 B (0.00739)	0.34 B (0.0081)	0.32 B (0.0049)	0.948 C129 (0.0421)	0.954 C129 (0.0421)	--	--	--
PCB-164 (2,3,3',4',5,6-HxCB)	UB (0.00651)	0.018 J (0.0072)	0.023 EMPC J (0.0043)	0.0605 (0.0421)	0.0748 (0.0421)	--	--	--
PCB-166 (2,3,4,4',5,6-HxCB)	0.0647 EMPC J (0.00715)	0.04 J (0.0079)	0.034 EMPC J (0.0048)	0.0981 C128 (0.0421)	0.113 C128 (0.0421)	--	--	--
PCB-167 (2,3',4,4',5,5'-HxCB)	0.0161 J (0.00509)	U (0.0052)	0.0087 EMPC J (0.0032)	0.0183 J (0.0421)	0.0295 J (0.0421)	--	--	--
PCB-168 (2,3',4,4',5',6-HxCB)	0.612 B (0.00639)	0.28 B (0.007)	0.24 B (0.0043)	0.888 C153 (0.0421)	0.892 C153 (0.0421)	--	--	--
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.00459)	U (0.0056)	U (0.0035)	U (0.0421)	U (0.0421)	--	--	--
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.982 (0.0136)	0.32 EMPC (0.009)	0.38 (0.005)	2.19 (0.0421)	1.84 (0.0421)	--	--	--
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	0.074 J (0.0094)	0.034 EMPC J (0.0066)	0.027 J (0.0036)	0.164 (0.0421)	0.169 (0.0421)	--	--	--
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.352 J (0.00961)	0.13 EMPC J (0.007)	0.15 J (0.0038)	0.788 (0.0421)	0.679 (0.0421)	--	--	--
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.18 J (0.0049)	0.079 J (0.0069)	0.063 JQ (0.0034)	0.385 (0.0421)	0.42 (0.0421)	--	--	--
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	UB (0.00532)	U (0.0074)	0.0082 J (0.0037)	0.0704 (0.0421)	0.0767 EMPC (0.0421)	--	--	--
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	UB (0.00761)	0.027 EMPC J (0.0093)	0.03 EMPC J (0.0048)	--	--	--	--	--
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.00567)	U (0.0069)	U (0.0036)	0.00638 EMPC J (0.0421)	0.0125 J (0.0421)	--	--	--
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.545 (0.00786)	0.21 (0.0096)	0.22 (0.005)	0.97 C (0.0421)	1.17 C (0.0421)	--	--	--
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.545 (0.00786)	0.21 (0.0096)	0.22 (0.005)	0.0618 (0.0421)	0.0688 (0.0421)	--	--	--
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	0.0274 J (0.00556)	U (0.0068)	0.014 EMPC J (0.0035)	0.084 (0.0421)	0.0965 (0.0421)	--	--	--
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	0.0354 J (0.00537)	0.022 J (0.0065)	0.019 J (0.0034)	0.97 C198 (0.0421)	1.17 C198 (0.0421)	--	--	--
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.159 J (0.00605)	0.098 J (0.0074)	0.076 J (0.0038)	0.37 (0.0421)	0.369 (0.0421)	--	--	--
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.401 J (0.00702)	0.16 J (0.0086)	0.16 EMPC J (0.0044)	0.858 (0.0421)	0.909 (0.0421)	--	--	--
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.00589)	U (0.0072)	U (0.0037)	U (0.0421)	U (0.0421)	--	--	--
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.00413)	U (0.0058)	U (0.0029)	0.00424 EMPC J (0.0421)	0.0125 EMPC J (0.0421)	--	--	--
PCB-24/27	--	--	--	0.121 (0.0421)	0.14 (0.0421)	--	--	--
PCB-42/59	--	--	--	0.45 (0.0421)	0.516 (0.0421)	--	--	--
PCB-52/69	--	--	--	3.1 B (0.0421)	3.36 B (0.0421)	--	--	--
PCB-61/70	--	--	--	1.24 BC (0.0421)	1.33 BC (0.0421)	--	--	--
PCB-90/101	--	--	--	0.956 C (0.0421)	0.975 C (0.0421)	--	--	--
PCB-107/109	--	--	--	0.0396 J (0.0421)	0.0537 J (0.0421)	--	--	--
PCB-132/161	--	--	--	0.34 (0.0421)	0.34 (0.0421)	--	--	--
PCB-133/142	--	--	--	0.0121 EMPC J (0.0421)	0.015 EMPC J (0.0421)	--	--	--
PCB-138/163/164	--	--	--	0.948 C129 (0.0421)	0.954 C129 (0.0421)	--	--	--
PCB-196/203	--	--	--	0.184 (0.0421)	0.198 (0.0421)	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	0.0401 EMPC J (0.00994)	0.036 EMPC J (0.0095)	0.038 EMPC J (0.0063)	0.0791 (0.0421)	0.0972 EMPC (0.0421)	--	--	--
PCB-083 (2,2',3,3',5-PeCB)	0.272 EMPC J (0.00835)	0.21 EMPC (0.008)	0.22 (0.0053)	0.418 C (0.0421)	0.451 C (0.0421)	--	--	--
PCB-084 (2,2',3,3',6-PeCB)	0.225 EMPC J (0.00949)	0.18 EMPC J (0.0091)	0.23 (0.0061)	0.303 J (0.0421)	0.374 J (0.0421)	--	--	--
PCB-085 (2,2',3,4,4'-PeCB)	0.0597 J (0.00688)	0.042 EMPC J (0.0066)	0.052 EMPC J (0.0044)	0.0885 EMPC (0.0421)	0.12 C (0.0421)	--	--	--
PCB-086 (2,2',3,4,5-PeCB)	UB (0.00704)	0.29 EMPC (0.0067)	0.28 EMPC (0.0045)	0.472 C (0.0421)	0.533 EMPC (0.0421)	--	--	--
PCB-087 (2,2',3,4,5'-PeCB)	0.279 BJQ (0.00704)	0.29 Q (0.0067)	0.28 Q (0.0045)	0.472 C86 (0.0421)	0.533 EMPC (0.0421)	--	--	--
PCB-088 (2,2',3,4,6-PeCB)	0.0805 EMPC J (0.00846)	0.088 EMPC J (0.0081)	0.079 EMPC J (0.0054)	0.144 C (0.0421)	0.171 C (0.0421)	--	--	--
PCB-089 (2,2',3,4,6'-PeCB)	U (0.00919)	U (0.0088)	U (0.0059)	U (0.0421)	0.0151 J (0.0421)	--	--	--
PCB-090 (2,2',3,4',5-PeCB)	0.697 B (0.00716)	0.51 B (0.0068)	0.53 B (0.0046)	--	--	--	--	--
PCB-097 (2,2',3,4',5'-PeCB)	UB (0.00704)	0.29 EMPC (0.0067)	0.28 EMPC (0.0045)	0.472 C86 (0.0421)	0.533 EMPC (0.0421)	--	--	--
PCB-091 (2,2',3,4',6-PeCB)	0.0805 JQ (0.00846)	0.088 JQ (0.0081)	0.079 JQ (0.0054)	0.144 C88 (0.0421)	0.171 C88 (0.0421)	--	--	--
PCB-098 (2,2',3,4',6'-PeCB)	0.026 EMPC J (0.00791)	0.028 EMPC J (0.0076)	0.028 EMPC J (0.005)	0.0322 EMPC J (0.0421)	0.051 EMPC (0.0421)	--	--	--
PCB-092 (2,2',3,5,5'-PeCB)	0.13 J (0.00813)	0.11 J (0.0078)	0.12 J (0.0052)	0.178 (0.0421)	0.198 (0.0421)	--	--	--
PCB-093 (2,2',3,5,6-PeCB)	UB (0.00816)	0.012 EMPC J (0.0078)	U (0.0052)	0.0226 EMPC J (0.0421)	0.0307 EMPC J (0.0421)	--	--	--
PCB-094 (2,2',3,5,6'-PeCB)	U (0.00919)	U (0.0088)	0.013 EMPC J (0.0059)	U (0.0421)	0.0229 J (0.0421)	--	--	--
PCB-095 (2,2',3,5',6-PeCB)	0.875 (0.00865)	0.71 (0.0083)	0.73 (0.0055)	1.16 (0.0421)	1.21 (0.0421)	--	--	--
PCB-096 (2,2',3,6,6'-PeCB)	0.0168 EMPC J (0.00687)	U (0.0066)	0.014 EMPC J (0.0044)	0.0146 EMPC J (0.0421)	0.0259 J (0.0421)	--	--	--
PCB-099 (2,2',4,4',5-PeCB)	0.272 JQ (0.00835)	0.21 Q (0.008)	0.22 (0.0053)	0.418 C83 (0.0421)	0.451 C83 (0.0421)	--	--	--
PCB-100 (2,2',4,4',6-PeCB)	UB (0.00816)	0.012 EMPC J (0.0078)	U (0.0052)	0.0226 EMPC J (0.0421)	0.0307 EMPC J (0.0421)	--	--	--
PCB-101 (2,2',4,5,5'-PeCB)	0.697 B (0.00716)	0.51 B (0.0068)	0.53 B (0.0046)	0.956 C90 (0.0421)	0.975 C90 (0.0421)	--	--	--
PCB-102 (2,2',4,5,6'-PeCB)	0.026 JQ (0.00791)	0.028 JQ (0.0076)	0.028 JQ (0.005)	0.0322 EMPC J (0.0421)	0.051 EMPC (0.0421)	--	--	--
PCB-103 (2,2',4,5',6-PeCB)	U (0.00805)	U (0.0077)	U (0.0051)	0.0119 EMPC J (0.0421)	0.0149 EMPC J (0.0421)	--	--	--
PCB-104 (2,2',4,6,6'-PeCB)	U (0.00612)	U (0.0058)	U (0.0039)	U (0.0421)	U (0.0421)	--	--	--
PCB-105 (2,3,3',4,4'-PeCB)	UB (0.00423)	0.061 J (0.0055)	0.067 J (0.004)	0.166 (0.0421)	0.189 (0.0421)	--	--	--
PCB-108 (2,3,3',4,5'-PeCB)	UB (0.00456)	U (0.0058)	0.0059 EMPC J (0.0041)	0.0169 J (0.0421)	0.0193 EMPC J (0.0421)	--	--	--
PCB-109 (2,3,3',4,6-PeCB)	UB (0.00704)	0.29 EMPC (0.0067)	0.28 EMPC (0.0045)	0.472 C86 (0.0421)	0.533 EMPC (0.0421)	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-04 DUP-20110413 Micropurge 4/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110727 Micropurge 7/27/2011	MB-MW-04 DUP-20110727 Micropurge 7/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20111027 Micropurge 10/27/2011	MB-MW-04 DUP-20111027 Micropurge 10/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20120425 Micropurge 4/25/2012	MB-MW-04 DUP-20120425 Micropurge 4/25/2012 Field Duplicate	MB-MW-04 MB-MW-04-20121018 Micropurge 10/18/2012
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5-PeCB)	UB (0.00433)	0.022 EMPC J (0.0055)	0.013 EMPC J (0.0039)	--	--	--	--	--
PCB-110 (2,3,3',4',6-PeCB)	0.696 (0.00607)	0.53 B (0.0058)	0.51 B (0.0039)	0.903 BC (0.0421)	0.964 BC (0.0421)	--	--	--
PCB-111 (2,3,3',5,5'-PeCB)	U (0.00575)	U (0.0055)	U (0.0037)	U (0.0421)	U (0.0421)	--	--	--
PCB-113 (2,3,3',5',6-PeCB)	0.697 B (0.00716)	0.51 B (0.0068)	0.53 B (0.0046)	0.956 C90 (0.0421)	0.975 C90 (0.0421)	--	--	--
PCB-114 (2,3,4,4',5-PeCB)	U (0.00412)	U (0.0052)	0.0075 J (0.0037)	--	--	--	--	--
PCB-115 (2,3,4,4',6-PeCB)	0.696 (0.00607)	0.53 B (0.0058)	0.51 B (0.0039)	0.903 BC110 (0.0421)	0.964 BC110 (0.0421)	--	--	--
PCB-116 (2,3,4,5,6-PeCB)	0.0597 J (0.00688)	0.042 JQ (0.0066)	0.052 JQ (0.0044)	0.0885 EMPC (0.0421)	0.12 C85 (0.0421)	--	--	--
PCB-117 (2,3,4',5,6-PeCB)	0.0597 J (0.00688)	0.042 EMPC J (0.0066)	0.052 EMPC J (0.0044)	0.0885 EMPC (0.0421)	0.12 C85 (0.0421)	--	--	--
PCB-118 (2,3',4,4',5-PeCB)	0.346 J (0.00416)	0.24 B (0.0053)	0.23 B (0.0039)	0.487 EMPC (0.0421)	0.506 EMPC (0.0421)	--	--	--
PCB-119 (2,3',4,4',6-PeCB)	UB (0.00704)	0.29 EMPC (0.0067)	0.28 EMPC (0.0045)	0.472 C86 (0.0421)	0.533 EMPC (0.0421)	--	--	--
PCB-120 (2,3',4,5,5'-PeCB)	U (0.00592)	U (0.0057)	U (0.0038)	U (0.0421)	U (0.0421)	--	--	--
PCB-121 (2,3',4,5',6-PeCB)	U (0.00597)	U (0.0057)	U (0.0038)	U (0.0421)	U (0.0421)	--	--	--
PCB-122 (2,3,3',4',5'-PeCB)	U (0.00486)	U (0.0062)	U (0.0044)	0.00502 EMPC J (0.0421)	0.0108 EMPC J (0.0421)	--	--	--
PCB-123 (2,3',4,4',5'-PeCB)	U (0.0046)	U (0.0056)	U (0.0042)	0.00749 EMPC J (0.0421)	0.012 J (0.0421)	--	--	--
PCB-124 (2,3',4',5,5'-PeCB)	UB (0.00456)	U (0.0058)	0.0059 EMPC J (0.0041)	0.0169 J (0.0421)	0.0193 EMPC J (0.0421)	--	--	--
PCB-125 (2,3',4',5',6-PeCB)	UB (0.00704)	0.29 EMPC (0.0067)	0.28 EMPC (0.0045)	0.472 C86 (0.0421)	0.533 EMPC (0.0421)	--	--	--
PCB-126 (3,3',4,4',5-PeCB)	U (0.00434)	U (0.0057)	U (0.0037)	U (0.0421)	U (0.0421)	--	--	--
PCB-127 (3,3',4,5,5'-PeCB)	U (0.00442)	U (0.0056)	U (0.004)	U (0.0421)	U (0.0421)	--	--	--
PCB-040 (2,2',3,3'-TeCB)	0.97 EMPC (0.00772)	0.78 (0.008)	0.74 (0.0057)	0.953 C (0.0421)	1.07 C (0.0421)	--	--	--
PCB-041 (2,2',3,4-TeCB)	0.97 EMPC (0.00772)	0.78 (0.008)	0.74 (0.0057)	0.953 C40 (0.0421)	1.07 C40 (0.0421)	--	--	--
PCB-042 (2,2',3,4'-TeCB)	0.414 BJ (0.00786)	0.37 (0.0081)	0.35 EMPC (0.0058)	--	--	--	--	--
PCB-043 (2,2',3,5-TeCB)	UB (0.00722)	0.077 J (0.0075)	0.068 J (0.0053)	0.062 EMPC (0.0421)	0.091 C (0.0421)	--	--	--
PCB-044 (2,2',3,5'-TeCB)	2.03 B (0.00691)	1.7 B (0.0072)	1.8 B (0.0051)	2.2 BC (0.0421)	2.41 BC (0.0421)	--	--	--
PCB-045 (2,2',3,6-TeCB)	1.03 (0.008)	0.98 (0.0083)	0.96 (0.0059)	1.14 BC (0.0421)	1.24 BC (0.0421)	--	--	--
PCB-046 (2,2',3,6'-TeCB)	0.485 (0.00946)	0.46 (0.0098)	0.45 (0.007)	0.5 (0.0421)	0.577 (0.0421)	--	--	--
PCB-047 (2,2',4,4'-TeCB)	2.03 B (0.00691)	1.7 B (0.0072)	1.8 B (0.0051)	2.2 BC44 (0.0421)	2.41 BC44 (0.0421)	--	--	--
PCB-048 (2,2',4,5-TeCB)	0.227 BJ (0.00766)	0.23 (0.0079)	0.23 (0.0056)	0.261 (0.0421)	0.309 (0.0421)	--	--	--
PCB-049 (2,2',4,5'-TeCB)	1.56 B (0.00636)	1.4 B (0.0066)	1.4 B (0.0047)	1.64 BC (0.0421)	1.78 BC (0.0421)	--	--	--
PCB-050 (2,2',4,6-TeCB)	1.65 B (0.00743)	1.6 (0.0077)	1.6 (0.0055)	1.61 C (0.0421)	1.77 C (0.0421)	--	--	--
PCB-051 (2,2',4,6'-TeCB)	1.03 (0.008)	0.98 (0.0083)	0.96 (0.0059)	1.14 BC45 (0.0421)	1.24 BC45 (0.0421)	--	--	--
PCB-052 (2,2',5,5'-TeCB)	2.87 B (0.00744)	2.6 B (0.0077)	2.6 B (0.0055)	--	--	--	--	--
PCB-053 (2,2',5,6'-TeCB)	1.65 B (0.00743)	1.6 (0.0077)	1.6 (0.0055)	1.61 C50 (0.0421)	1.77 C50 (0.0421)	--	--	--
PCB-054 (2,2',6,6'-TeCB)	0.176 J (0.00988)	0.21 (0.01)	0.25 (0.0071)	0.195 J (0.0421)	0.24 J (0.0421)	--	--	--
PCB-055 (2,3,3',4-TeCB)	0.0165 J (0.00598)	0.033 J (0.0062)	0.019 EMPC J (0.0044)	0.0102 EMPC J (0.0421)	0.0193 J (0.0421)	--	--	--
PCB-056 (2,3,3',4'-TeCB)	0.245 BJ (0.00563)	0.21 B (0.0058)	0.2 B (0.0041)	0.306 (0.0421)	0.36 (0.0421)	--	--	--
PCB-057 (2,3,3',5-TeCB)	UB (0.0057)	U (0.0059)	U (0.0042)	0.00825 J (0.0421)	0.013 EMPC J (0.0421)	--	--	--
PCB-058 (2,3,3',5'-TeCB)	UB (0.00567)	U (0.0059)	U (0.0042)	0.00294 EMPC J (0.0421)	0.00541 EMPC J (0.0421)	--	--	--
PCB-059 (2,3,3',6-TeCB)	UB (0.0055)	0.12 EMPC J (0.0057)	0.13 J (0.004)	0.168 C (0.0421)	0.203 C (0.0421)	--	--	--
PCB-060 (2,3,4,4'-TeCB)	0.103 J (0.0058)	0.076 J (0.006)	0.09 J (0.0043)	0.123 (0.0421)	0.156 (0.0421)	--	--	--
PCB-061 (2,3,4,5-TeCB)	1.12 B (0.00549)	0.83 B (0.0057)	0.87 B (0.004)	--	--	--	--	--
PCB-062 (2,3,4,6-TeCB)	UB (0.0055)	0.12 EMPC J (0.0057)	0.13 J (0.004)	0.168 C59 (0.0421)	0.203 C59 (0.0421)	--	--	--
PCB-063 (2,3,4',5-TeCB)	0.0327 J (0.00528)	0.025 EMPC J (0.0055)	0.028 EMPC J (0.0039)	0.0366 J (0.0421)	0.0503 (0.0421)	--	--	--
PCB-064 (2,3,4',6-TeCB)	0.434 B (0.00521)	0.38 B (0.0054)	0.36 B (0.0038)	0.508 (0.0421)	0.564 (0.0421)	--	--	--
PCB-065 (2,3,5,6-TeCB)	2.03 B (0.00691)	1.7 B (0.0072)	1.8 B (0.0051)	2.2 BC44 (0.0421)	2.41 BC44 (0.0421)	--	--	--
PCB-066 (2,3',4,4'-TeCB)	0.567 B (0.00546)	0.45 B (0.0057)	0.43 B (0.004)	0.662 (0.0421)	0.725 (0.0421)	--	--	--
PCB-067 (2,3',4,5-TeCB)	UB (0.00512)	0.014 EMPC J (0.0053)	0.018 J (0.0038)	0.0229 J (0.0421)	0.0351 J (0.0421)	--	--	--
PCB-068 (2,3',4,5'-TeCB)	UB (0.00516)	0.012 EMPC J (0.0053)	0.015 J (0.0038)	0.0171 J (0.0421)	0.0192 EMPC J (0.0421)	--	--	--
PCB-069 (2,3',4,6-TeCB)	1.56 B (0.00636)	1.4 B (0.0066)	1.4 B (0.0047)	1.64 BC49 (0.0421)	1.78 BC49 (0.0421)	--	--	--
PCB-070 (2,3',4',5-TeCB)	1.12 B (0.00549)	0.83 B (0.0057)	0.87 B (0.004)	1.24 BC61 (0.0421)	1.33 BC61 (0.0421)	--	--	--
PCB-076 (2,3',4',5'-TeCB)	1.12 B (0.00549)	0.83 B (0.0057)	0.87 B (0.004)	1.24 BC61 (0.0421)	1.33 BC61 (0.0421)	--	--	--
PCB-071 (2,3',4',6-TeCB)	0.97 EMPC (0.00772)	0.78 (0.008)	0.74 (0.0057)	0.953 C40 (0.0421)	1.07 C40 (0.0421)	--	--	--
PCB-072 (2,3',5,5'-TeCB)	0.0184 EMPC J (0.00554)	0.016 EMPC J (0.0057)	0.014 J (0.0041)	0.0156 J (0.0421)	0.023 J (0.0421)	--	--	--
PCB-073 (2,3',5',6-TeCB)	UB (0.00722)	0.077 J (0.0075)	0.068 J (0.0053)	0.062 EMPC (0.0421)	0.091 C43 (0.0421)	--	--	--
PCB-074 (2,4,4',5-TeCB)	1.12 B (0.00549)	0.83 B (0.0057)	0.87 B (0.004)	1.24 BC61 (0.0421)	1.33 BC61 (0.0421)	--	--	--
PCB-075 (2,4,4',6-TeCB)	UB (0.0055)	0.12 EMPC J (0.0057)	0.13 J (0.004)	0.168 C59 (0.0421)	0.203 C59 (0.0421)	--	--	--
PCB-077 (3,3',4,4'-TeCB)	UB (0.00526)	0.022 EMPC J (0.0055)	0.014 EMPC J (0.004)	0.0389 J (0.0421)	0.0449 EMPC (0.0421)	--	--	--
PCB-078 (3,3',4,5-TeCB)	U (0.00589)	U (0.0061)	U (0.0043)	U (0.0421)	U (0.0421)	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-04 DUP-20110413 Micropurge 4/13/2011 Field Duplicate	MB-MW-04 MB-MW-04-20110727 Micropurge 7/27/2011	MB-MW-04 DUP-20110727 Micropurge 7/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20111027 Micropurge 10/27/2011	MB-MW-04 DUP-20111027 Micropurge 10/27/2011 Field Duplicate	MB-MW-04 MB-MW-04-20120425 Micropurge 4/25/2012	MB-MW-04 DUP-20120425 Micropurge 4/25/2012 Field Duplicate	MB-MW-04 MB-MW-04-20121018 Micropurge 10/18/2012
PCB Congeners [ng/L] (continued)								
PCB-079 (3,3',4,5'-TeCB)	U (0.00517)	U (0.0054)	U (0.0038)	0.00467 J (0.0421)	0.00799 EMPC J (0.0421)	--	--	--
PCB-081 (3,4,4',5'-TeCB)	U (0.00541)	U (0.0056)	U (0.0039)	U (0.0421)	U (0.0421)	--	--	--
PCB-016 (2,2',3'-TrCB)	3.1 B (0.0124)	3.3 (0.011)	3.7 (0.0095)	3.55 (0.0421)	3.82 (0.0421)	--	--	--
PCB-017 (2,2',4'-TrCB)	4.17 B (0.0104)	4.5 (0.0091)	4.9 (0.008)	4.57 (0.0421)	4.96 (0.0421)	--	--	--
PCB-018 (2,2',5'-TrCB)	8.29 B (0.00919)	8.9 B (0.0081)	9.5 B (0.007)	9.51 BC (0.0632)	10.2 BC (0.0632)	--	--	--
PCB-019 (2,2',6'-TrCB)	4.09 (0.0127)	4.3 (0.011)	4.7 (0.0098)	4.82 (0.0421)	5.19 (0.0421)	--	--	--
PCB-020 (2,3,3'-TrCB)	3.5 B (0.00437)	3.2 B (0.0058)	3.2 B (0.0044)	4.25 BC (0.0421)	4.64 BC (0.0421)	--	--	--
PCB-021 (2,3,4'-TrCB)	1.46 B (0.00439)	1.4 B (0.0058)	1.4 B (0.0044)	1.82 BC (0.0421)	2.02 BC (0.0421)	--	--	--
PCB-022 (2,3,4'-TrCB)	1 B (0.00446)	0.95 B (0.0059)	0.92 B (0.0045)	1.27 B (0.0421)	1.37 B (0.0421)	--	--	--
PCB-023 (2,3,5'-TrCB)	U (0.00454)	U (0.006)	0.0076 EMPC J (0.0045)	0.00405 EMPC J (0.0421)	U (0.0421)	--	--	--
PCB-024 (2,3,6'-TrCB)	0.0764 J (0.0087)	0.11 J (0.0077)	0.12 EMPC J (0.0067)	--	--	--	--	--
PCB-025 (2,3',4'-TrCB)	0.663 B (0.00405)	0.69 (0.0054)	0.65 (0.004)	0.769 (0.0421)	0.799 (0.0421)	--	--	--
PCB-026 (2,3',5'-TrCB)	1.21 B (0.0043)	1.2 B (0.0057)	1.2 B (0.0043)	1.42 C (0.0421)	1.49 C (0.0421)	--	--	--
PCB-027 (2,3',6'-TrCB)	4.11 (0.0075)	4.5 (0.0066)	4.9 (0.0058)	4.68 (0.0421)	4.9 (0.0421)	--	--	--
PCB-028 (2,4,4'-TrCB)	3.5 B (0.00437)	3.2 B (0.0058)	3.2 B (0.0044)	4.25 BC20 (0.0421)	4.64 BC20 (0.0421)	--	--	--
PCB-030 (2,4,6'-TrCB)	8.29 B (0.00919)	8.9 B (0.0081)	9.5 B (0.007)	9.51 BC18 (0.0632)	10.2 BC18 (0.0632)	--	--	--
PCB-029 (2,4,5'-TrCB)	1.21 B (0.0043)	1.2 B (0.0057)	1.2 B (0.0043)	1.42 C26 (0.0421)	1.49 C26 (0.0421)	--	--	--
PCB-031 (2,4',5'-TrCB)	3.43 B (0.00427)	3.2 B (0.0056)	3.1 B (0.0043)	4.08 B (0.0421)	4.25 B (0.0421)	--	--	--
PCB-032 (2,4',6'-TrCB)	2.46 (0.00736)	2.7 (0.0065)	2.8 (0.0056)	3 (0.0421)	3.23 (0.0421)	--	--	--
PCB-033 (2,3',4'-TrCB)	1.46 B (0.00439)	1.4 B (0.0058)	1.4 B (0.0044)	1.82 BC21 (0.0421)	2.02 BC21 (0.0421)	--	--	--
PCB-034 (2,3',5'-TrCB)	UB (0.00447)	0.021 EMPC J (0.0059)	0.032 J (0.0045)	0.0312 J (0.0421)	0.0374 EMPC J (0.0421)	--	--	--
PCB-035 (3,3',4'-TrCB)	UB (0.0046)	0.015 J (0.0061)	U (0.0046)	0.0182 EMPC J (0.0421)	0.0216 EMPC J (0.0421)	--	--	--
PCB-036 (3,3',5'-TrCB)	U (0.00444)	U (0.0059)	U (0.0044)	U (0.0421)	U (0.0421)	--	--	--
PCB-037 (3,4,4'-TrCB)	0.384 BJ (0.00456)	0.34 (0.006)	0.31 (0.0046)	0.47 EMPC (0.0421)	0.563 (0.0421)	--	--	--
PCB-038 (3,4,5'-TrCB)	U (0.00469)	U (0.0062)	U (0.0047)	U (0.0421)	0.00514 EMPC J (0.0421)	--	--	--
PCB-039 (3,4',5'-TrCB)	U (0.00417)	U (0.0055)	U (0.0042)	0.0104 EMPC J (0.0421)	0.0136 J (0.0421)	--	--	--
PCB								
PCBs (total)	U (0.0739)	U (0.0028)	U (0.0028)	U (0.51)	U (0.51)	U (0.01)	U (0.01)	0.028 (0.011)
Aroclor-1016	U (0.0468)	U (0.0024)	U (0.0024)	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)
Aroclor-1242	U (0.0309)	U (0.0018)	U (0.0018)	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)
Aroclor-1248	U (0.0173)	U (0.0022)	U (0.0021)	U (0.51)	U (0.51)	U (0.01)	U (0.01)	0.028 (0.011)
Aroclor-1254	U (0.00877)	U (0.0022)	U (0.0022)	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)
Aroclor-1260	U (0.0014)	U (0.0013)	U (0.0013)	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)
Aroclor-1268	U (0.0028)	U (0.0026)	U (0.0026)	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)
CDDF [pg/L]								
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	U (0.57)	U (0.44)	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	U (0.47)	0.77 EMPC J (0.41)	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	U (0.71)	U (0.62)	--	--	--	--	--
Octachlorodibenzo-p-dioxin	--	UB (1.1)	UB (0.73)	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	U (0.37)	0.31 JQ (0.26)	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran	--	U (0.42)	U (0.28)	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran	--	U (0.37)	U (0.33)	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	U (0.44)	UB (0.37)	--	--	--	--	--
Octachlorodibenzofuran	--	U (0.71)	1.2 BJQ (0.39)	--	--	--	--	--

Notes:
1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
Field Sample ID	DUP-20121018	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-04-20141031	DUP-20141031	MB-MW-04-20150604	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/18/2012	4/10/2013	4/10/2013	10/9/2013	10/9/2013	10/31/2014	10/31/2014	6/4/2015	
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		
SVOC									
Acenaphthene	3.9 (2.2)	U (2)	2.8 J (2)	1.3 J (1.9)	3.5 (1.9)	3 (2.1)	3.2 (2.1)	2.2 J (2.4)	
Acenaphthylene	U (2.2)	UJ (2)	U (2)	U (1.9)	U (1.9)	0.21 J (2.1)	0.22 J (2.1)	U (2.4)	
Acetophenone	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Anthracene	0.46 J (2.2)	0.36 J (2)	0.4 J (2)	0.35 J (1.9)	0.53 J (1.9)	U (2.1)	U (2.1)	U (2.4)	
Benzaldehyde	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Benzo(a)anthracene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Benzo(a)pyrene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Benzo(b)fluoranthene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Benzo(g,h,i)perylene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Benzo(k)fluoranthene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Biphenyl	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
bis(2-Chloroethyl) ether	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
bis(2-Ethylhexyl)phthalate	U (22)	U (20)	U (20)	U (19)	U (19)	U (21)	U (21)	U (24)	
Butylbenzylphthalate	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Caprolactam	U (56)	U (51)	U (51)	U (48)	U (48)	U (53)	U (53)	U (60)	
Carbazole	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
4-Chloroaniline	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
2-Chlorophenol	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
4-Chlorophenyl-phenyl ether	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Chrysene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Dibenz(a,h)anthracene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Dibenzofuran	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
2,4-Dichlorophenol	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Diethylphthalate	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
2,4-Dimethylphenol	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Dimethylphthalate	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Di-n-butylphthalate	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
4,6-Dinitro-2-methylphenol	U (56)	U (51)	U (51)	U (48)	U (48)	U (53)	13 J (53)	U (60)	
Di-n-octylphthalate	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Fluoranthene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Fluorene	6.9 (2.2)	U (2)	1.3 J (2)	0.56 J (1.9)	1.8 J (1.9)	U (2.1)	0.69 J (2.1)	U (2.4)	
Indeno(1,2,3-cd)pyrene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Isophorone	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
2-Methylnaphthalene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
2-Methylphenol	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
3&4-Methylphenol	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
4-Methylphenol	--	--	--	--	--	--	--	--	
Naphthalene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	1 J (2.1)	U (2.1)	U (2.4)	
N-Nitrosodiphenylamine	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Pentachlorophenol	U (11)	U (10)	U (10)	U (9.6)	U (9.6)	U (11)	U (11)	U (12)	
Phenanthrene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Phenol	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
Pyrene	U (2.2)	U (2)	U (2)	U (1.9)	U (1.9)	U (2.1)	U (2.1)	U (2.4)	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	--	--	--	--	--	--	
PCB-001 (2-CB)	--	--	--	--	--	--	--	--	
PCB-002 (3-CB)	--	--	--	--	--	--	--	--	
PCB-003 (4-CB)	--	--	--	--	--	--	--	--	
PCB-209 (DeCB)	--	--	--	--	--	--	--	--	
PCB-004 (2,2'-DiCB)	--	--	--	--	--	--	--	--	
PCB-005 (2,3-DiCB)	--	--	--	--	--	--	--	--	
PCB-006 (2,3'-DiCB)	--	--	--	--	--	--	--	--	
PCB-007 (2,4-DiCB)	--	--	--	--	--	--	--	--	
PCB-008 (2,4'-DiCB)	--	--	--	--	--	--	--	--	
PCB-009 (2,5-DiCB)	--	--	--	--	--	--	--	--	
PCB-010 (2,6-DiCB)	--	--	--	--	--	--	--	--	
PCB-011 (3,3'-DiCB)	--	--	--	--	--	--	--	--	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
Field Sample ID	DUP-20121018	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-04-20141031	DUP-20141031	MB-MW-04-20150604	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/18/2012	4/10/2013	4/10/2013	10/9/2013	10/9/2013	10/31/2014	10/31/2014	6/4/2015	
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		
PCB Congeners [ng/L] (continued)									
PCB-012 (3,4-DiCB)	--	--	--	--	--	--	--	--	--
PCB-013 (3,4'-DiCB)	--	--	--	--	--	--	--	--	--
PCB-014 (3,5-DiCB)	--	--	--	--	--	--	--	--	--
PCB-015 (4,4'-DiCB)	--	--	--	--	--	--	--	--	--
PCB-170 (2,2',3,3',4,4',5-HpCB)	--	--	--	--	--	--	--	--	--
PCB-171 (2,2',3,3',4,4',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-172 (2,2',3,3',4,5,5'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-173 (2,2',3,3',4,5,6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-174 (2,2',3,3',4,5,6'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-175 (2,2',3,3',4,5',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-177 (2,2',3,3',4,5',6'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-176 (2,2',3,3',4,6,6'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-178 (2,2',3,3',5,5',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-179 (2,2',3,3',5,6,6'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-180 (2,2',3,4,4',5,5'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-181 (2,2',3,4,4',5,6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-182 (2,2',3,4,4',5,6'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-183 (2,2',3,4,4',5',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-185 (2,2',3,4,5,5',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-187 (2,2',3,4',5,5',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-188 (2,2',3,4',5,6,6'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-189 (2,3,3',4,4',5,5'-HpCB)	--	--	--	--	--	--	--	--	--
PCB-190 (2,3,3',4,4',5,6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-191 (2,3,3',4,4',5',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-193 (2,3,3',4',5,5',6-HpCB)	--	--	--	--	--	--	--	--	--
PCB-128 (2,2',3,3',4,4'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-129 (2,2',3,3',4,5-HxCB)	--	--	--	--	--	--	--	--	--
PCB-130 (2,2',3,3',4,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-131 (2,2',3,3',4,6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-132 (2,2',3,3',4,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-133 (2,2',3,3',5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-134 (2,2',3,3',5,6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-135 (2,2',3,3',5,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-136 (2,2',3,3',6,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-137 (2,2',3,4,4',5-HxCB)	--	--	--	--	--	--	--	--	--
PCB-138 (2,2',3,4,4',5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-139 (2,2',3,4,4',6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-140 (2,2',3,4,4',6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-141 (2,2',3,4,5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-143 (2,2',3,4,5,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-144 (2,2',3,4,5',6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-146 (2,2',3,4',5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-147 (2,2',3,4',5,6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-148 (2,2',3,4',5,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-149 (2,2',3,4',5',6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-150 (2,2',3,4',6,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-151 (2,2',3,5,5',6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-152 (2,2',3,5,6,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-153 (2,2',4,4',5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-154 (2,2',4,4',5,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-155 (2,2',4,4',6,6'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-156 (2,3,3',4,4',5-HxCB)	--	--	--	--	--	--	--	--	--
PCB-157 (2,3,3',4,4',5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-158 (2,3,3',4,4',6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-159 (2,3,3',4,5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-160 (2,3,3',4,5,6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-162 (2,3,3',4',5,5'-HxCB)	--	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
Field Sample ID	DUP-20121018	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-04-20141031	DUP-20141031	MB-MW-04-20150604	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/18/2012	4/10/2013	4/10/2013	10/9/2013	10/9/2013	10/31/2014	10/31/2014	6/4/2015	
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		
PCB Congeners [ng/L] (continued)									
PCB-163 (2,3,3',4',5,6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-164 (2,3,3',4',5',6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-166 (2,3,4,4',5,6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-167 (2,3',4,4',5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-168 (2,3',4,4',5',6-HxCB)	--	--	--	--	--	--	--	--	--
PCB-169 (3,3',4,4',5,5'-HxCB)	--	--	--	--	--	--	--	--	--
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	--	--	--	--	--	--	--	--	--
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	--	--	--	--	--	--	--	--	--
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	--	--	--	--	--	--	--	--	--
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	--	--	--	--	--	--	--	--	--
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	--	--	--	--	--	--	--	--	--
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	--	--	--	--	--	--	--	--	--
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	--	--	--	--	--	--	--	--	--
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	--	--	--	--	--	--	--	--	--
PCB-24/27	--	--	--	--	--	--	--	--	--
PCB-42/59	--	--	--	--	--	--	--	--	--
PCB-52/69	--	--	--	--	--	--	--	--	--
PCB-61/70	--	--	--	--	--	--	--	--	--
PCB-90/101	--	--	--	--	--	--	--	--	--
PCB-107/109	--	--	--	--	--	--	--	--	--
PCB-132/161	--	--	--	--	--	--	--	--	--
PCB-133/142	--	--	--	--	--	--	--	--	--
PCB-138/163/164	--	--	--	--	--	--	--	--	--
PCB-196/203	--	--	--	--	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	--	--	--	--	--	--	--	--	--
PCB-083 (2,2',3,3',5-PeCB)	--	--	--	--	--	--	--	--	--
PCB-084 (2,2',3,3',6-PeCB)	--	--	--	--	--	--	--	--	--
PCB-085 (2,2',3,4,4'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-086 (2,2',3,4,5-PeCB)	--	--	--	--	--	--	--	--	--
PCB-087 (2,2',3,4,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-088 (2,2',3,4,6-PeCB)	--	--	--	--	--	--	--	--	--
PCB-089 (2,2',3,4,6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-090 (2,2',3,4',5-PeCB)	--	--	--	--	--	--	--	--	--
PCB-097 (2,2',3,4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-091 (2,2',3,4',6-PeCB)	--	--	--	--	--	--	--	--	--
PCB-098 (2,2',3,4',6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-092 (2,2',3,5,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-093 (2,2',3,5,6-PeCB)	--	--	--	--	--	--	--	--	--
PCB-094 (2,2',3,5,6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-095 (2,2',3,5',6-PeCB)	--	--	--	--	--	--	--	--	--
PCB-096 (2,2',3,6,6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-099 (2,2',4,4',5-PeCB)	--	--	--	--	--	--	--	--	--
PCB-100 (2,2',4,4',6-PeCB)	--	--	--	--	--	--	--	--	--
PCB-101 (2,2',4,5,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-102 (2,2',4,5,6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-103 (2,2',4,5',6-PeCB)	--	--	--	--	--	--	--	--	--
PCB-104 (2,2',4,6,6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-105 (2,3,3',4,4'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-108 (2,3,3',4,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-109 (2,3,3',4,6-PeCB)	--	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
Field Sample ID	DUP-20121018	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-04-20141031	DUP-20141031	MB-MW-04-20150604	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	10/18/2012	4/10/2013	4/10/2013	10/9/2013	10/9/2013	10/31/2014	10/31/2014	6/4/2015	
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		
PCB Congeners [ng/L] (continued)									
PCB-107 (2,3,3',4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-110 (2,3,3',4',6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-111 (2,3,3',5,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-113 (2,3,3',5',6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-114 (2,3,4,4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-115 (2,3,4,4',6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-116 (2,3,4,5,6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-117 (2,3,4',5,6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-118 (2,3',4,4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-119 (2,3',4,4',6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-120 (2,3',4,5,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-121 (2,3',4,5',6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-122 (2,3,3',4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-123 (2,3',4,4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-124 (2,3',4',5,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-125 (2,3',4',5',6'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-126 (3,3',4,4',5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-127 (3,3',4,5,5'-PeCB)	--	--	--	--	--	--	--	--	--
PCB-040 (2,2',3,3'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-041 (2,2',3,4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-042 (2,2',3,4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-043 (2,2',3,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-044 (2,2',3,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-045 (2,2',3,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-046 (2,2',3,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-047 (2,2',4,4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-048 (2,2',4,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-049 (2,2',4,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-050 (2,2',4,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-051 (2,2',4,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-052 (2,2',5,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-053 (2,2',5,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-054 (2,2',6,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-055 (2,3,3',4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-056 (2,3,3',4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-057 (2,3,3',5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-058 (2,3,3',5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-059 (2,3,3',6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-060 (2,3,4,4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-061 (2,3,4,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-062 (2,3,4,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-063 (2,3,4',5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-064 (2,3,4',6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-065 (2,3,5,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-066 (2,3',4,4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-067 (2,3',4,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-068 (2,3',4,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-069 (2,3',4,6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-070 (2,3',4',5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-076 (2,3',4',5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-071 (2,3',4',6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-072 (2,3',5,5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-073 (2,3',5',6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-074 (2,4,4',5'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-075 (2,4,4',6'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-077 (3,3',4,4'-TeCB)	--	--	--	--	--	--	--	--	--
PCB-078 (3,3',4,5'-TeCB)	--	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-04 DUP-20121018 Micropurge 10/18/2012 Field Duplicate	MB-MW-04 MB-MW-04-20130410 Micropurge 4/10/2013	MB-MW-04 DUP-20130410 Micropurge 4/10/2013 Field Duplicate	MB-MW-04 MB-MW-04-20131009 Micropurge 10/9/2013	MB-MW-04 DUP-20131009 Micropurge 10/9/2013 Field Duplicate	MB-MW-04 MB-MW-04-20141031 Bladder Pump 10/31/2014	MB-MW-04 DUP-20141031 Bladder Pump 10/31/2014 Field Duplicate	MB-MW-04 MB-MW-04-20150604 Bladder Pump 6/4/2015
PCB Congeners [ng/L] (continued)								
PCB-079 (3,3',4,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-081 (3,4,4',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-016 (2,2',3-TrCB)	--	--	--	--	--	--	--	--
PCB-017 (2,2',4-TrCB)	--	--	--	--	--	--	--	--
PCB-018 (2,2',5-TrCB)	--	--	--	--	--	--	--	--
PCB-019 (2,2',6-TrCB)	--	--	--	--	--	--	--	--
PCB-020 (2,3,3'-TrCB)	--	--	--	--	--	--	--	--
PCB-021 (2,3,4-TrCB)	--	--	--	--	--	--	--	--
PCB-022 (2,3,4'-TrCB)	--	--	--	--	--	--	--	--
PCB-023 (2,3,5-TrCB)	--	--	--	--	--	--	--	--
PCB-024 (2,3,6-TrCB)	--	--	--	--	--	--	--	--
PCB-025 (2,3',4-TrCB)	--	--	--	--	--	--	--	--
PCB-026 (2,3',5-TrCB)	--	--	--	--	--	--	--	--
PCB-027 (2,3',6-TrCB)	--	--	--	--	--	--	--	--
PCB-028 (2,4,4'-TrCB)	--	--	--	--	--	--	--	--
PCB-030 (2,4,6-TrCB)	--	--	--	--	--	--	--	--
PCB-029 (2,4,5-TrCB)	--	--	--	--	--	--	--	--
PCB-031 (2,4',5-TrCB)	--	--	--	--	--	--	--	--
PCB-032 (2,4',6-TrCB)	--	--	--	--	--	--	--	--
PCB-033 (2,3',4'-TrCB)	--	--	--	--	--	--	--	--
PCB-034 (2,3',5'-TrCB)	--	--	--	--	--	--	--	--
PCB-035 (3,3',4-TrCB)	--	--	--	--	--	--	--	--
PCB-036 (3,3',5-TrCB)	--	--	--	--	--	--	--	--
PCB-037 (3,4,4'-TrCB)	--	--	--	--	--	--	--	--
PCB-038 (3,4,5-TrCB)	--	--	--	--	--	--	--	--
PCB-039 (3,4',5-TrCB)	--	--	--	--	--	--	--	--
PCB								
PCBs (total)	0.025 (0.01)	0.025 (0.01)	0.0479 (0.011)	0.095 (0.0094)	U (0.0096)	U (0.01)	U (0.01)	U (0.01)
Aroclor-1016	U (0.01)	U (0.01)	U (0.011)	U (0.0094)	U (0.0096)	U (0.01)	U (0.01)	U (0.01)
Aroclor-1242	U (0.01)	0.025 J (0.01)	0.043 J (0.011)	0.095 (0.0094)	U (0.0096)	U (0.01)	U (0.01)	U (0.01)
Aroclor-1248	0.025 (0.01)	U (0.01)	U (0.011)	U (0.0094)	U (0.0096)	U (0.01)	U (0.01)	U (0.01)
Aroclor-1254	U (0.01)	U (0.01)	U (0.011)	U (0.0094)	U (0.0096)	U (0.01)	U (0.01)	U (0.01)
Aroclor-1260	U (0.01)	U (0.01)	0.0049 J (0.011)	U (0.0094)	U (0.0096)	U (0.01)	U (0.01)	U (0.01)
Aroclor-1268	U (0.01)	U (0.01)	U (0.011)	U (0.0094)	U (0.0096)	U (0.01)	U (0.01)	U (0.01)
CDDF [pg/L]								
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--
Octachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	--	--	--	--	--	--	--
Octachlorodibenzofuran	--	--	--	--	--	--	--	--

- Notes:
- 1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
 - 2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
Field Sample ID	MB-DUP-01-20150604	MB-MW-04-20161003	MB-FD-01-20161003	MB-MW-04-20170425	DUP-20170425	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	10/3/2016	10/3/2016	4/25/2017	4/25/2017	7/28/2010	10/19/2010	1/13/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate			
SVOC								
Acenaphthene	3.1 (2.1)	3.8 (1.9)	4.6 (2.3)	4.2 J (2.1)	UL (2)	112 (0.15)	--	24.6 (0.158)
Acenaphthylene	0.2 J (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	8.46 (0.158)	--	1.46 J (0.167)
Acetophenone	U (10)	U (19)	U (23)	U (21)	U (20)	U (0.832)	--	U (0.88)
Anthracene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	11 (0.16)	--	3.27 (0.169)
Benzaldehyde	U (10)	U (19)	U (23)	U (21)	U (20)	U (1.56)	--	U (1.65)
Benzo(a)anthracene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.153)	--	4.41 (0.162)
Benzo(a)pyrene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.139)	--	3.12 (0.147)
Benzo(b)fluoranthene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.163)	--	3.86 (0.173)
Benzo(g,h,i)perylene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.157)	--	4.2 (0.166)
Benzo(k)fluoranthene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.569)	--	3.62 (0.602)
Biphenyl	U (10)	U (9.6)	U (11)	U (10)	U (10)	24.6 (0.432)	--	4.59 J (0.456)
bis(2-Chloroethyl) ether	U (2.1)	U (9.6)	U (11)	U (2.1)	U (2)	U (0.261)	--	U (0.276)
bis(2-Ethylhexyl)phthalate	U (21)	5.2 J (19)	5.2 J (23)	U (21)	UL (20)	U (13)	--	U (13.8)
Butylbenzylphthalate	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (1.48)	--	1.76 J (1.57)
Caprolactam	U (52)	U (48)	U (57)	U (52)	U (50)	43 J (12.4)	--	U (13.1)
Carbazole	U (2.1)	U (9.6)	U (11)	U (2.1)	U (2)	93.9 (0.164)	--	14 (0.174)
4-Chloroaniline	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (0.92)	--	U (0.974)
2-Chlorophenol	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (1.72)	--	U (1.82)
4-Chlorophenyl-phenyl ether	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (0.523)	--	U (0.553)
Chrysene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.146)	--	4.25 (0.154)
Dibenz(a,h)anthracene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.161)	--	4.36 (0.17)
Dibenzofuran	U (10)	U (9.6)	U (11)	U (10)	U (10)	77.7 (0.642)	--	15.6 (0.679)
2,4-Dichlorophenol	U (2.1)	U (9.6)	U (11)	U (2.1)	U (2)	U (0.347)	--	U (0.367)
Diethylphthalate	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (1.52)	--	U (1.61)
2,4-Dimethylphenol	U (10)	U (9.6)	U (11)	U (10)	U (10)	226 (0.886)	--	20 (0.937)
Dimethylphthalate	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (0.796)	--	U (0.842)
Di-n-butylphthalate	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (1.3)	--	U (1.37)
4,6-Dinitro-2-methylphenol	U (52)	U (48)	U (57)	U (52)	U (50)	U (2.28)	--	U (2.42)
Di-n-octylphthalate	U (10)	U (9.6)	U (11)	U* (10)	U* (10)	U (2.15)	--	2.41 J (2.27)
Fluoranthene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	9.75 (0.168)	--	4.14 (0.178)
Fluorene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	84.1 (0.225)	--	18.9 (0.238)
Indeno(1,2,3-cd)pyrene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	U (0.207)	--	3.07 (0.219)
Isophorone	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (0.67)	--	U (0.708)
2-Methylnaphthalene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	162 (0.127)	--	26.5 (0.134)
2-Methylphenol	U (10)	U (9.6)	U (11)	U (10)	U (10)	10.5 (0.896)	--	1.11 J (0.948)
3&4-Methylphenol	U (10)	U (9.6)	U (11)	U (10)	U (10)	--	--	--
4-Methylphenol	--	--	--	--	--	33.6 (0.938)	--	U (0.992)
Naphthalene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	1070 (0.728)	--	187 (0.154)
N-Nitrosodiphenylamine	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (0.887)	--	U (0.938)
Pentachlorophenol	U (10)	U (9.6)	U (11)	U (10)	U (10)	U (0.69)	--	U (0.729)
Phenanthrene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	92.6 (0.444)	--	23.5 (0.47)
Phenol	U (2.1)	U (9.6)	U (11)	U (10)	U (10)	4.34 (0.604)	--	U (0.639)
Pyrene	U (2.1)	U (1.9)	U (2.3)	U (2.1)	U (2)	4.91 (0.163)	--	3.38 (0.173)
PCB Congeners [ng/L]								
13C12-PCB 114	--	--	--	--	--	--	--	--
PCB-001 (2-CB)	--	--	--	--	--	9.19 (0.00671)	9.89 B (0.00183)	14.5 B (0.00242)
PCB-002 (3-CB)	--	--	--	--	--	0.471 (0.00655)	0.0868 (0.00126)	0.602 (0.0023)
PCB-003 (4-CB)	--	--	--	--	--	1.95 (0.00639)	0.0569 B (0.000978)	2.79 (0.0022)
PCB-209 (DeCB)	--	--	--	--	--	0.483 (0.0091)	0.0649 (0.00232)	0.141 J (0.00506)
PCB-004 (2,2'-DiCB)	--	--	--	--	--	8.71 B (0.0356)	12.6 B (0.0123)	12.7 (0.0122)
PCB-005 (2,3-DiCB)	--	--	--	--	--	0.0488 JQ (0.0262)	0.0453 EMPC (0.00565)	0.0392 EMPC J (0.00976)
PCB-006 (2,3'-DiCB)	--	--	--	--	--	UB (0.0246)	2.48 B (0.00531)	3.35 (0.00918)
PCB-007 (2,4-DiCB)	--	--	--	--	--	0.112 JQ (0.0253)	0.0847 EMPC (0.00546)	0.156 EMPC J (0.00943)
PCB-008 (2,4'-DiCB)	--	--	--	--	--	4.53 B (0.0241)	4.55 B (0.0052)	5.44 B (0.00898)
PCB-009 (2,5-DiCB)	--	--	--	--	--	0.192 JQ (0.0254)	0.224 B (0.00549)	0.258 (0.00948)
PCB-010 (2,6-DiCB)	--	--	--	--	--	0.112 JQ (0.0273)	0.251 (0.0059)	0.312 EMPC (0.0102)
PCB-011 (3,3'-DiCB)	--	--	--	--	--	UB (0.0242)	UB (0.00523)	0.131 EMPC J (0.00903)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
Field Sample ID	MB-DUP-01-20150604	MB-MW-04-20161003	MB-FD-01-20161003	MB-MW-04-20170425	DUP-20170425	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	10/3/2016	10/3/2016	4/25/2017	4/25/2017	7/28/2010	10/19/2010	1/13/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate			
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	--	--	--	--	--	0.301 JQ (0.0248)	0.234 (0.00536)	0.377 EMPC (0.00925)
PCB-013 (3,4'-DiCB)	--	--	--	--	--	0.301 JQ (0.0248)	0.234 (0.00536)	0.377 EMPC (0.00925)
PCB-014 (3,5-DiCB)	--	--	--	--	--	U (0.0214)	U (0.00462)	U (0.00798)
PCB-015 (4,4'-DiCB)	--	--	--	--	--	0.925 (0.0246)	0.888 B (0.00421)	1.12 B (0.00974)
PCB-170 (2,2',3,3',4,4',5-HpCB)	--	--	--	--	--	0.176 J (0.0125)	0.0329 EMPC J (0.00246)	0.0781 J (0.00603)
PCB-171 (2,2',3,3',4,4',6-HpCB)	--	--	--	--	--	0.0525 J (0.0108)	0.0097 EMPC J (0.00237)	0.0228 J (0.00586)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	--	--	--	--	--	U (0.0107)	0.00439 J (0.00234)	0.0165 J (0.0058)
PCB-173 (2,2',3,3',4,5,6-HpCB)	--	--	--	--	--	0.0525 J (0.0108)	0.0097 EMPC J (0.00237)	0.0228 J (0.00586)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	--	--	--	--	--	0.192 J (0.00999)	0.0409 EMPC (0.00219)	0.0854 EMPC J (0.00543)
PCB-175 (2,2',3,3',4,5',6-HpCB)	--	--	--	--	--	U (0.00959)	U (0.00211)	U (0.00522)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	--	--	--	--	--	0.0794 JQ (0.0102)	0.0268 J (0.00225)	0.0402 EMPC J (0.00556)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	--	--	--	--	--	0.0212 JQ (0.00731)	U (0.00161)	0.0127 J (0.00397)
PCB-178 (2,2',3,3',5,5',6-HpCB)	--	--	--	--	--	0.0417 JQ (0.0104)	0.0096 EMPC J (0.00228)	0.0182 J (0.00564)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	--	--	--	--	--	0.113 J (0.00771)	0.0227 J (0.00169)	0.0456 J (0.00419)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	--	--	--	--	--	0.451 (0.00815)	0.104 (0.00179)	0.229 (0.00443)
PCB-181 (2,2',3,4,4',5,6-HpCB)	--	--	--	--	--	U (0.00959)	U (0.00211)	U (0.00521)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	--	--	--	--	--	U (0.00932)	U (0.00205)	U (0.00507)
PCB-183 (2,2',3,4,4',5',6-HpCB)	--	--	--	--	--	0.166 J (0.00952)	0.0299 J (0.00209)	0.0627 J (0.00518)
PCB-185 (2,2',3,4,5,5',6-HpCB)	--	--	--	--	--	0.166 J (0.00952)	0.0299 J (0.00209)	0.0627 J (0.00518)
PCB-187 (2,2',3,4',5,5',6-HpCB)	--	--	--	--	--	0.468 (0.00891)	0.0969 (0.00196)	0.175 J (0.00485)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	--	--	--	--	--	U (0.00642)	U (0.0015)	U (0.00374)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	--	--	--	--	--	U (0.00652)	U (0.000779)	U (0.00396)
PCB-190 (2,3,3',4,4',5,6-HpCB)	--	--	--	--	--	0.0224 J (0.00743)	0.00547 EMPC J (0.00163)	0.0182 J (0.00404)
PCB-191 (2,3,3',4,4',5',6-HpCB)	--	--	--	--	--	U (0.0073)	U (0.0016)	U (0.00397)
PCB-193 (2,3,3',4',5,5',6-HpCB)	--	--	--	--	--	0.451 (0.00815)	0.104 (0.00179)	0.229 (0.00443)
PCB-128 (2,2',3,3',4,4'-HxCB)	--	--	--	--	--	0.0836 JQ (0.0106)	0.0249 J (0.00161)	0.0433 JQ (0.00522)
PCB-129 (2,2',3,3',4,5-HxCB)	--	--	--	--	--	0.652 B (0.011)	0.185 B (0.00166)	0.332 B (0.0054)
PCB-130 (2,2',3,3',4,5'-HxCB)	--	--	--	--	--	0.024 JQ (0.0141)	0.00992 J (0.00215)	0.013 EMPC J (0.00697)
PCB-131 (2,2',3,3',4,6-HxCB)	--	--	--	--	--	U (0.0145)	U (0.0022)	U (0.00714)
PCB-132 (2,2',3,3',4,6'-HxCB)	--	--	--	--	--	0.216 J (0.0138)	0.0654 (0.0021)	0.114 J (0.00679)
PCB-133 (2,2',3,3',5,5'-HxCB)	--	--	--	--	--	U (0.0133)	U (0.00202)	U (0.00655)
PCB-134 (2,2',3,3',5,6-HxCB)	--	--	--	--	--	0.0302 JQ (0.0142)	0.0103 J (0.00215)	0.0211 J (0.00697)
PCB-135 (2,2',3,3',5,6'-HxCB)	--	--	--	--	--	0.255 J (0.0129)	0.0587 (0.00337)	0.131 EMPC J (0.00676)
PCB-136 (2,2',3,3',6,6'-HxCB)	--	--	--	--	--	0.0733 JQ (0.00949)	0.0226 J (0.00247)	0.0554 J (0.00496)
PCB-137 (2,2',3,4,4',5-HxCB)	--	--	--	--	--	0.0215 JQ (0.0122)	0.00676 J (0.00185)	0.00891 J (0.00601)
PCB-138 (2,2',3,4,4',5'-HxCB)	--	--	--	--	--	0.652 B (0.011)	0.185 B (0.00166)	0.332 B (0.0054)
PCB-139 (2,2',3,4,4',6-HxCB)	--	--	--	--	--	U (0.0121)	U (0.00184)	U (0.00598)
PCB-140 (2,2',3,4,4',6'-HxCB)	--	--	--	--	--	U (0.0121)	U (0.00184)	U (0.00598)
PCB-141 (2,2',3,4,5,5'-HxCB)	--	--	--	--	--	0.124 JQ (0.0126)	0.033 J (0.00192)	0.0592 JQ (0.00622)
PCB-143 (2,2',3,4,5,6'-HxCB)	--	--	--	--	--	0.0302 JQ (0.0142)	0.0103 J (0.00215)	0.0211 J (0.00697)
PCB-144 (2,2',3,4,5',6-HxCB)	--	--	--	--	--	0.032 JQ (0.012)	U (0.00313)	U (0.00627)
PCB-146 (2,2',3,4',5,5'-HxCB)	--	--	--	--	--	0.0887 J (0.0115)	0.0236 J (0.00175)	0.0454 J (0.00568)
PCB-147 (2,2',3,4',5,6-HxCB)	--	--	--	--	--	0.541 B (0.0118)	0.162 B (0.00179)	0.307 (0.0058)
PCB-148 (2,2',3,4',5,6'-HxCB)	--	--	--	--	--	U (0.0127)	U (0.00331)	U (0.00663)
PCB-149 (2,2',3,4',5',6-HxCB)	--	--	--	--	--	0.541 B (0.0118)	0.162 B (0.00179)	0.307 (0.0058)
PCB-150 (2,2',3,4',6,6'-HxCB)	--	--	--	--	--	U (0.00884)	U (0.00231)	U (0.00462)
PCB-151 (2,2',3,5,5',6-HxCB)	--	--	--	--	--	0.255 J (0.0129)	0.0587 (0.00337)	0.131 EMPC J (0.00676)
PCB-152 (2,2',3,5,6,6'-HxCB)	--	--	--	--	--	U (0.00902)	U (0.00235)	U (0.00471)
PCB-153 (2,2',4,4',5,5'-HxCB)	--	--	--	--	--	0.553 B (0.00947)	0.144 B (0.00144)	0.268 (0.00466)
PCB-154 (2,2',4,4',5,6'-HxCB)	--	--	--	--	--	0.00763 J (0.0105)	0.00203 EMPC J (0.00274)	U (0.00549)
PCB-155 (2,2',4,4',6,6'-HxCB)	--	--	--	--	--	U (0.0086)	U (0.00224)	U (0.00449)
PCB-156 (2,3,3',4,4',5-HxCB)	--	--	--	--	--	0.0588 J (0.0113)	0.0144 JQ (0.00171)	0.0265 JQ (0.00571)
PCB-157 (2,3,3',4,4',5'-HxCB)	--	--	--	--	--	0.0588 J (0.0113)	0.0144 EMPC J (0.00171)	0.0265 EMPC J (0.00571)
PCB-158 (2,3,3',4,4',6-HxCB)	--	--	--	--	--	0.0526 JQ (0.00864)	0.015 J (0.00131)	0.0288 J (0.00426)
PCB-159 (2,3,3',4,5,5'-HxCB)	--	--	--	--	--	U (0.00927)	U (0.00141)	U (0.00457)
PCB-160 (2,3,3',4,5,6-HxCB)	--	--	--	--	--	0.652 B (0.011)	0.185 B (0.00166)	0.332 B (0.0054)
PCB-162 (2,3,3',4',5,5'-HxCB)	--	--	--	--	--	U (0.00915)	U (0.00139)	U (0.00451)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
Field Sample ID	MB-DUP-01-20150604	MB-MW-04-20161003	MB-FD-01-20161003	MB-MW-04-20170425	DUP-20170425	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	10/3/2016	10/3/2016	4/25/2017	4/25/2017	7/28/2010	10/19/2010	1/13/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate			
PCB Congeners [ng/L] (continued)								
PCB-163 (2,3,3',4',5,6-HxCB)	--	--	--	--	--	0.652 B (0.011)	0.185 B (0.00166)	0.332 B (0.0054)
PCB-164 (2,3,3',4',5',6-HxCB)	--	--	--	--	--	0.0371 J (0.00965)	0.00974 J (0.00147)	0.0163 J (0.00475)
PCB-166 (2,3,4,4',5,6-HxCB)	--	--	--	--	--	0.0836 JQ (0.0106)	0.0249 J (0.00161)	0.0433 EMPC J (0.00522)
PCB-167 (2,3',4,4',5,5'-HxCB)	--	--	--	--	--	0.0175 JQ (0.00709)	0.0037 EMPC J (0.00104)	0.00978 J (0.00335)
PCB-168 (2,3',4,4',5',6-HxCB)	--	--	--	--	--	0.553 B (0.00947)	0.144 B (0.00144)	0.268 (0.00466)
PCB-169 (3,3',4,4',5,5'-HxCB)	--	--	--	--	--	U (0.00721)	U (0.00114)	U (0.00357)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	--	--	--	--	--	1.98 (0.0134)	0.265 (0.00226)	0.526 (0.00528)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	--	--	--	--	--	0.157 J (0.00963)	0.0209 EMPC J (0.00144)	0.0403 EMPC J (0.00383)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	--	--	--	--	--	0.768 (0.0101)	0.103 (0.00139)	0.188 J (0.00405)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	--	--	--	--	--	0.326 J (0.00806)	0.051 Q (0.00152)	0.0969 J (0.00364)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	--	--	--	--	--	0.0346 JQ (0.00875)	0.0103 J (0.00165)	U (0.00395)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	--	--	--	--	--	0.16 JQ (0.0103)	0.0199 J (0.00268)	0.0568 J (0.0049)
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	--	--	--	--	--	U (0.00768)	U (0.00199)	U (0.00365)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	--	--	--	--	--	1.24 (0.0107)	0.174 (0.00276)	0.344 (0.00506)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	--	--	--	--	--	1.24 (0.0107)	0.174 (0.00276)	0.344 (0.00506)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	--	--	--	--	--	0.0467 JQ (0.00754)	0.00725 EMPC J (0.00196)	0.00863 EMPC J (0.00358)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	--	--	--	--	--	0.0813 J (0.00728)	0.012 J (0.00189)	0.025 EMPC J (0.00346)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	--	--	--	--	--	0.352 J (0.0082)	0.0478 (0.00213)	0.1 J (0.00389)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	--	--	--	--	--	0.863 (0.00952)	0.109 (0.00247)	0.234 (0.00452)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	--	--	--	--	--	U (0.00799)	U (0.00207)	U (0.00379)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	--	--	--	--	--	U (0.00679)	U (0.00128)	U (0.00307)
PCB-24/27	--	--	--	--	--	--	--	--
PCB-42/59	--	--	--	--	--	--	--	--
PCB-52/69	--	--	--	--	--	--	--	--
PCB-61/70	--	--	--	--	--	--	--	--
PCB-90/101	--	--	--	--	--	--	--	--
PCB-107/109	--	--	--	--	--	--	--	--
PCB-132/161	--	--	--	--	--	--	--	--
PCB-133/142	--	--	--	--	--	--	--	--
PCB-138/163/164	--	--	--	--	--	--	--	--
PCB-196/203	--	--	--	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	--	--	--	--	--	0.103 J (0.0129)	0.0468 (0.00347)	0.0695 J (0.00772)
PCB-083 (2,2',3,3',5-PeCB)	--	--	--	--	--	0.37 J (0.0108)	0.151 (0.00291)	0.293 (0.00649)
PCB-084 (2,2',3,3',6-PeCB)	--	--	--	--	--	0.211 JQ (0.0123)	0.117 (0.00331)	0.162 J (0.00738)
PCB-085 (2,2',3,4,4'-PeCB)	--	--	--	--	--	0.143 J (0.00892)	0.0514 (0.0024)	0.0644 EMPC J (0.00534)
PCB-086 (2,2',3,4,5-PeCB)	--	--	--	--	--	0.492 BQ (0.00913)	0.184 (0.00246)	0.368 (0.00547)
PCB-087 (2,2',3,4,5'-PeCB)	--	--	--	--	--	0.492 BQ (0.00913)	0.184 (0.00246)	0.368 (0.00547)
PCB-088 (2,2',3,4,6-PeCB)	--	--	--	--	--	0.114 JQ (0.011)	0.042 EMPC (0.00295)	0.0725 J (0.00658)
PCB-089 (2,2',3,4,6'-PeCB)	--	--	--	--	--	U (0.0119)	0.0105 J (0.00321)	U (0.00714)
PCB-090 (2,2',3,4',5-PeCB)	--	--	--	--	--	0.715 B (0.00929)	0.3 B (0.0025)	0.538 B (0.00556)
PCB-097 (2,2',3,4',5'-PeCB)	--	--	--	--	--	0.492 BQ (0.00913)	0.184 (0.00246)	0.368 (0.00547)
PCB-091 (2,2',3,4',6-PeCB)	--	--	--	--	--	0.114 JQ (0.011)	0.042 Q (0.00295)	0.0725 J (0.00658)
PCB-098 (2,2',3,4',6'-PeCB)	--	--	--	--	--	0.0349 J (0.0103)	0.0122 J (0.00276)	U (0.00615)
PCB-092 (2,2',3,5,5'-PeCB)	--	--	--	--	--	0.126 J (0.0105)	0.0467 (0.00284)	0.0879 J (0.00632)
PCB-093 (2,2',3,5,6-PeCB)	--	--	--	--	--	0.0115 J (0.0106)	U (0.00285)	0.0226 EMPC J (0.00634)
PCB-094 (2,2',3,5,6'-PeCB)	--	--	--	--	--	U (0.0119)	U (0.00321)	U (0.00714)
PCB-095 (2,2',3,5',6-PeCB)	--	--	--	--	--	0.63 (0.0112)	0.337 (0.00302)	0.61 (0.00672)
PCB-096 (2,2',3,6,6'-PeCB)	--	--	--	--	--	U (0.00892)	U (0.0024)	U (0.00534)
PCB-099 (2,2',4,4',5-PeCB)	--	--	--	--	--	0.37 J (0.0108)	0.151 (0.00291)	0.293 (0.00649)
PCB-100 (2,2',4,4',6-PeCB)	--	--	--	--	--	0.0115 J (0.0106)	U (0.00285)	0.0226 EMPC J (0.00634)
PCB-101 (2,2',4,5,5'-PeCB)	--	--	--	--	--	0.715 B (0.00929)	0.3 B (0.0025)	0.538 B (0.00556)
PCB-102 (2,2',4,5,6'-PeCB)	--	--	--	--	--	0.0349 J (0.0103)	0.0122 J (0.00276)	U (0.00615)
PCB-103 (2,2',4,5',6-PeCB)	--	--	--	--	--	U (0.0105)	U (0.00281)	U (0.00626)
PCB-104 (2,2',4,6,6'-PeCB)	--	--	--	--	--	U (0.00794)	U (0.00214)	U (0.00476)
PCB-105 (2,3,3',4,4'-PeCB)	--	--	--	--	--	0.245 J (0.00714)	0.069 (0.000816)	0.114 EMPC J (0.00413)
PCB-108 (2,3,3',4,5'-PeCB)	--	--	--	--	--	0.0217 JQ (0.00783)	0.00634 J (0.000882)	0.00981 EMPC J (0.00426)
PCB-109 (2,3,3',4,6-PeCB)	--	--	--	--	--	0.492 BQ (0.00913)	0.184 (0.00246)	0.368 (0.00547)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
Field Sample ID	MB-DUP-01-20150604	MB-MW-04-20161003	MB-FD-01-20161003	MB-MW-04-20170425	DUP-20170425	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	10/3/2016	10/3/2016	4/25/2017	4/25/2017	7/28/2010	10/19/2010	1/13/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate			
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5-PeCB)	--	--	--	--	--	0.0345 J (0.00745)	0.0108 J (0.000839)	0.0161 EMPC J (0.00405)
PCB-110 (2,3,3',4',6-PeCB)	--	--	--	--	--	0.836 B (0.00788)	0.379 B (0.00212)	0.66 B (0.00472)
PCB-111 (2,3,3',5,5'-PeCB)	--	--	--	--	--	U (0.00747)	U (0.00201)	U (0.00447)
PCB-113 (2,3,3',5',6-PeCB)	--	--	--	--	--	0.715 B (0.00929)	0.3 B (0.0025)	0.538 B (0.00556)
PCB-114 (2,3,4,4',5-PeCB)	--	--	--	--	--	0.0138 JQ (0.00727)	0.0042 J (0.000807)	0.00664 EMPC J (0.0037)
PCB-115 (2,3,4,4',6-PeCB)	--	--	--	--	--	0.836 B (0.00788)	0.379 B (0.00212)	0.66 B (0.00472)
PCB-116 (2,3,4,5,6-PeCB)	--	--	--	--	--	0.143 J (0.00892)	0.0514 (0.0024)	0.0644 JQ (0.00534)
PCB-117 (2,3,4',5,6-PeCB)	--	--	--	--	--	0.143 J (0.00892)	0.0514 (0.0024)	0.0644 EMPC J (0.00534)
PCB-118 (2,3',4,4',5-PeCB)	--	--	--	--	--	0.557 B (0.00741)	0.177 B (0.000807)	0.333 B (0.00377)
PCB-119 (2,3',4,4',6-PeCB)	--	--	--	--	--	0.492 BQ (0.00913)	0.184 (0.00246)	0.368 (0.00547)
PCB-120 (2,3',4,5,5'-PeCB)	--	--	--	--	--	U (0.00768)	U (0.00207)	U (0.0046)
PCB-121 (2,3',4,5',6-PeCB)	--	--	--	--	--	U (0.00774)	U (0.00208)	U (0.00464)
PCB-122 (2,3,3',4',5'-PeCB)	--	--	--	--	--	U (0.00836)	0.00286 JQ (0.000942)	U (0.00454)
PCB-123 (2,3',4,4',5'-PeCB)	--	--	--	--	--	0.0113 JQ (0.00758)	0.0019 EMPC J (0.000884)	0.00446 EMPC J (0.00416)
PCB-124 (2,3',4',5,5'-PeCB)	--	--	--	--	--	0.0217 JQ (0.00783)	0.00634 J (0.000882)	0.00981 EMPC J (0.00426)
PCB-125 (2,3',4',5',6-PeCB)	--	--	--	--	--	0.492 BQ (0.00913)	0.184 (0.00246)	0.368 (0.00547)
PCB-126 (3,3',4,4',5-PeCB)	--	--	--	--	--	U (0.00744)	U (0.000837)	U (0.00431)
PCB-127 (3,3',4,5,5'-PeCB)	--	--	--	--	--	U (0.00759)	U (0.000855)	U (0.00412)
PCB-040 (2,2',3,3'-TeCB)	--	--	--	--	--	0.778 (0.0113)	0.531 (0.002)	0.755 (0.00702)
PCB-041 (2,2',3,4-TeCB)	--	--	--	--	--	0.778 (0.0113)	0.531 (0.002)	0.755 (0.00702)
PCB-042 (2,2',3,4'-TeCB)	--	--	--	--	--	0.356 J (0.0115)	0.22 (0.00204)	0.34 (0.00715)
PCB-043 (2,2',3,5-TeCB)	--	--	--	--	--	0.058 J (0.0106)	0.0279 J (0.00187)	0.047 J (0.00656)
PCB-044 (2,2',3,5'-TeCB)	--	--	--	--	--	1.48 B (0.0101)	0.878 B (0.00179)	1.28 B (0.00628)
PCB-045 (2,2',3,6-TeCB)	--	--	--	--	--	0.377 BJ (0.0117)	0.284 B (0.00207)	0.449 (0.00728)
PCB-046 (2,2',3,6'-TeCB)	--	--	--	--	--	0.133 J (0.0139)	0.105 (0.00245)	0.175 J (0.00861)
PCB-047 (2,2',4,4'-TeCB)	--	--	--	--	--	1.48 B (0.0101)	0.878 B (0.00179)	1.28 B (0.00628)
PCB-048 (2,2',4,5-TeCB)	--	--	--	--	--	0.268 J (0.0112)	0.162 (0.00199)	0.262 (0.00697)
PCB-049 (2,2',4,5'-TeCB)	--	--	--	--	--	0.871 (0.00932)	0.456 B (0.00165)	0.716 (0.00579)
PCB-050 (2,2',4,6-TeCB)	--	--	--	--	--	0.322 J (0.0109)	0.222 (0.00193)	0.358 (0.00676)
PCB-051 (2,2',4,6'-TeCB)	--	--	--	--	--	0.377 BJ (0.0117)	0.284 B (0.00207)	0.449 (0.00728)
PCB-052 (2,2',5,5'-TeCB)	--	--	--	--	--	1.54 B (0.0109)	0.978 B (0.00193)	1.45 B (0.00677)
PCB-053 (2,2',5,6'-TeCB)	--	--	--	--	--	0.322 J (0.0109)	0.222 (0.00193)	0.358 (0.00676)
PCB-054 (2,2',6,6'-TeCB)	--	--	--	--	--	U (0.0179)	U (0.00295)	U (0.0114)
PCB-055 (2,3,3',4-TeCB)	--	--	--	--	--	0.0168 JQ (0.00876)	0.0104 EMPC J (0.00155)	0.0293 EMPC J (0.00544)
PCB-056 (2,3,3',4'-TeCB)	--	--	--	--	--	0.384 J (0.00824)	0.234 B (0.00146)	0.327 (0.00512)
PCB-057 (2,3,3',5-TeCB)	--	--	--	--	--	U (0.00834)	0.00354 J (0.00148)	U (0.00518)
PCB-058 (2,3,3',5'-TeCB)	--	--	--	--	--	U (0.0083)	U (0.00147)	U (0.00516)
PCB-059 (2,3,3',6-TeCB)	--	--	--	--	--	0.107 J (0.00805)	0.0819 B (0.00142)	0.119 J (0.005)
PCB-060 (2,3,4,4'-TeCB)	--	--	--	--	--	0.196 J (0.00849)	0.124 (0.0015)	0.186 J (0.00527)
PCB-061 (2,3,4,5-TeCB)	--	--	--	--	--	1.52 B (0.00805)	0.802 B (0.00142)	1.18 B (0.005)
PCB-062 (2,3,4,6-TeCB)	--	--	--	--	--	0.107 J (0.00805)	0.0819 B (0.00142)	0.119 J (0.005)
PCB-063 (2,3,4',5-TeCB)	--	--	--	--	--	0.0364 J (0.00774)	0.0156 J (0.00137)	0.0222 J (0.0048)
PCB-064 (2,3,4',6-TeCB)	--	--	--	--	--	0.525 B (0.00763)	0.315 (0.00135)	0.477 (0.00474)
PCB-065 (2,3,5,6-TeCB)	--	--	--	--	--	1.48 B (0.0101)	0.878 B (0.00179)	1.28 B (0.00628)
PCB-066 (2,3',4,4'-TeCB)	--	--	--	--	--	0.79 (0.00799)	0.425 B (0.00141)	0.616 B (0.00496)
PCB-067 (2,3',4,5-TeCB)	--	--	--	--	--	0.0243 J (0.0075)	0.0141 J (0.00133)	0.024 J (0.00466)
PCB-068 (2,3',4,5'-TeCB)	--	--	--	--	--	UB (0.00756)	UB (0.00134)	UB (0.00469)
PCB-069 (2,3',4,6-TeCB)	--	--	--	--	--	0.871 (0.00932)	0.456 B (0.00165)	0.716 (0.00579)
PCB-070 (2,3',4',5-TeCB)	--	--	--	--	--	1.52 B (0.00805)	0.802 B (0.00142)	1.18 B (0.005)
PCB-076 (2,3',4',5'-TeCB)	--	--	--	--	--	1.52 B (0.00805)	0.802 B (0.00142)	1.18 B (0.005)
PCB-071 (2,3',4',6-TeCB)	--	--	--	--	--	0.778 (0.0113)	0.531 (0.002)	0.755 (0.00702)
PCB-072 (2,3',5,5'-TeCB)	--	--	--	--	--	U (0.00812)	0.00364 EMPC J (0.00144)	0.00611 EMPC J (0.00504)
PCB-073 (2,3',5',6-TeCB)	--	--	--	--	--	0.058 J (0.0106)	0.0279 J (0.00187)	0.047 J (0.00656)
PCB-074 (2,4,4',5-TeCB)	--	--	--	--	--	1.52 B (0.00805)	0.802 B (0.00142)	1.18 B (0.005)
PCB-075 (2,4,4',6-TeCB)	--	--	--	--	--	0.107 J (0.00805)	0.0819 B (0.00142)	0.119 J (0.005)
PCB-077 (3,3',4,4'-TeCB)	--	--	--	--	--	0.0525 J (0.0076)	0.0292 J (0.00142)	0.0401 J (0.00484)
PCB-078 (3,3',4,5-TeCB)	--	--	--	--	--	U (0.00862)	U (0.00153)	U (0.00535)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
Field Sample ID	MB-DUP-01-20150604	MB-MW-04-20161003	MB-FD-01-20161003	MB-MW-04-20170425	DUP-20170425	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	10/3/2016	10/3/2016	4/25/2017	4/25/2017	7/28/2010	10/19/2010	1/13/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate			
PCB Congeners [ng/L] (continued)								
PCB-079 (3,3',4,5'-TeCB)	--	--	--	--	--	U (0.00757)	0.00225 EMPC J (0.00134)	U (0.0047)
PCB-081 (3,4,4',5'-TeCB)	--	--	--	--	--	U (0.00805)	U (0.00134)	U (0.00487)
PCB-016 (2,2',3-TrCB)	--	--	--	--	--	1.17 (0.0147)	1.32 (0.00582)	1.52 (0.00932)
PCB-017 (2,2',4-TrCB)	--	--	--	--	--	1.33 S (0.0122)	1.42 (0.00486)	1.68 (0.00777)
PCB-018 (2,2',5-TrCB)	--	--	--	--	--	2.93 (0.0108)	3.21 B (0.0043)	3.69 B (0.00688)
PCB-019 (2,2',6-TrCB)	--	--	--	--	--	0.743 (0.015)	1.19 (0.00595)	1.48 (0.00952)
PCB-020 (2,3,3'-TrCB)	--	--	--	--	--	1.63 B (0.00801)	1.87 B (0.000884)	2.8 B (0.00487)
PCB-021 (2,3,4-TrCB)	--	--	--	--	--	0.835 B (0.00803)	0.564 B (0.000886)	0.694 B (0.00488)
PCB-022 (2,3,4'-TrCB)	--	--	--	--	--	0.543 (0.00816)	0.672 B (0.000901)	0.835 B (0.00496)
PCB-023 (2,3,5-TrCB)	--	--	--	--	--	U (0.00832)	U (0.000918)	U (0.00506)
PCB-024 (2,3,6-TrCB)	--	--	--	--	--	0.0265 J (0.0102)	0.0644 (0.00407)	0.0785 J (0.00651)
PCB-025 (2,3',4-TrCB)	--	--	--	--	--	0.347 J (0.00742)	0.194 (0.000819)	0.319 (0.00451)
PCB-026 (2,3',5-TrCB)	--	--	--	--	--	0.538 (0.00788)	0.422 B (0.000869)	0.646 (0.00479)
PCB-027 (2,3',6-TrCB)	--	--	--	--	--	0.369 J (0.00883)	0.414 (0.00351)	0.447 J (0.00562)
PCB-028 (2,4,4'-TrCB)	--	--	--	--	--	1.63 B (0.00801)	1.87 B (0.000884)	2.8 B (0.00487)
PCB-030 (2,4,6-TrCB)	--	--	--	--	--	2.93 (0.0108)	3.21 B (0.0043)	3.69 B (0.00688)
PCB-029 (2,4,5-TrCB)	--	--	--	--	--	0.538 (0.00788)	0.422 B (0.000869)	0.646 (0.00479)
PCB-031 (2,4',5-TrCB)	--	--	--	--	--	1.73 B (0.00782)	1.49 B (0.000863)	2.19 B (0.00475)
PCB-032 (2,4',6-TrCB)	--	--	--	--	--	0.437 S (0.00866)	1.36 (0.00344)	1.02 (0.00551)
PCB-033 (2,3',4'-TrCB)	--	--	--	--	--	0.835 B (0.00803)	0.564 B (0.000886)	0.694 B (0.00488)
PCB-034 (2,3',5'-TrCB)	--	--	--	--	--	U (0.00819)	0.00859 J (0.000904)	0.0138 J (0.00498)
PCB-035 (3,3',4-TrCB)	--	--	--	--	--	U (0.00842)	0.0137 J (0.000929)	0.0165 EMPC J (0.00512)
PCB-036 (3,3',5-TrCB)	--	--	--	--	--	U (0.00814)	U (0.000898)	0.0148 J (0.00494)
PCB-037 (3,4,4'-TrCB)	--	--	--	--	--	0.196 J (0.00835)	0.268 B (0.000921)	0.339 (0.00507)
PCB-038 (3,4,5-TrCB)	--	--	--	--	--	U (0.00858)	U (0.000947)	U (0.00522)
PCB-039 (3,4',5-TrCB)	--	--	--	--	--	U (0.00763)	U (0.000842)	U (0.00464)
PCB								
PCBs (total)	U (0.01)	U (0.011)	U (0.01)	U (0.01)	U (0.011)	U (0.00296)	U (0.00305)	0.014 (0.00317)
Aroclor-1016	U (0.01)	U (0.011)	U (0.01)	U (0.01)	U (0.011)	U (0.00254)	U (0.00262)	0.014 (0.00272)
Aroclor-1242	U (0.01)	U (0.011)	U (0.01)	U (0.01)	U (0.011)	U (0.00188)	U (0.00193)	U (0.00201)
Aroclor-1248	U (0.01)	U (0.011)	U (0.01)	U (0.01)	U (0.011)	U (0.0023)	U (0.00236)	U (0.00245)
Aroclor-1254	U (0.01)	U (0.011)	U (0.01)	U (0.01)	U (0.011)	U (0.00231)	U (0.00238)	U (0.00247)
Aroclor-1260	U (0.01)	U (0.011)	U (0.01)	U (0.01)	U (0.011)	U (0.00137)	U (0.00141)	U (0.00146)
Aroclor-1268	U (0.01)	U (0.011)	U (0.01)	U (0.01)	U (0.011)	U (0.00274)	U (0.00283)	U (0.00293)
CDDF [pg/L]								
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	U (1.96)	--	0.96 EMPC J (0.238)
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	U (1.52)	--	0.944 EMPC J (0.192)
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	--	--	--	--	18.6 J (2.38)	--	UB (0.246)
Octachlorodibenzo-p-dioxin	--	--	--	--	--	247 (2.59)	--	59.2 BJ (0.172)
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	--	--	--	--	U (4.02)	--	0.243 BJQ (0.12)
1,2,3,7,8-Pentachlorodibenzofuran	--	--	--	--	--	U (1.62)	--	UB (0.158)
1,2,3,4,7,8-Hexachlorodibenzofuran	--	--	--	--	--	U (0.989)	--	UB (0.164)
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	--	--	--	--	3.73 EMPC J (1.51)	--	UB (0.168)
Octachlorodibenzofuran	--	--	--	--	--	13 JQ (2.73)	--	4.7 BJQ (0.156)

- Notes:
- All concentrations are presented in ug/L (ppb) unless otherwise noted.
 - Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05
Field Sample ID	MB-MW-05-20110412	MB-MW-05-20110727	MB-MW-05-20111027	MB-MW-05-20120425	MB-MW-05-20121018	MB-MW-05-20130411	MB-MW-05-20131010	MB-MW-05-20141031	MB-MW-05
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	MB-MW-05
Sample Date	4/12/2011	7/27/2011	10/27/2011	4/25/2012	10/18/2012	4/11/2013	10/10/2013	10/31/2014	MB-MW-05
Comments									MB-MW-05
SVOC									
Acenaphthene	--	40 (1.9)	--	39 (2)	64 (2.3)	16 (2.4)	59 (1.9)	53 (2.1)	
Acenaphthylene	--	1.8 J (1.9)	--	2 (0.2)	2.3 (2.3)	1.2 J (2.4)	2 (1.9)	1.2 J (2.1)	
Acetophenone	--	U (0.76)	--	1.4 (1)	U (11)	U (12)	U (9.6)	U (10)	
Anthracene	--	3.1 (1.9)	--	5.4 (0.2)	5.9 (2.3)	1.7 J (2.4)	5.5 (1.9)	3.7 (2.1)	
Benzaldehyde	--	U (1.4)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
Benzo(a)anthracene	--	U (0.14)	--	0.25 (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Benzo(a)pyrene	--	U (0.13)	--	0.057 J (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Benzo(b)fluoranthene	--	U (0.15)	--	0.65 B (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Benzo(g,h,i)perylene	--	U (0.14)	--	0.053 J (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Benzo(k)fluoranthene	--	U (0.52)	--	U (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Biphenyl	--	6.2 J (9.5)	--	9.2 B (1)	11 (11)	U (12)	9.3 J (9.6)	9 J (10)	
bis(2-Chloroethyl) ether	--	U (0.24)	--	0.23 (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
bis(2-Ethylhexyl)phthalate	--	U (12)	--	U (2)	U (23)	U (24)	U (19)	U (21)	
Butylbenzylphthalate	--	U (1.4)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
Caprolactam	--	U (11)	--	U (5.1)	U (57)	U (59)	U (48)	U (52)	
Carbazole	--	20 (1.9)	--	32 (0.2)	36 (2.3)	3.1 (2.4)	44 (1.9)	36 (2.1)	
4-Chloroaniline	--	U (0.84)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
2-Chlorophenol	--	U (1.6)	--	0.42 J (1)	U (11)	U (12)	U (9.6)	U (10)	
4-Chlorophenyl-phenyl ether	--	U (0.48)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
Chrysene	--	U (0.13)	--	0.24 (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Dibenz(a,h)anthracene	--	U (0.15)	--	0.49 (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Dibenzofuran	--	19 (9.5)	--	31 (1)	37 (11)	1.3 J (12)	33 (9.6)	30 (10)	
2,4-Dichlorophenol	--	U (0.32)	--	UL (0.2)	U (2.3)	0.58 J (2.4)	U (1.9)	U (2.1)	
Diethylphthalate	--	U (1.4)	--	0.43 J (1)	U (11)	U (12)	U (9.6)	U (10)	
2,4-Dimethylphenol	--	29 (9.5)	--	42 L (10)	38 (11)	120 (12)	67 (9.6)	39 (10)	
Dimethylphthalate	--	U (0.73)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
Di-n-butylphthalate	--	U (1.2)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
4,6-Dinitro-2-methylphenol	--	U (2.1)	--	UL (5.1)	U (57)	U (59)	U (48)	U (52)	
Di-n-octylphthalate	--	U (2)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
Fluoranthene	--	3.2 (1.9)	--	6.9 (0.2)	7.1 (2.3)	5.5 (2.4)	7.5 (1.9)	5.2 (2.1)	
Fluorene	--	23 (1.9)	--	39 (0.2)	45 (2.3)	1 J (2.4)	41 (1.9)	38 (2.1)	
Indeno(1,2,3-cd)pyrene	--	U (0.19)	--	0.38 (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Isophorone	--	U (0.61)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
2-Methylnaphthalene	--	34 (1.9)	--	46 B (2)	70 (2.3)	U (2.4)	44 (1.9)	54 (2.1)	
2-Methylphenol	--	1.5 J (9.5)	--	2.4 L (1)	1.4 J (11)	U (12)	U (9.6)	U (10)	
3&4-Methylphenol	--	--	--	0.59 J (1)	U (11)	U (12)	U (9.6)	U (10)	
4-Methylphenol	--	1 J (9.5)	--	--	--	--	--	--	
Naphthalene	--	260 (1.9)	--	270 B (2)	420 (2.3)	U (2.4)	270 (1.9)	280 (2.1)	
N-Nitrosodiphenylamine	--	U (0.81)	--	U (1)	U (11)	U (12)	U (9.6)	U (10)	
Pentachlorophenol	--	U (0.63)	--	UL (1)	U (11)	U (12)	U (9.6)	U (10)	
Phenanthrene	--	27 (1.9)	--	38 (2)	61 (2.3)	U (2.4)	42 (1.9)	41 (2.1)	
Phenol	--	U (0.55)	--	0.16 J (0.2)	U (2.3)	U (2.4)	U (1.9)	U (2.1)	
Pyrene	--	1.8 J (1.9)	--	3.6 (0.2)	4.4 (2.3)	3.3 (2.4)	3.4 (1.9)	2.7 (2.1)	
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	0.00763 EMPC J (0.421)	--	--	--	--	--	
PCB-001 (2-CB)	14.3 (0.00385)	14 B (0.0042)	16.1 B (0.421)	--	--	--	--	--	
PCB-002 (3-CB)	0.521 (0.0036)	0.52 (0.0045)	0.592 EMPC (0.421)	--	--	--	--	--	
PCB-003 (4-CB)	2.41 B (0.00338)	2.7 (0.0048)	2.83 B (0.421)	--	--	--	--	--	
PCB-209 (DeCB)	0.0638 J (0.00713)	0.093 J (0.0061)	0.0866 EMPC J (0.421)	--	--	--	--	--	
PCB-004 (2,2'-DiCB)	10.4 B (0.0216)	13 (0.028)	11.6 B (0.632)	--	--	--	--	--	
PCB-005 (2,3-DiCB)	0.0454 EMPC J (0.0168)	5.6 (0.02)	0.0477 EMPC J (0.421)	--	--	--	--	--	
PCB-006 (2,3'-DiCB)	2.57 B (0.0158)	3.8 (0.019)	3.25 B (0.421)	--	--	--	--	--	
PCB-007 (2,4-DiCB)	UB (0.0162)	0.14 EMPC J (0.02)	0.118 EMPC J (0.421)	--	--	--	--	--	
PCB-008 (2,4'-DiCB)	3.89 B (0.0155)	U (0.019)	5.28 B (0.632)	--	--	--	--	--	
PCB-009 (2,5-DiCB)	0.193 EMPC J (0.0163)	0.23 EMPC (0.02)	0.212 EMPC J (0.421)	--	--	--	--	--	
PCB-010 (2,6-DiCB)	0.21 EMPC J (0.0175)	0.21 EMPC J (0.021)	0.137 EMPC J (0.421)	--	--	--	--	--	
PCB-011 (3,3'-DiCB)	UB (0.0155)	0.13 EMPC J (0.019)	0.0787 EMPC J (0.632)	--	--	--	--	--	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-05 MB-MW-05-20110412 Micropurge 4/12/2011	MB-MW-05 MB-MW-05-20110727 Micropurge 7/27/2011	MB-MW-05 MB-MW-05-20111027 Micropurge 10/27/2011	MB-MW-05 MB-MW-05-20120425 Micropurge 4/25/2012	MB-MW-05 MB-MW-05-20121018 Micropurge 10/18/2012	MB-MW-05 MB-MW-05-20130411 Micropurge 4/11/2013	MB-MW-05 MB-MW-05-20131010 Micropurge 10/10/2013	MB-MW-05 MB-MW-05-20141031 Bladder Pump 10/31/2014
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	UB (0.0159)	0.46 (0.019)	0.423 J (0.632)	--	--	--	--	--
PCB-013 (3,4'-DiCB)	UB (0.0159)	0.46 (0.019)	0.423 J (0.632)	--	--	--	--	--
PCB-014 (3,5-DiCB)	U (0.0137)	U (0.017)	U (0.421)	--	--	--	--	--
PCB-015 (4,4'-DiCB)	0.791 EMPC (0.0164)	0.89 B (0.019)	0.98 (0.421)	--	--	--	--	--
PCB-170 (2,2',3,3',4,4',5-HpCB)	UB (0.0117)	0.039 EMPC J (0.0067)	0.0616 EMPC J (0.421)	--	--	--	--	--
PCB-171 (2,2',3,3',4,4',6-HpCB)	U (0.0105)	0.02 J (0.0063)	U (0.421)	--	--	--	--	--
PCB-172 (2,2',3,3',4,5,5'-HpCB)	U (0.0104)	0.017 EMPC J (0.0063)	U (0.421)	--	--	--	--	--
PCB-173 (2,2',3,3',4,5,6-HpCB)	U (0.0105)	0.02 J (0.0063)	U (0.421)	--	--	--	--	--
PCB-174 (2,2',3,3',4,5,6'-HpCB)	UB (0.00973)	0.062 EMPC J (0.0059)	0.0634 J (0.421)	--	--	--	--	--
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.00934)	U (0.0056)	U (0.421)	--	--	--	--	--
PCB-177 (2,2',3,3',4,5',6'-HpCB)	UB (0.00997)	0.038 EMPC J (0.006)	U (0.421)	--	--	--	--	--
PCB-176 (2,2',3,3',4,6,6'-HpCB)	U (0.00712)	0.0065 EMPC J (0.0043)	U (0.421)	--	--	--	--	--
PCB-178 (2,2',3,3',5,5',6-HpCB)	UB (0.0101)	0.015 EMPC J (0.0061)	U (0.421)	--	--	--	--	--
PCB-179 (2,2',3,3',5,6,6'-HpCB)	UB (0.0075)	0.037 J (0.0045)	0.0306 EMPC J (0.421)	--	--	--	--	--
PCB-180 (2,2',3,4,4',5,5'-HpCB)	UB (0.00793)	0.17 BJ (0.0048)	0.131 J (0.421)	--	--	--	--	--
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.00933)	U (0.0056)	U (0.421)	--	--	--	--	--
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.00907)	U (0.0055)	U (0.421)	--	--	--	--	--
PCB-183 (2,2',3,4,4',5',6-HpCB)	UB (0.00927)	0.046 EMPC J (0.0056)	0.0392 EMPC J (0.421)	--	--	--	--	--
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.0408 J (0.00927)	0.046 JQ (0.0056)	0.0392 EMPC J (0.421)	--	--	--	--	--
PCB-187 (2,2',3,4',5,5',6-HpCB)	UB (0.00868)	0.13 J (0.0052)	0.114 J (0.421)	--	--	--	--	--
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.0064)	U (0.004)	U (0.421)	--	--	--	--	--
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.00553)	U (0.0043)	U (0.421)	--	--	--	--	--
PCB-190 (2,3,3',4,4',5,6-HpCB)	U (0.00723)	0.012 EMPC J (0.0044)	U (0.421)	--	--	--	--	--
PCB-191 (2,3,3',4,4',5',6-HpCB)	U (0.00711)	U (0.0043)	U (0.421)	--	--	--	--	--
PCB-193 (2,3,3',4',5,5',6-HpCB)	UB (0.00793)	0.17 BJ (0.0048)	0.131 J (0.421)	--	--	--	--	--
PCB-128 (2,2',3,3',4,4'-HxCB)	0.0406 J (0.00858)	0.035 J (0.0058)	0.0219 J (0.421)	--	--	--	--	--
PCB-129 (2,2',3,3',4,5-HxCB)	UB (0.00887)	0.26 B (0.006)	0.232 J (0.421)	--	--	--	--	--
PCB-130 (2,2',3,3',4,5'-HxCB)	U (0.0115)	U (0.0077)	U (0.421)	--	--	--	--	--
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.0117)	U (0.0079)	U (0.421)	--	--	--	--	--
PCB-132 (2,2',3,3',4,6'-HxCB)	0.0758 J (0.0112)	0.096 J (0.0075)	--	--	--	--	--	--
PCB-133 (2,2',3,3',5,5'-HxCB)	U (0.0108)	U (0.0073)	--	--	--	--	--	--
PCB-134 (2,2',3,3',5,6-HxCB)	U (0.0115)	0.011 EMPC J (0.0077)	U (0.421)	--	--	--	--	--
PCB-135 (2,2',3,3',5,6'-HxCB)	0.083 J (0.0125)	0.067 EMPC J (0.0075)	0.0627 EMPC J (0.421)	--	--	--	--	--
PCB-136 (2,2',3,3',6,6'-HxCB)	0.0339 J (0.00915)	0.041 J (0.0055)	0.0234 EMPC J (0.421)	--	--	--	--	--
PCB-137 (2,2',3,4,4',5-HxCB)	U (0.00988)	U (0.0067)	U (0.421)	--	--	--	--	--
PCB-138 (2,2',3,4,4',5'-HxCB)	UB (0.00887)	0.26 B (0.006)	--	--	--	--	--	--
PCB-139 (2,2',3,4,4',6-HxCB)	U (0.00982)	U (0.0066)	U (0.421)	--	--	--	--	--
PCB-140 (2,2',3,4,4',6'-HxCB)	U (0.00982)	U (0.0066)	U (0.421)	--	--	--	--	--
PCB-141 (2,2',3,4,5,5'-HxCB)	0.0473 J (0.0102)	0.042 JQ (0.0069)	0.0407 J (0.421)	--	--	--	--	--
PCB-143 (2,2',3,4,5,6'-HxCB)	U (0.0115)	0.011 EMPC J (0.0077)	U (0.421)	--	--	--	--	--
PCB-144 (2,2',3,4,5',6-HxCB)	U (0.0116)	U (0.007)	U (0.421)	--	--	--	--	--
PCB-146 (2,2',3,4',5,5'-HxCB)	UB (0.00933)	0.04 J (0.0063)	0.04 J (0.421)	--	--	--	--	--
PCB-147 (2,2',3,4',5,6-HxCB)	UB (0.00954)	0.22 B (0.0064)	0.187 EMPC J (0.421)	--	--	--	--	--
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.0122)	U (0.0074)	U (0.421)	--	--	--	--	--
PCB-149 (2,2',3,4',5',6-HxCB)	0.214 BJ (0.00954)	0.22 B (0.0064)	0.187 EMPC J (0.421)	--	--	--	--	--
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.00853)	U (0.0052)	U (0.421)	--	--	--	--	--
PCB-151 (2,2',3,5,5',6-HxCB)	0.083 J (0.0125)	0.067 EMPC J (0.0075)	0.0627 EMPC J (0.421)	--	--	--	--	--
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.0087)	U (0.0053)	U (0.421)	--	--	--	--	--
PCB-153 (2,2',4,4',5,5'-HxCB)	UB (0.00767)	0.2 BJ (0.0052)	0.178 J (0.421)	--	--	--	--	--
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.0101)	U (0.0061)	U (0.421)	--	--	--	--	--
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.00829)	U (0.005)	U (0.421)	--	--	--	--	--
PCB-156 (2,3,3',4,4',5-HxCB)	0.0163 JQ (0.00854)	0.022 J (0.0061)	0.0158 EMPC J (0.421)	--	--	--	--	--
PCB-157 (2,3,3',4,4',5'-HxCB)	UB (0.00854)	0.022 J (0.0061)	0.0158 EMPC J (0.421)	--	--	--	--	--
PCB-158 (2,3,3',4,4',6-HxCB)	UB (0.007)	0.03 J (0.0047)	0.0172 EMPC J (0.421)	--	--	--	--	--
PCB-159 (2,3,3',4,5,5'-HxCB)	U (0.0075)	U (0.0051)	U (0.421)	--	--	--	--	--
PCB-160 (2,3,3',4,5,6-HxCB)	UB (0.00887)	0.26 B (0.006)	0.232 J (0.421)	--	--	--	--	--
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.00741)	U (0.005)	U (0.421)	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-05 MB-MW-05-20110412 Micropurge 4/12/2011	MB-MW-05 MB-MW-05-20110727 Micropurge 7/27/2011	MB-MW-05 MB-MW-05-20111027 Micropurge 10/27/2011	MB-MW-05 MB-MW-05-20120425 Micropurge 4/25/2012	MB-MW-05 MB-MW-05-20121018 Micropurge 10/18/2012	MB-MW-05 MB-MW-05-20130411 Micropurge 4/11/2013	MB-MW-05 MB-MW-05-20131010 Micropurge 10/10/2013	MB-MW-05 MB-MW-05-20141031 Bladder Pump 10/31/2014
PCB Congeners [ng/L] (continued)								
PCB-163 (2,3,3',4',5,6-HxCB)	UB (0.00887)	0.26 B (0.006)	0.232 J (0.421)	--	--	--	--	--
PCB-164 (2,3,3',4',5',6-HxCB)	UB (0.00781)	0.0094 EMPC J (0.0053)	0.00965 EMPC J (0.421)	--	--	--	--	--
PCB-166 (2,3,4,4',5,6-HxCB)	0.0406 J (0.00858)	0.035 J (0.0058)	0.0219 J (0.421)	--	--	--	--	--
PCB-167 (2,3',4,4',5,5'-HxCB)	U (0.00623)	0.0064 EMPC J (0.0038)	U (0.421)	--	--	--	--	--
PCB-168 (2,3',4,4',5',6-HxCB)	UB (0.00767)	0.2 BJ (0.0052)	0.178 J (0.421)	--	--	--	--	--
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.00587)	U (0.004)	U (0.421)	--	--	--	--	--
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.345 J (0.0166)	0.43 (0.0073)	0.379 J (0.421)	--	--	--	--	--
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	U (0.0122)	0.032 EMPC J (0.0054)	0.026 EMPC J (0.421)	--	--	--	--	--
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.124 EMPC J (0.013)	0.18 J (0.0058)	0.15 J (0.421)	--	--	--	--	--
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.0681 J (0.00562)	0.078 JQ (0.0049)	0.0806 J (0.421)	--	--	--	--	--
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	UB (0.0061)	U (0.0054)	U (0.421)	--	--	--	--	--
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	UB (0.00811)	0.056 J (0.0069)	--	--	--	--	--	--
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.00603)	U (0.0051)	U (0.421)	--	--	--	--	--
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	UB (0.00837)	0.27 (0.0071)	0.295 J (0.421)	--	--	--	--	--
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	UB (0.00837)	0.27 (0.0071)	0.0175 J (0.421)	--	--	--	--	--
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	U (0.00592)	0.014 EMPC J (0.005)	0.00939 EMPC J (0.421)	--	--	--	--	--
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	UB (0.00572)	0.021 EMPC J (0.0049)	0.295 J (0.421)	--	--	--	--	--
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.0576 EMPC J (0.00644)	0.068 EMPC J (0.0055)	0.0629 EMPC J (0.421)	--	--	--	--	--
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	UB (0.00748)	0.22 (0.0064)	0.175 J (0.421)	--	--	--	--	--
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.00627)	U (0.0053)	U (0.421)	--	--	--	--	--
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.00473)	U (0.0042)	U (0.421)	--	--	--	--	--
PCB-24/27	--	--	U (0.421)	--	--	--	--	--
PCB-42/59	--	--	0.247 J (0.421)	--	--	--	--	--
PCB-52/69	--	--	1.24 B (0.421)	--	--	--	--	--
PCB-61/70	--	--	0.816 BC (0.421)	--	--	--	--	--
PCB-90/101	--	--	0.306 J (0.421)	--	--	--	--	--
PCB-107/109	--	--	0.0114 EMPC J (0.421)	--	--	--	--	--
PCB-132/161	--	--	0.0818 EMPC J (0.421)	--	--	--	--	--
PCB-133/142	--	--	U (0.421)	--	--	--	--	--
PCB-138/163/164	--	--	0.232 J (0.421)	--	--	--	--	--
PCB-196/203	--	--	0.0301 EMPC J (0.421)	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	0.0303 EMPC J (0.0115)	0.033 EMPC J (0.009)	0.0497 EMPC J (0.421)	--	--	--	--	--
PCB-083 (2,2',3,3',5-PeCB)	0.122 EMPC J (0.00963)	0.18 J (0.0076)	0.109 EMPC J (0.421)	--	--	--	--	--
PCB-084 (2,2',3,3',6-PeCB)	0.0857 J (0.0109)	0.15 J (0.0086)	0.128 J (0.421)	--	--	--	--	--
PCB-085 (2,2',3,4,4'-PeCB)	0.0322 EMPC J (0.00793)	0.065 EMPC J (0.0062)	0.0571 J (0.421)	--	--	--	--	--
PCB-086 (2,2',3,4,5-PeCB)	UB (0.00811)	0.22 EMPC (0.0064)	0.197 J (0.421)	--	--	--	--	--
PCB-087 (2,2',3,4,5'-PeCB)	0.195 BJ (0.00811)	0.22 Q (0.0064)	0.197 J (0.421)	--	--	--	--	--
PCB-088 (2,2',3,4,6-PeCB)	0.0368 J (0.00975)	0.059 EMPC J (0.0077)	0.0582 J (0.421)	--	--	--	--	--
PCB-089 (2,2',3,4,6'-PeCB)	U (0.0106)	U (0.0083)	U (0.421)	--	--	--	--	--
PCB-090 (2,2',3,4',5-PeCB)	0.249 BJQ (0.00825)	0.29 BQ (0.0065)	--	--	--	--	--	--
PCB-097 (2,2',3,4',5'-PeCB)	UB (0.00811)	0.22 EMPC (0.0064)	0.197 J (0.421)	--	--	--	--	--
PCB-091 (2,2',3,4',6-PeCB)	0.0368 J (0.00975)	0.059 JQ (0.0077)	0.0582 J (0.421)	--	--	--	--	--
PCB-098 (2,2',3,4',6'-PeCB)	U (0.00912)	0.019 EMPC J (0.0072)	U (0.421)	--	--	--	--	--
PCB-092 (2,2',3,5,5'-PeCB)	0.0405 EMPC J (0.00937)	0.063 J (0.0074)	0.0568 J (0.421)	--	--	--	--	--
PCB-093 (2,2',3,5,6-PeCB)	U (0.00941)	U (0.0074)	U (0.421)	--	--	--	--	--
PCB-094 (2,2',3,5,6'-PeCB)	U (0.0106)	U (0.0083)	U (0.421)	--	--	--	--	--
PCB-095 (2,2',3,5',6-PeCB)	0.314 J (0.00997)	0.4 (0.0078)	0.322 EMPC J (0.421)	--	--	--	--	--
PCB-096 (2,2',3,6,6'-PeCB)	U (0.00792)	U (0.0062)	U (0.421)	--	--	--	--	--
PCB-099 (2,2',4,4',5-PeCB)	0.122 JQ (0.00963)	0.18 J (0.0076)	0.109 EMPC J (0.421)	--	--	--	--	--
PCB-100 (2,2',4,4',6-PeCB)	U (0.00941)	U (0.0074)	U (0.421)	--	--	--	--	--
PCB-101 (2,2',4,5,5'-PeCB)	UB (0.00825)	0.29 EMPC (0.0065)	0.306 J (0.421)	--	--	--	--	--
PCB-102 (2,2',4,5,6'-PeCB)	U (0.00912)	0.019 JQ (0.0072)	U (0.421)	--	--	--	--	--
PCB-103 (2,2',4,5',6-PeCB)	U (0.00929)	U (0.0073)	U (0.421)	--	--	--	--	--
PCB-104 (2,2',4,6,6'-PeCB)	U (0.00706)	U (0.0056)	U (0.421)	--	--	--	--	--
PCB-105 (2,3,3',4,4'-PeCB)	UB (0.00458)	0.088 J (0.0045)	0.0958 J (0.421)	--	--	--	--	--
PCB-108 (2,3,3',4,5'-PeCB)	UB (0.00523)	U (0.0047)	U (0.421)	--	--	--	--	--
PCB-109 (2,3,3',4,6-PeCB)	UB (0.00811)	0.22 EMPC (0.0064)	0.197 J (0.421)	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-05 MB-MW-05-20110412 Micropurge 4/12/2011	MB-MW-05 MB-MW-05-20110727 Micropurge 7/27/2011	MB-MW-05 MB-MW-05-20111027 Micropurge 10/27/2011	MB-MW-05 MB-MW-05-20120425 Micropurge 4/25/2012	MB-MW-05 MB-MW-05-20121018 Micropurge 10/18/2012	MB-MW-05 MB-MW-05-20130411 Micropurge 4/11/2013	MB-MW-05 MB-MW-05-20131010 Micropurge 10/10/2013	MB-MW-05 MB-MW-05-20141031 Bladder Pump 10/31/2014
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5-PeCB)	UB (0.00497)	0.013 J (0.0045)	--	--	--	--	--	--
PCB-110 (2,3,3',4',6-PeCB)	0.326 J (0.007)	0.44 B (0.0055)	0.36 J (0.421)	--	--	--	--	--
PCB-111 (2,3,3',5,5'-PeCB)	U (0.00663)	U (0.0052)	U (0.421)	--	--	--	--	--
PCB-113 (2,3,3',5',6-PeCB)	UB (0.00825)	0.29 EMPC (0.0065)	0.306 J (0.421)	--	--	--	--	--
PCB-114 (2,3,4,4',5-PeCB)	U (0.00474)	U (0.004)	--	--	--	--	--	--
PCB-115 (2,3,4,4',6-PeCB)	0.326 J (0.007)	0.44 B (0.0055)	0.36 J (0.421)	--	--	--	--	--
PCB-116 (2,3,4,5,6-PeCB)	0.0322 JQ (0.00793)	0.065 JQ (0.0062)	0.0571 J (0.421)	--	--	--	--	--
PCB-117 (2,3,4',5,6-PeCB)	0.0322 EMPC J (0.00793)	0.065 EMPC J (0.0062)	0.0571 J (0.421)	--	--	--	--	--
PCB-118 (2,3',4,4',5-PeCB)	0.219 J (0.00513)	0.23 B (0.0044)	0.212 J (0.421)	--	--	--	--	--
PCB-119 (2,3',4,4',6-PeCB)	UB (0.00811)	0.22 EMPC (0.0064)	0.197 J (0.421)	--	--	--	--	--
PCB-120 (2,3',4,5,5'-PeCB)	U (0.00682)	U (0.0054)	U (0.421)	--	--	--	--	--
PCB-121 (2,3',4,5',6-PeCB)	U (0.00688)	U (0.0054)	U (0.421)	--	--	--	--	--
PCB-122 (2,3,3',4',5'-PeCB)	U (0.00558)	0.0076 JQ (0.005)	U (0.421)	--	--	--	--	--
PCB-123 (2,3',4,4',5'-PeCB)	U (0.00521)	U (0.0048)	U (0.421)	--	--	--	--	--
PCB-124 (2,3',4',5,5'-PeCB)	UB (0.00523)	U (0.0047)	U (0.421)	--	--	--	--	--
PCB-125 (2,3',4',5',6-PeCB)	UB (0.00811)	0.22 EMPC (0.0064)	0.197 J (0.421)	--	--	--	--	--
PCB-126 (3,3',4,4',5-PeCB)	U (0.00495)	U (0.0044)	U (0.421)	--	--	--	--	--
PCB-127 (3,3',4,5,5'-PeCB)	U (0.00507)	U (0.0045)	U (0.421)	--	--	--	--	--
PCB-040 (2,2',3,3'-TeCB)	0.457 B (0.00961)	0.49 (0.006)	0.615 C (0.421)	--	--	--	--	--
PCB-041 (2,2',3,4-TeCB)	0.457 B (0.00961)	0.49 (0.006)	0.615 C40 (0.421)	--	--	--	--	--
PCB-042 (2,2',3,4'-TeCB)	0.189 BJ (0.00978)	0.21 EMPC J (0.0061)	--	--	--	--	--	--
PCB-043 (2,2',3,5-TeCB)	UB (0.00898)	0.029 EMPC J (0.0056)	0.0296 EMPC J (0.421)	--	--	--	--	--
PCB-044 (2,2',3,5'-TeCB)	0.81 B (0.0086)	0.88 B (0.0054)	1.03 BC (0.421)	--	--	--	--	--
PCB-045 (2,2',3,6-TeCB)	0.279 J (0.00996)	0.33 (0.0062)	0.354 J (0.421)	--	--	--	--	--
PCB-046 (2,2',3,6'-TeCB)	0.101 J (0.0118)	0.097 EMPC J (0.0074)	0.146 J (0.421)	--	--	--	--	--
PCB-047 (2,2',4,4'-TeCB)	0.81 B (0.0086)	0.88 B (0.0054)	1.03 BC44 (0.421)	--	--	--	--	--
PCB-048 (2,2',4,5-TeCB)	0.139 BJ (0.00954)	0.16 J (0.006)	0.181 J (0.421)	--	--	--	--	--
PCB-049 (2,2',4,5'-TeCB)	0.487 B (0.00792)	0.52 B (0.0049)	0.586 BC (0.421)	--	--	--	--	--
PCB-050 (2,2',4,6-TeCB)	UB (0.00925)	0.27 (0.0058)	0.311 J (0.421)	--	--	--	--	--
PCB-051 (2,2',4,6'-TeCB)	0.279 J (0.00996)	0.33 (0.0062)	0.354 J (0.421)	--	--	--	--	--
PCB-052 (2,2',5,5'-TeCB)	0.929 B (0.00927)	0.99 B (0.0058)	--	--	--	--	--	--
PCB-053 (2,2',5,6'-TeCB)	UB (0.00925)	0.27 (0.0058)	0.311 J (0.421)	--	--	--	--	--
PCB-054 (2,2',6,6'-TeCB)	U (0.0165)	U (0.029)	U (0.421)	--	--	--	--	--
PCB-055 (2,3,3',4-TeCB)	U (0.00745)	0.013 EMPC J (0.0046)	U (0.421)	--	--	--	--	--
PCB-056 (2,3,3',4'-TeCB)	0.19 BJ (0.00701)	0.21 B (0.0044)	0.205 J (0.421)	--	--	--	--	--
PCB-057 (2,3,3',5-TeCB)	U (0.00709)	U (0.0044)	U (0.421)	--	--	--	--	--
PCB-058 (2,3,3',5'-TeCB)	U (0.00705)	U (0.0044)	U (0.421)	--	--	--	--	--
PCB-059 (2,3,3',6-TeCB)	UB (0.00684)	0.079 J (0.0043)	0.0766 J (0.421)	--	--	--	--	--
PCB-060 (2,3,4,4'-TeCB)	0.0985 J (0.00722)	0.12 J (0.0045)	0.0736 EMPC J (0.421)	--	--	--	--	--
PCB-061 (2,3,4,5-TeCB)	0.73 B (0.00684)	0.78 B (0.0043)	--	--	--	--	--	--
PCB-062 (2,3,4,6-TeCB)	UB (0.00684)	0.079 J (0.0043)	0.0766 J (0.421)	--	--	--	--	--
PCB-063 (2,3,4',5-TeCB)	U (0.00657)	0.023 J (0.0041)	0.0137 EMPC J (0.421)	--	--	--	--	--
PCB-064 (2,3,4',6-TeCB)	0.246 EMPC J (0.00648)	0.31 B (0.004)	0.341 J (0.421)	--	--	--	--	--
PCB-065 (2,3,5,6-TeCB)	0.81 B (0.0086)	0.88 B (0.0054)	1.03 BC44 (0.421)	--	--	--	--	--
PCB-066 (2,3',4,4'-TeCB)	0.386 BJ (0.00679)	0.42 B (0.0042)	0.396 J (0.421)	--	--	--	--	--
PCB-067 (2,3',4,5-TeCB)	UB (0.00637)	0.019 J (0.004)	0.0152 EMPC J (0.421)	--	--	--	--	--
PCB-068 (2,3',4,5'-TeCB)	U (0.00642)	U (0.004)	U (0.421)	--	--	--	--	--
PCB-069 (2,3',4,6-TeCB)	0.487 B (0.00792)	0.52 B (0.0049)	0.586 BC49 (0.421)	--	--	--	--	--
PCB-070 (2,3',4',5-TeCB)	0.73 B (0.00684)	0.78 B (0.0043)	0.816 BC61 (0.421)	--	--	--	--	--
PCB-076 (2,3',4',5'-TeCB)	0.73 B (0.00684)	0.78 B (0.0043)	0.816 BC61 (0.421)	--	--	--	--	--
PCB-071 (2,3',4',6-TeCB)	0.457 B (0.00961)	0.49 (0.006)	0.615 C40 (0.421)	--	--	--	--	--
PCB-072 (2,3',5,5'-TeCB)	U (0.0069)	U (0.0043)	U (0.421)	--	--	--	--	--
PCB-073 (2,3',5',6-TeCB)	UB (0.00898)	0.029 EMPC J (0.0056)	0.0296 EMPC J (0.421)	--	--	--	--	--
PCB-074 (2,4,4',5-TeCB)	0.73 B (0.00684)	0.78 B (0.0043)	0.816 BC61 (0.421)	--	--	--	--	--
PCB-075 (2,4,4',6-TeCB)	UB (0.00684)	0.079 J (0.0043)	0.0766 J (0.421)	--	--	--	--	--
PCB-077 (3,3',4,4'-TeCB)	UB (0.00646)	0.024 EMPC J (0.004)	0.0227 EMPC J (0.421)	--	--	--	--	--
PCB-078 (3,3',4,5-TeCB)	U (0.00733)	U (0.0046)	U (0.421)	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05
Field Sample ID	MB-MW-05-20110412	MB-MW-05-20110727	MB-MW-05-20111027	MB-MW-05-20120425	MB-MW-05-20121018	MB-MW-05-20130411	MB-MW-05-20131010	MB-MW-05-20141031	MB-MW-05
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	
Sample Date	4/12/2011	7/27/2011	10/27/2011	4/25/2012	10/18/2012	4/11/2013	10/10/2013	10/31/2014	
Comments									
PCB Congeners [ng/L] (continued)									
PCB-079 (3,3',4,5'-TeCB)	U (0.00643)	U (0.004)	U (0.421)	--	--	--	--	--	--
PCB-081 (3,4,4',5'-TeCB)	U (0.00683)	U (0.0043)	U (0.421)	--	--	--	--	--	--
PCB-016 (2,2',3-TrCB)	1.13 B (0.0143)	1.1 EMPC (0.012)	1.53 (0.421)	--	--	--	--	--	--
PCB-017 (2,2',4-TrCB)	1.13 B (0.0119)	1.4 (0.0099)	1.17 (0.421)	--	--	--	--	--	--
PCB-018 (2,2',5-TrCB)	2.8 B (0.0106)	3.5 B (0.0088)	3.7 BC (0.632)	--	--	--	--	--	--
PCB-019 (2,2',6-TrCB)	1.03 (0.0146)	1.2 (0.012)	1.2 (0.421)	--	--	--	--	--	--
PCB-020 (2,3,3'-TrCB)	1.7 B (0.00484)	1.8 B (0.0046)	2.21 BC (0.421)	--	--	--	--	--	--
PCB-021 (2,3,4-TrCB)	UB (0.00485)	0.35 B (0.0046)	0.557 BC (0.421)	--	--	--	--	--	--
PCB-022 (2,3,4'-TrCB)	0.589 B (0.00493)	0.52 B (0.0047)	0.648 B (0.421)	--	--	--	--	--	--
PCB-023 (2,3,5-TrCB)	U (0.00503)	U (0.0048)	U (0.421)	--	--	--	--	--	--
PCB-024 (2,3,6-TrCB)	0.04 EMPC J (0.01)	0.17 EMPC J (0.0083)	--	--	--	--	--	--	--
PCB-025 (2,3',4-TrCB)	0.214 BJ (0.00448)	0.23 (0.0043)	0.306 J (0.421)	--	--	--	--	--	--
PCB-026 (2,3',5-TrCB)	0.437 BJ (0.00476)	0.49 B (0.0046)	0.664 C (0.421)	--	--	--	--	--	--
PCB-027 (2,3',6-TrCB)	0.345 J (0.00863)	0.46 (0.0072)	0.43 (0.421)	--	--	--	--	--	--
PCB-028 (2,4,4'-TrCB)	1.7 B (0.00484)	1.8 B (0.0046)	2.21 BC20 (0.421)	--	--	--	--	--	--
PCB-030 (2,4,6-TrCB)	2.8 B (0.0106)	3.5 B (0.0088)	3.7 BC18 (0.632)	--	--	--	--	--	--
PCB-029 (2,4,5-TrCB)	0.437 BJ (0.00476)	0.49 B (0.0046)	0.664 C26 (0.421)	--	--	--	--	--	--
PCB-031 (2,4',5-TrCB)	1.39 B (0.00472)	1.4 B (0.0045)	1.98 B (0.421)	--	--	--	--	--	--
PCB-032 (2,4',6-TrCB)	0.736 S (0.00846)	0.29 J (0.007)	0.661 S (0.421)	--	--	--	--	--	--
PCB-033 (2,3',4'-TrCB)	UB (0.00485)	0.35 B (0.0046)	0.557 BC21 (0.421)	--	--	--	--	--	--
PCB-034 (2,3',5'-TrCB)	UB (0.00495)	0.01 EMPC J (0.0047)	0.0151 J (0.421)	--	--	--	--	--	--
PCB-035 (3,3',4-TrCB)	UB (0.00508)	0.011 J (0.0049)	U (0.421)	--	--	--	--	--	--
PCB-036 (3,3',5-TrCB)	U (0.00491)	U (0.0047)	U (0.421)	--	--	--	--	--	--
PCB-037 (3,4,4'-TrCB)	UB (0.00504)	0.19 J (0.0048)	0.209 J (0.421)	--	--	--	--	--	--
PCB-038 (3,4,5-TrCB)	U (0.00518)	U (0.005)	U (0.421)	--	--	--	--	--	--
PCB-039 (3,4',5-TrCB)	U (0.00461)	U (0.0044)	U (0.421)	--	--	--	--	--	--
PCB									
PCBs (total)	U (0.0719)	U (0.0028)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)	U (0.01)	
Aroclor-1016	U (0.00264)	U (0.0024)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)	U (0.01)	
Aroclor-1242	U (0.0248)	U (0.0018)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)	U (0.01)	
Aroclor-1248	U (0.00239)	U (0.0022)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)	U (0.01)	
Aroclor-1254	U (0.0142)	U (0.0022)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)	U (0.01)	
Aroclor-1260	U (0.00142)	U (0.0013)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)	U (0.01)	
Aroclor-1268	U (0.00285)	U (0.0026)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)	U (0.01)	
CDDF [pg/L]									
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	U (0.45)	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	1.3 J (0.4)	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	UB (0.53)	--	--	--	--	--	--	--
Octachlorodibenzo-p-dioxin	--	UB (0.73)	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	0.23 JQ (0.21)	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran	--	U (0.31)	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran	--	UB (0.31)	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	UB (0.3)	--	--	--	--	--	--	--
Octachlorodibenzofuran	--	2.6 BJQ (0.31)	--	--	--	--	--	--	--

- Notes:
- All concentrations are presented in ug/L (ppb) unless otherwise noted.
 - Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-05-20150604	MB-MW-05-20170425	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20111026
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	4/25/2017	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	10/26/2011
Comments									
SVOC									
Acenaphthene	34 (2.1)	33 (1.9)	2.08 J (0.153)	--	U (0.153)	--	0.69 J (2.1)	--	--
Acenaphthylene	1.1 J (2.1)	1.4 J (1.9)	U (0.161)	--	U (0.161)	--	U (0.16)	--	--
Acetophenone	U (11)	U (19)	U (0.848)	--	U (0.848)	--	U (0.84)	--	--
Anthracene	2.7 (2.1)	2.3 (1.9)	0.507 J (0.163)	--	U (0.163)	--	U (0.16)	--	--
Benzaldehyde	U (11)	U (19)	U (1.59)	--	U (1.59)	--	U (1.6)	--	--
Benzo(a)anthracene	U (2.1)	U (1.9)	U (0.156)	--	0.688 J (0.156)	--	U (0.15)	--	--
Benzo(a)pyrene	U (2.1)	U (1.9)	U (0.142)	--	U (0.142)	--	U (0.14)	--	--
Benzo(b)fluoranthene	U (2.1)	U (1.9)	0.19 J (0.166)	--	U (0.166)	--	U (0.17)	--	--
Benzo(g,h,i)perylene	U (2.1)	U (1.9)	U (0.16)	--	U (0.16)	--	U (0.16)	--	--
Benzo(k)fluoranthene	U (2.1)	U (1.9)	U (0.58)	--	U (0.58)	--	U (0.58)	--	--
Biphenyl	3.7 J (11)	1.7 J (9.6)	U (0.44)	--	U (0.44)	--	U (0.44)	--	--
bis(2-Chloroethyl) ether	U (2.1)	U (1.9)	U (0.266)	--	U (0.266)	--	U (0.26)	--	--
bis(2-Ethylhexyl)phthalate	U (21)	U (19)	U (13.3)	--	U (13.3)	--	U (13)	--	--
Butylbenzylphthalate	U (11)	U (9.6)	U (1.51)	--	U (1.51)	--	U (1.5)	--	--
Caprolactam	U (53)	U (48)	32.1 J (12.6)	--	U (12.6)	--	22 J (53)	--	--
Carbazole	25 (2.1)	20 (1.9)	0.596 J (0.167)	--	U (0.167)	--	U (0.17)	--	--
4-Chloroaniline	U (11)	U (9.6)	U (0.938)	--	U (0.938)	--	U (0.93)	--	--
2-Chlorophenol	U (11)	U (9.6)	U (1.75)	--	U (1.75)	--	U (1.7)	--	--
4-Chlorophenyl-phenyl ether	U (11)	U (9.6)	U (0.533)	--	U (0.533)	--	U (0.53)	--	--
Chrysene	U (2.1)	U (1.9)	U (0.148)	--	0.506 J (0.148)	--	U (0.15)	--	--
Dibenz(a,h)anthracene	U (2.1)	U (1.9)	U (0.164)	--	U (0.164)	--	U (0.16)	--	--
Dibenzofuran	17 (11)	13 (9.6)	U (0.654)	--	U (0.654)	--	U (0.65)	--	--
2,4-Dichlorophenol	U (2.1)	U (1.9)	U (0.354)	--	U (0.354)	--	U (0.35)	--	--
Diethylphthalate	U (11)	U (9.6)	U (1.55)	--	U (1.55)	--	U (1.5)	--	--
2,4-Dimethylphenol	67 (11)	25 (9.6)	U (0.903)	--	U (0.903)	--	U (0.9)	--	--
Dimethylphthalate	U (11)	U (9.6)	U (0.811)	--	U (0.811)	--	U (0.81)	--	--
Di-n-butylphthalate	U (11)	U (9.6)	U (1.32)	--	U (1.32)	--	U (1.3)	--	--
4,6-Dinitro-2-methylphenol	U (53)	U (48)	U (2.33)	--	U (2.33)	--	U (2.3)	--	--
Di-n-octylphthalate	U (11)	U* (9.6)	4.35 J (2.19)	--	U (2.19)	--	U (2.2)	--	--
Fluoranthene	3.9 (2.1)	5.3 (1.9)	0.61 J (0.172)	--	0.34 J (0.172)	--	U (0.17)	--	--
Fluorene	22 (2.1)	16 (1.9)	U (0.229)	--	U (0.229)	--	U (0.23)	--	--
Indeno(1,2,3-cd)pyrene	U (2.1)	U (1.9)	U (0.211)	--	U (0.211)	--	U (0.21)	--	--
Isophorone	U (11)	U (9.6)	U (0.683)	--	U (0.683)	--	U (0.68)	--	--
2-Methylnaphthalene	18 (2.1)	5 (1.9)	U (0.129)	--	U (0.129)	--	U (0.13)	--	--
2-Methylphenol	U (11)	U (9.6)	U (0.914)	--	U (0.914)	--	U (0.91)	--	--
3&4-Methylphenol	U (11)	U (9.6)	--	--	--	--	--	--	--
4-Methylphenol	--	--	U (0.956)	--	U (0.956)	--	U (0.95)	--	--
Naphthalene	150 (2.1)	31 (1.9)	U (0.148)	--	U (0.148)	--	U (0.15)	--	--
N-Nitrosodiphenylamine	U (11)	U (9.6)	U (0.904)	--	U (0.904)	--	U (0.9)	--	--
Pentachlorophenol	U (11)	U (9.6)	U (0.703)	--	U (0.703)	--	U (0.7)	--	--
Phenanthrene	16 (2.1)	6.9 (1.9)	0.815 J (0.453)	--	U (0.453)	--	U (0.45)	--	--
Phenol	U (2.1)	U (9.6)	U (0.616)	--	U (0.616)	--	U (0.61)	--	--
Pyrene	3 (2.1)	3 (1.9)	0.565 J (0.166)	--	0.306 J (0.166)	--	U (0.17)	--	--
PCB Congeners [ng/L]									
13C12-PCB 114	--	--	--	--	--	--	--	U (0.0421)	--
PCB-001 (2-CB)	--	--	2.68 (0.0018)	2.31 B (0.000829)	2.23 B (0.000666)	2 (0.000317)	2.7 B (0.00048)	2.72 B (0.0421)	--
PCB-002 (3-CB)	--	--	U (0.00182)	0.00722 EMPC J (0.000889)	0.00491 J (0.000784)	0.0088 J (0.00034)	0.0063 J (0.0005)	0.0116 B (0.0421)	--
PCB-003 (4-CB)	--	--	0.0688 (0.00184)	0.0526 B (0.000952)	0.0504 (0.000938)	0.0732 B (0.000364)	0.07 (0.00053)	0.0506 EMPC (0.0421)	--
PCB-209 (DeCB)	--	--	0.0532 (0.00223)	0.101 (0.00261)	0.141 (0.002)	0.548 (0.00117)	0.046 EMPC (0.0013)	0.0319 EMPC J (0.0421)	--
PCB-004 (2,2'-DiCB)	--	--	6.63 (0.00911)	6.59 B (0.00693)	5.76 (0.00343)	4.77 B (0.00187)	6.9 (0.0029)	6.1 B (0.0632)	--
PCB-005 (2,3-DiCB)	--	--	0.00936 J (0.00597)	0.0123 EMPC J (0.00443)	0.00481 EMPC J (0.00262)	0.0117 EMPC J (0.00137)	0.0087 J (0.002)	0.011 B (0.0421)	--
PCB-006 (2,3'-DiCB)	--	--	0.359 (0.00561)	0.381 B (0.00417)	0.321 (0.00246)	0.349 B (0.00129)	0.33 (0.0019)	0.299 B (0.0421)	--
PCB-007 (2,4-DiCB)	--	--	0.0252 J (0.00577)	0.0297 EMPC J (0.00429)	0.0252 EMPC J (0.00253)	0.0248 EMPC J (0.00132)	0.02 EMPC J (0.0019)	0.0192 B (0.0421)	--
PCB-008 (2,4'-DiCB)	--	--	0.975 B (0.00549)	0.979 B (0.00408)	0.853 B (0.00241)	0.944 B (0.00126)	0.86 B (0.0018)	0.771 B (0.0632)	--
PCB-009 (2,5-DiCB)	--	--	0.0392 JQ (0.0058)	0.0573 B (0.00431)	0.0387 EMPC J (0.00254)	0.0417 EMPC J (0.00133)	0.038 J (0.0019)	0.0421 EMPC (0.0421)	--
PCB-010 (2,6-DiCB)	--	--	0.151 (0.00623)	0.128 (0.00463)	0.153 (0.00273)	0.0997 (0.00143)	0.15 (0.0021)	0.116 (0.0421)	--
PCB-011 (3,3'-DiCB)	--	--	UB (0.00552)	0.0628 B (0.0041)	UB (0.00242)	UB (0.00127)	UB (0.0019)	0.0137 B (0.0632)	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-05-20150604	MB-MW-05-20170425	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20111026
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6 / 4 / 2015	4 / 25 / 2017	7 / 28 / 2010	10 / 19 / 2010	1 / 12 / 2011	4 / 12 / 2011	7 / 26 / 2011	10 / 26 / 2011	10 / 26 / 2011
Comments									
PCB Congeners [ng/L] (continued)									
PCB-012 (3,4-DiCB)	--	--	0.0158 JQ (0.00566)	0.0353 EMPC J (0.00421)	0.0278 EMPC J (0.00248)	0.0521 EMPC J (0.0013)	0.021 J (0.0019)	0.0216 B (0.0632)	
PCB-013 (3,4'-DiCB)	--	--	0.0158 JQ (0.00566)	0.0353 EMPC J (0.00421)	0.0278 EMPC J (0.00248)	0.0521 EMPC J (0.0013)	0.021 J (0.0019)	0.0216 B (0.0632)	
PCB-014 (3,5-DiCB)	--	--	U (0.00488)	U (0.00363)	U (0.00214)	UB (0.00112)	U (0.0016)	0.00167 B (0.0421)	
PCB-015 (4,4'-DiCB)	--	--	0.0978 Q (0.00521)	0.137 B (0.00382)	0.127 B (0.00252)	0.238 B (0.00128)	0.089 EMPC (0.0018)	0.0861 (0.0421)	
PCB-170 (2,2',3,3',4,4',5-HpCB)	--	--	0.0539 (0.00323)	0.0996 (0.00239)	0.136 (0.00242)	0.425 (0.0018)	0.038 J (0.0012)	0.0424 (0.0421)	
PCB-171 (2,2',3,3',4,4',6-HpCB)	--	--	0.0165 JQ (0.00286)	0.0271 J (0.00222)	0.0241 EMPC J (0.00208)	0.124 (0.0016)	0.012 J (0.0012)	0.0123 EMPC J (0.0421)	
PCB-172 (2,2',3,3',4,5,5'-HpCB)	--	--	0.00786 J (0.00283)	0.0142 EMPC J (0.0022)	0.0141 EMPC J (0.00205)	0.061 (0.00158)	0.0059 EMPC J (0.0012)	0.00422 EMPC J (0.0421)	
PCB-173 (2,2',3,3',4,5,6-HpCB)	--	--	0.0165 JQ (0.00286)	0.0271 J (0.00222)	0.0241 EMPC J (0.00208)	0.124 (0.0016)	0.012 J (0.0012)	0.0123 EMPC J (0.0421)	
PCB-174 (2,2',3,3',4,5,6'-HpCB)	--	--	0.0633 (0.00265)	0.093 (0.00206)	0.126 (0.00192)	UB (0.00148)	0.04 BJ (0.0011)	0.0344 EMPC J (0.0421)	
PCB-175 (2,2',3,3',4,5',6-HpCB)	--	--	U (0.00255)	0.00341 J (0.00198)	U (0.00185)	UB (0.00142)	U (0.001)	U (0.0421)	
PCB-177 (2,2',3,3',4,5',6'-HpCB)	--	--	0.0252 JQ (0.00272)	0.0543 (0.00211)	0.0619 EMPC (0.00197)	UB (0.00152)	0.021 EMPC J (0.0011)	0.0231 J (0.0421)	
PCB-176 (2,2',3,3',4,6,6'-HpCB)	--	--	0.00544 JQ (0.00194)	0.0125 J (0.0015)	0.0133 EMPC J (0.00141)	0.0491 (0.00108)	0.005 EMPC J (0.00079)	0.00335 EMPC J (0.0421)	
PCB-178 (2,2',3,3',5,5',6-HpCB)	--	--	0.0092 JQ (0.00276)	0.0175 EMPC J (0.00214)	0.0233 J (0.002)	0.09 (0.00154)	0.007 EMPC J (0.0011)	0.00904 EMPC J (0.0421)	
PCB-179 (2,2',3,3',5,6,6'-HpCB)	--	--	0.0238 JQ (0.00205)	0.0439 (0.00159)	0.058 (0.00148)	0.188 (0.00114)	0.022 J (0.00083)	0.0173 EMPC J (0.0421)	
PCB-180 (2,2',3,4,4',5,5'-HpCB)	--	--	0.136 (0.00216)	0.205 (0.00168)	0.292 (0.00157)	0.921 B (0.00121)	0.09 B (0.00088)	0.101 C (0.0421)	
PCB-181 (2,2',3,4,4',5,6-HpCB)	--	--	U (0.00255)	U (0.00197)	U (0.00185)	0.00309 J (0.00142)	U (0.001)	U (0.0421)	
PCB-182 (2,2',3,4,4',5,6'-HpCB)	--	--	U (0.00248)	U (0.00192)	U (0.00179)	0.00245 EMPC J (0.00138)	U (0.001)	U (0.0421)	
PCB-183 (2,2',3,4,4',5',6-HpCB)	--	--	0.0367 J (0.00253)	0.0713 (0.00196)	0.0839 (0.00183)	UB (0.00141)	0.033 J (0.001)	0.0307 J (0.0421)	
PCB-185 (2,2',3,4,5,5',6-HpCB)	--	--	0.0367 J (0.00253)	0.0713 (0.00196)	0.0839 (0.00183)	0.296 (0.00141)	0.033 J (0.001)	0.0307 J (0.0421)	
PCB-187 (2,2',3,4',5,5',6-HpCB)	--	--	0.0868 (0.00237)	0.134 (0.00184)	0.186 (0.00172)	UB (0.00132)	0.062 (0.00096)	0.0639 (0.0421)	
PCB-188 (2,2',3,4',5,6,6'-HpCB)	--	--	U (0.00173)	U (0.00137)	U (0.00123)	U (0.000966)	U (0.00073)	U (0.0421)	
PCB-189 (2,3,3',4,4',5,5'-HpCB)	--	--	U (0.00177)	0.00233 EMPC J (0.000818)	0.00313 EMPC J (0.0012)	0.0112 EMPC J (0.000823)	0.0014 EMPC J (0.00077)	U (0.0421)	
PCB-190 (2,3,3',4,4',5,6-HpCB)	--	--	0.0117 J (0.00197)	0.0168 J (0.00153)	0.0246 J (0.00143)	0.0739 (0.0011)	0.0078 J (0.0008)	0.00562 EMPC J (0.0421)	
PCB-191 (2,3,3',4,4',5',6-HpCB)	--	--	U (0.00194)	U (0.0015)	0.0045 J (0.00141)	0.0157 J (0.00108)	0.0018 EMPC J (0.00079)	U (0.0421)	
PCB-193 (2,3,3',4',5,5',6-HpCB)	--	--	0.136 (0.00216)	0.205 (0.00168)	0.292 (0.00157)	0.921 B (0.00121)	0.09 B (0.00088)	0.101 C180 (0.0421)	
PCB-128 (2,2',3,3',4,4'-HxCB)	--	--	0.0308 J (0.00299)	0.0496 (0.00172)	0.0652 (0.00189)	0.2 (0.00138)	0.024 J (0.0011)	0.0204 J (0.0421)	
PCB-129 (2,2',3,3',4,5-HxCB)	--	--	0.237 B (0.00309)	0.337 B (0.00178)	0.539 B (0.00195)	1.57 B (0.00143)	0.18 B (0.0011)	0.177 C (0.0421)	
PCB-130 (2,2',3,3',4,5'-HxCB)	--	--	U (0.00399)	0.0194 J (0.0023)	0.0258 J (0.00252)	0.0834 (0.00184)	0.0085 EMPC J (0.0015)	0.00959 J (0.0421)	
PCB-131 (2,2',3,3',4,6-HxCB)	--	--	U (0.00409)	U (0.00236)	0.00468 J (0.00258)	0.0154 EMPC J (0.00189)	U (0.0015)	U (0.0421)	
PCB-132 (2,2',3,3',4,6'-HxCB)	--	--	0.0846 (0.00389)	0.117 (0.00224)	0.179 (0.00246)	0.483 (0.0018)	0.062 (0.0014)	--	
PCB-133 (2,2',3,3',5,5'-HxCB)	--	--	U (0.00375)	0.00601 J (0.00216)	0.00582 JQ (0.00237)	0.0232 J (0.00173)	0.0032 J (0.0014)	--	
PCB-134 (2,2',3,3',5,6-HxCB)	--	--	0.0095 JQ (0.00399)	0.0236 J (0.0023)	0.0325 J (0.00253)	0.08 (0.00185)	0.0089 EMPC J (0.0015)	0.00697 EMPC J (0.0421)	
PCB-135 (2,2',3,3',5,6'-HxCB)	--	--	0.0749 Q (0.00342)	0.123 EMPC (0.00306)	0.163 (0.0021)	0.496 (0.00197)	0.074 (0.0016)	0.056 C (0.0421)	
PCB-136 (2,2',3,3',6,6'-HxCB)	--	--	0.0277 J (0.00251)	0.0472 (0.00225)	0.0662 (0.00154)	0.194 (0.00145)	0.029 J (0.0012)	0.0237 J (0.0421)	
PCB-137 (2,2',3,4,4',5-HxCB)	--	--	0.0069 JQ (0.00344)	0.0146 J (0.00198)	0.0159 JQ (0.00218)	0.0613 (0.00159)	0.0061 JQ (0.0013)	0.00529 EMPC J (0.0421)	
PCB-138 (2,2',3,4,4',5'-HxCB)	--	--	0.237 B (0.00309)	0.337 B (0.00178)	0.539 B (0.00195)	1.57 B (0.00143)	0.18 B (0.0011)	--	
PCB-139 (2,2',3,4,4',6-HxCB)	--	--	U (0.00342)	0.00854 J (0.00197)	0.00692 J (0.00216)	0.0239 J (0.00158)	U (0.0012)	0.00211 EMPC J (0.0421)	
PCB-140 (2,2',3,4,4',6'-HxCB)	--	--	U (0.00342)	0.00854 J (0.00197)	0.00692 J (0.00216)	0.0239 J (0.00158)	U (0.0012)	0.00211 EMPC J (0.0421)	
PCB-141 (2,2',3,4,5,5'-HxCB)	--	--	0.044 (0.00356)	0.0661 (0.00205)	0.1 (0.00225)	0.275 (0.00165)	0.034 J (0.0013)	0.0204 EMPC J (0.0421)	
PCB-143 (2,2',3,4,5,6'-HxCB)	--	--	0.0095 JQ (0.00399)	0.0236 J (0.0023)	0.0325 J (0.00253)	0.08 (0.00185)	0.0089 EMPC J (0.0015)	0.00697 EMPC J (0.0421)	
PCB-144 (2,2',3,4,5',6-HxCB)	--	--	0.00861 JQ (0.00317)	0.0142 EMPC J (0.00284)	0.0167 J (0.00195)	0.0613 (0.00183)	0.0099 J (0.0015)	0.0052 EMPC J (0.0421)	
PCB-146 (2,2',3,4',5,5'-HxCB)	--	--	0.0287 JQ (0.00325)	0.0501 (0.00187)	0.0733 (0.00205)	0.214 (0.0015)	0.027 J (0.0012)	0.0266 J (0.0421)	
PCB-147 (2,2',3,4',5,6-HxCB)	--	--	0.203 B (0.00332)	0.267 B (0.00192)	0.44 (0.0021)	1.2 B (0.00154)	0.15 B (0.0012)	0.142 C (0.0421)	
PCB-148 (2,2',3,4',5,6'-HxCB)	--	--	U (0.00335)	U (0.00301)	U (0.00206)	0.00308 EMPC J (0.00194)	U (0.0016)	U (0.0421)	
PCB-149 (2,2',3,4',5',6-HxCB)	--	--	0.203 B (0.00332)	0.267 B (0.00192)	0.44 (0.0021)	1.2 B (0.00154)	0.15 B (0.0012)	0.142 C147 (0.0421)	
PCB-150 (2,2',3,4',6,6'-HxCB)	--	--	U (0.00234)	U (0.0021)	U (0.00144)	0.00332 JQ (0.00135)	U (0.0011)	U (0.0421)	
PCB-151 (2,2',3,5,5',6-HxCB)	--	--	0.0749 Q (0.00342)	0.123 EMPC (0.00306)	0.163 (0.0021)	0.496 (0.00197)	0.074 (0.0016)	0.056 C135 (0.0421)	
PCB-152 (2,2',3,5,6,6'-HxCB)	--	--	U (0.00238)	U (0.00214)	U (0.00147)	U (0.00138)	U (0.0011)	U (0.0421)	
PCB-153 (2,2',4,4',5,5'-HxCB)	--	--	0.19 B (0.00267)	0.267 B (0.00154)	0.42 (0.00169)	1.23 B (0.00124)	0.14 B (0.00098)	0.136 C (0.0421)	
PCB-154 (2,2',4,4',5,6'-HxCB)	--	--	U (0.00278)	U (0.00249)	0.0034 EMPC J (0.00171)	0.0211 J (0.0016)	U (0.0013)	U (0.0421)	
PCB-155 (2,2',4,4',6,6'-HxCB)	--	--	U (0.00227)	U (0.00204)	U (0.0014)	U (0.00131)	U (0.0011)	U (0.0421)	
PCB-156 (2,3,3',4,4',5-HxCB)	--	--	0.0194 J (0.00314)	0.0349 J (0.00184)	0.0449 (0.00215)	0.152 (0.0015)	0.015 J (0.0012)	0.0149 J (0.0421)	
PCB-157 (2,3,3',4,4',5'-HxCB)	--	--	0.0194 J (0.00314)	0.0349 J (0.00184)	0.0449 (0.00215)	0.152 (0.0015)	0.015 J (0.0012)	0.0149 J (0.0421)	
PCB-158 (2,3,3',4,4',6-HxCB)	--	--	0.0195 J (0.00244)	0.0334 J (0.00141)	0.0507 (0.00154)	0.143 (0.00113)	0.017 J (0.00089)	0.0138 J (0.0421)	
PCB-159 (2,3,3',4,5,5'-HxCB)	--	--	U (0.00261)	0.00294 J (0.00151)	0.00464 J (0.00165)	UB (0.00121)	0.0015 EMPC J (0.00095)	U (0.0421)	
PCB-160 (2,3,3',4,5,6-HxCB)	--	--	0.237 B (0.00309)	0.337 B (0.00178)	0.539 B (0.00195)	1.57 B (0.00143)	0.18 B (0.0011)	0.177 C129 (0.0421)	
PCB-162 (2,3,3',4',5,5'-HxCB)	--	--	U (0.00258)	U (0.00149)	U (0.00163)	0.00364 EMPC J (0.00119)	U (0.00094)	U (0.0421)	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-05-20150604	MB-MW-05-20170425	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20111026
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	4/25/2017	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	10/26/2011
Comments									
PCB Congeners [ng/L] (continued)									
PCB-163 (2,3,3',4',5,6-HxCB)	--	--	0.237 B (0.00309)	0.337 B (0.00178)	0.539 B (0.00195)	1.57 B (0.00143)	0.18 B (0.0011)	0.177 C129 (0.0421)	
PCB-164 (2,3,3',4',5',6-HxCB)	--	--	0.0126 JQ (0.00272)	0.0257 J (0.00157)	0.0335 J (0.00172)	0.101 (0.00126)	0.012 J (0.00099)	0.0103 J (0.0421)	
PCB-166 (2,3,4,4',5,6-HxCB)	--	--	0.0308 J (0.00299)	0.0496 (0.00172)	0.0652 (0.00189)	0.2 (0.00138)	0.024 J (0.0011)	0.0204 J (0.0421)	
PCB-167 (2,3',4,4',5,5'-HxCB)	--	--	0.00637 J (0.00194)	0.0103 EMPC J (0.00108)	0.0124 J (0.00118)	0.0514 (0.000949)	0.0054 EMPC J (0.0007)	0.00374 EMPC J (0.0421)	
PCB-168 (2,3',4,4',5',6-HxCB)	--	--	0.19 B (0.00267)	0.267 B (0.00154)	0.42 (0.00169)	1.23 B (0.00124)	0.14 B (0.00098)	0.136 C153 (0.0421)	
PCB-169 (3,3',4,4',5,5'-HxCB)	--	--	U (0.00214)	U (0.00126)	U (0.00127)	U (0.000889)	U (0.00079)	U (0.0421)	
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	--	--	0.149 (0.00212)	0.253 (0.002)	0.383 (0.00204)	1.52 (0.00151)	0.13 (0.0013)	0.0942 (0.0421)	
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	--	--	0.00965 J (0.00143)	0.023 J (0.00133)	0.0278 J (0.00144)	0.126 (0.00112)	0.0093 EMPC J (0.00087)	0.0054 EMPC J (0.0421)	
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	--	--	0.0502 (0.00144)	0.0893 (0.00132)	0.136 (0.00149)	0.534 (0.0012)	0.043 (0.00089)	0.0357 J (0.0421)	
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	--	--	0.0418 (0.00172)	0.0767 Q (0.00145)	0.0948 (0.00187)	0.32 (0.000874)	0.031 J (0.00089)	0.0258 EMPC J (0.0421)	
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	--	--	0.00828 J (0.00187)	0.017 EMPC J (0.00157)	0.0254 J (0.00203)	0.0789 (0.000949)	0.0072 EMPC J (0.00096)	0.00497 EMPC J (0.0421)	
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	--	--	0.0187 J (0.00198)	0.0343 J (0.00253)	0.0458 (0.00192)	0.161 (0.00118)	0.016 EMPC J (0.0012)	--	
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	--	--	U (0.00147)	U (0.00188)	0.00223 J (0.00143)	0.00728 EMPC J (0.000879)	U (0.00088)	U (0.0421)	
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	--	--	0.0931 (0.00204)	0.158 (0.00261)	0.215 (0.00198)	0.836 (0.00122)	0.061 (0.0012)	0.0563 C (0.0421)	
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	--	--	0.0931 (0.00204)	0.158 (0.00261)	0.215 (0.00198)	0.836 (0.00122)	0.061 (0.0012)	0.00429 J (0.0421)	
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	--	--	0.00557 JQ (0.00144)	0.00889 EMPC J (0.00185)	0.0112 J (0.0014)	0.0389 J (0.000863)	0.0027 EMPC J (0.00086)	0.00616 EMPC J (0.0421)	
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	--	--	0.00597 J (0.0014)	0.016 J (0.00178)	0.0136 J (0.00135)	0.0659 (0.000833)	0.0069 J (0.00083)	0.0563 C198 (0.0421)	
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	--	--	0.0269 J (0.00157)	0.0412 EMPC (0.00201)	0.0619 (0.00152)	0.221 (0.000938)	0.019 EMPC J (0.00094)	0.0166 EMPC J (0.0421)	
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	--	--	0.0652 (0.00182)	0.101 (0.00233)	0.152 (0.00177)	0.52 (0.00109)	0.051 (0.0011)	0.0482 (0.0421)	
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	--	--	U (0.00153)	U (0.00195)	U (0.00148)	U (0.000913)	U (0.00091)	U (0.0421)	
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	--	--	U (0.00145)	U (0.00122)	0.00301 J (0.00158)	0.00915 J (0.000736)	0.0012 EMPC J (0.00075)	U (0.0421)	
PCB-24/27	--	--	--	--	--	--	--	0.0101 EMPC J (0.0421)	
PCB-42/59	--	--	--	--	--	--	--	0.0871 (0.0421)	
PCB-52/69	--	--	--	--	--	--	--	0.533 B (0.0421)	
PCB-61/70	--	--	--	--	--	--	--	0.264 BC (0.0421)	
PCB-90/101	--	--	--	--	--	--	--	0.195 C (0.0421)	
PCB-107/109	--	--	--	--	--	--	--	0.00701 EMPC J (0.0421)	
PCB-132/161	--	--	--	--	--	--	--	0.0529 (0.0421)	
PCB-133/142	--	--	--	--	--	--	--	U (0.0421)	
PCB-138/163/164	--	--	--	--	--	--	--	0.177 C129 (0.0421)	
PCB-196/203	--	--	--	--	--	--	--	0.0162 J (0.0421)	
PCB-082 (2,2',3,3',4-PeCB)	--	--	0.0257 J (0.00416)	0.0535 EMPC (0.00343)	0.0545 (0.00208)	0.163 (0.0017)	0.022 EMPC J (0.0015)	0.0195 EMPC J (0.0421)	
PCB-083 (2,2',3,3',5-PeCB)	--	--	0.138 (0.00349)	0.239 (0.00289)	0.231 (0.00175)	0.743 (0.00143)	0.11 (0.0012)	0.108 C (0.0421)	
PCB-084 (2,2',3,3',6-PeCB)	--	--	0.0826 (0.00397)	0.157 (0.00328)	0.167 (0.00199)	0.405 (0.00163)	0.089 (0.0014)	0.0899 (0.0421)	
PCB-085 (2,2',3,4,4'-PeCB)	--	--	0.0376 J (0.00288)	0.0648 (0.00238)	0.0616 (0.00144)	0.223 (0.00118)	0.035 J (0.001)	0.0307 J (0.0421)	
PCB-086 (2,2',3,4,5-PeCB)	--	--	0.137 Q (0.00294)	0.271 (0.00243)	0.261 (0.00147)	0.824 B (0.00121)	0.13 (0.001)	0.108 EMPC (0.0421)	
PCB-087 (2,2',3,4,5'-PeCB)	--	--	0.137 Q (0.00294)	0.271 (0.00243)	0.261 (0.00147)	0.824 B (0.00121)	0.13 (0.001)	0.108 EMPC (0.0421)	
PCB-088 (2,2',3,4,6-PeCB)	--	--	0.0478 (0.00354)	0.081 EMPC (0.00292)	0.0801 (0.00177)	0.233 (0.00145)	0.038 EMPC J (0.0012)	0.0393 J (0.0421)	
PCB-089 (2,2',3,4,6'-PeCB)	--	--	U (0.00384)	0.01 J (0.00318)	0.00693 EMPC J (0.00192)	0.0199 J (0.00157)	0.0033 EMPC J (0.0013)	U (0.0421)	
PCB-090 (2,2',3,4',5-PeCB)	--	--	0.246 B (0.003)	0.381 B (0.00247)	0.417 B (0.0015)	1.3 B (0.00123)	0.21 B (0.001)	--	
PCB-097 (2,2',3,4',5'-PeCB)	--	--	0.137 Q (0.00294)	0.271 (0.00243)	0.261 (0.00147)	0.824 B (0.00121)	0.13 (0.001)	0.108 EMPC (0.0421)	
PCB-091 (2,2',3,4',6-PeCB)	--	--	0.0478 (0.00354)	0.081 Q (0.00292)	0.0801 (0.00177)	0.233 (0.00145)	0.038 JQ (0.0012)	0.0393 J (0.0421)	
PCB-098 (2,2',3,4',6'-PeCB)	--	--	0.014 J (0.00331)	0.0201 EMPC J (0.00273)	0.0185 J (0.00165)	0.0502 EMPC (0.00136)	0.01 EMPC J (0.0012)	0.00557 EMPC J (0.0421)	
PCB-092 (2,2',3,5,5'-PeCB)	--	--	0.0437 Q (0.0034)	0.0697 (0.00281)	0.0839 (0.0017)	0.243 (0.00139)	0.046 (0.0012)	0.0353 EMPC J (0.0421)	
PCB-093 (2,2',3,5,6-PeCB)	--	--	0.00321 J (0.00341)	0.00735 EMPC J (0.00282)	0.0045 EMPC J (0.00171)	0.0315 BJ (0.0014)	0.0043 EMPC J (0.0012)	0.0046 EMPC J (0.0421)	
PCB-094 (2,2',3,5,6'-PeCB)	--	--	U (0.00384)	U (0.00317)	U (0.00192)	0.0138 J (0.00157)	U (0.0013)	U (0.0421)	
PCB-095 (2,2',3,5',6-PeCB)	--	--	0.3 (0.00362)	0.443 (0.00299)	0.505 (0.00181)	1.24 (0.00148)	0.27 (0.0013)	0.283 (0.0421)	
PCB-096 (2,2',3,6,6'-PeCB)	--	--	U (0.00287)	0.00866 J (0.00238)	0.00663 J (0.00144)	0.0175 J (0.00118)	0.0039 J (0.001)	U (0.0421)	
PCB-099 (2,2',4,4',5-PeCB)	--	--	0.138 (0.00349)	0.239 (0.00289)	0.231 (0.00175)	0.743 (0.00143)	0.11 (0.0012)	0.108 C83 (0.0421)	
PCB-100 (2,2',4,4',6-PeCB)	--	--	0.00321 J (0.00341)	0.00735 EMPC J (0.00282)	0.0045 EMPC J (0.00171)	0.0315 BJ (0.0014)	0.0043 EMPC J (0.0012)	0.0046 EMPC J (0.0421)	
PCB-101 (2,2',4,5,5'-PeCB)	--	--	0.246 B (0.003)	0.381 B (0.00247)	0.417 B (0.0015)	1.3 B (0.00123)	0.21 B (0.001)	0.195 C90 (0.0421)	
PCB-102 (2,2',4,5,6'-PeCB)	--	--	0.014 J (0.00331)	0.0201 JQ (0.00273)	0.0185 J (0.00165)	0.0502 Q (0.00136)	0.01 JQ (0.0012)	0.00557 EMPC J (0.0421)	
PCB-103 (2,2',4,5',6-PeCB)	--	--	U (0.00337)	U (0.00278)	0.00556 J (0.00168)	0.0194 J (0.00138)	U (0.0012)	U (0.0421)	
PCB-104 (2,2',4,6,6'-PeCB)	--	--	U (0.00256)	U (0.00212)	U (0.00128)	0.00286 J (0.00105)	U (0.0009)	U (0.0421)	
PCB-105 (2,3,3',4,4'-PeCB)	--	--	0.0611 (0.00206)	0.0853 (0.000916)	0.125 (0.00122)	0.394 B (0.000769)	0.041 J (0.00076)	0.0422 EMPC (0.0421)	
PCB-108 (2,3,3',4,5'-PeCB)	--	--	0.00537 J (0.00219)	0.0102 EMPC J (0.000994)	0.00894 EMPC J (0.00133)	0.0385 BJ (0.000823)	0.0037 EMPC J (0.00079)	0.0057 J (0.0421)	
PCB-109 (2,3,3',4,6-PeCB)	--	--	0.137 Q (0.00294)	0.271 (0.00243)	0.261 (0.00147)	0.824 B (0.00121)	0.13 (0.001)	0.108 EMPC (0.0421)	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location Field Sample ID Sample Method Sample Date Comments	MB-MW-05 MB-MW-05-20150604 Bladder Pump 6/4/2015	MB-MW-05 MB-MW-05-20170425 Bladder Pump 4/25/2017	MB-MW-06 MB-MW-06-20100728 Micropurge 7/28/2010	MB-MW-06 MB-MW-06-20101019 Micropurge 10/19/2010	MB-MW-06 MB-MW-06-20110112 Micropurge 1/12/2011	MB-MW-06 MB-MW-06-20110412 Micropurge 4/12/2011	MB-MW-06 MB-MW-06-20110726 Micropurge 7/26/2011	MB-MW-06 MB-MW-06-20111026 Micropurge 10/26/2011
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5-PeCB)	--	--	0.00757 JQ (0.00209)	0.0179 J (0.000945)	0.0227 J (0.00126)	0.0731 B (0.000783)	0.0064 EMPC J (0.00075)	--
PCB-110 (2,3,3',4',6-PeCB)	--	--	0.303 (0.00254)	0.486 B (0.0021)	0.499 B (0.00127)	1.62 (0.00104)	0.25 B (0.00089)	0.246 BC (0.0421)
PCB-111 (2,3,3',5,5'-PeCB)	--	--	U (0.00241)	U (0.00199)	U (0.0012)	UB (0.000986)	U (0.00084)	U (0.0421)
PCB-113 (2,3,3',5',6-PeCB)	--	--	0.246 B (0.003)	0.381 B (0.00247)	0.417 B (0.0015)	1.3 B (0.00123)	0.21 B (0.001)	0.195 C90 (0.0421)
PCB-114 (2,3,4,4',5-PeCB)	--	--	0.00207 JQ (0.00195)	0.00578 J (0.000896)	0.00605 EMPC J (0.00117)	0.0235 J (0.000734)	0.0025 EMPC J (0.00072)	--
PCB-115 (2,3,4,4',6-PeCB)	--	--	0.303 (0.00254)	0.486 B (0.0021)	0.499 B (0.00127)	1.62 (0.00104)	0.25 B (0.00089)	0.246 BC110 (0.0421)
PCB-116 (2,3,4,5,6-PeCB)	--	--	0.0376 J (0.00288)	0.0648 (0.00238)	0.0616 (0.00144)	0.223 (0.00118)	0.035 J (0.001)	0.0307 J (0.0421)
PCB-117 (2,3,4',5,6-PeCB)	--	--	0.0376 J (0.00288)	0.0648 (0.00238)	0.0616 (0.00144)	0.223 (0.00118)	0.035 J (0.001)	0.0307 J (0.0421)
PCB-118 (2,3',4,4',5-PeCB)	--	--	0.164 B (0.00195)	0.223 B (0.000912)	0.336 B (0.00122)	1.06 (0.00078)	0.11 B (0.00073)	0.123 EMPC (0.0421)
PCB-119 (2,3',4,4',6-PeCB)	--	--	0.137 Q (0.00294)	0.271 (0.00243)	0.261 (0.00147)	0.824 B (0.00121)	0.13 (0.001)	0.108 EMPC (0.0421)
PCB-120 (2,3',4,5,5'-PeCB)	--	--	U (0.00248)	U (0.00205)	U (0.00124)	UB (0.00101)	U (0.00087)	U (0.0421)
PCB-121 (2,3',4,5',6-PeCB)	--	--	U (0.0025)	U (0.00206)	U (0.00125)	U (0.00102)	U (0.00087)	U (0.0421)
PCB-122 (2,3,3',4',5'-PeCB)	--	--	U (0.00234)	0.00396 J (0.00106)	0.00551 J (0.00142)	0.0146 J (0.000878)	0.0019 JQ (0.00084)	0.00177 EMPC J (0.0421)
PCB-123 (2,3',4,4',5'-PeCB)	--	--	0.00242 JQ (0.00217)	0.0042 EMPC J (0.000969)	0.00458 J (0.00129)	0.0191 EMPC J (0.000855)	0.0017 EMPC J (0.00079)	U (0.0421)
PCB-124 (2,3',4',5,5'-PeCB)	--	--	0.00537 J (0.00219)	0.0102 EMPC J (0.000994)	0.00894 EMPC J (0.00133)	0.0385 BJ (0.000823)	0.0037 EMPC J (0.00079)	0.0057 J (0.0421)
PCB-125 (2,3',4',5',6-PeCB)	--	--	0.137 Q (0.00294)	0.271 (0.00243)	0.261 (0.00147)	0.824 B (0.00121)	0.13 (0.001)	0.108 EMPC (0.0421)
PCB-126 (3,3',4,4',5-PeCB)	--	--	U (0.00219)	0.00242 EMPC J (0.000982)	U (0.00135)	0.00321 EMPC J (0.000741)	U (0.00072)	U (0.0421)
PCB-127 (3,3',4,5,5'-PeCB)	--	--	U (0.00213)	U (0.000963)	U (0.00129)	UB (0.000797)	U (0.00076)	U (0.0421)
PCB-040 (2,2',3,3'-TeCB)	--	--	0.202 (0.00387)	0.316 (0.00182)	0.374 (0.00204)	0.677 B (0.0011)	0.19 (0.0011)	0.208 C (0.0421)
PCB-041 (2,2',3,4-TeCB)	--	--	0.202 (0.00387)	0.316 (0.00182)	0.374 (0.00204)	0.677 B (0.0011)	0.19 (0.0011)	0.208 C40 (0.0421)
PCB-042 (2,2',3,4'-TeCB)	--	--	0.0883 (0.00394)	0.14 (0.00185)	0.174 (0.00208)	0.307 B (0.00112)	0.086 (0.0012)	--
PCB-043 (2,2',3,5-TeCB)	--	--	0.0153 J (0.00362)	0.0242 J (0.0017)	0.027 J (0.00191)	0.0371 BJ (0.00102)	0.011 J (0.0011)	0.0101 EMPC J (0.0421)
PCB-044 (2,2',3,5'-TeCB)	--	--	0.453 B (0.00346)	0.65 B (0.00163)	0.843 B (0.00183)	1.38 B (0.00098)	0.39 B (0.001)	0.445 BC (0.0421)
PCB-045 (2,2',3,6-TeCB)	--	--	0.15 B (0.00401)	0.214 B (0.00189)	0.252 (0.00212)	0.35 (0.00114)	0.14 (0.0012)	0.165 BC (0.0421)
PCB-046 (2,2',3,6'-TeCB)	--	--	0.0513 (0.00474)	0.0819 (0.00223)	0.0922 (0.0025)	0.126 (0.00134)	0.056 (0.0014)	0.0585 (0.0421)
PCB-047 (2,2',4,4'-TeCB)	--	--	0.453 B (0.00346)	0.65 B (0.00163)	0.843 B (0.00183)	1.38 B (0.00098)	0.39 B (0.001)	0.445 BC44 (0.0421)
PCB-048 (2,2',4,5-TeCB)	--	--	0.07 (0.00384)	0.109 (0.0018)	0.132 (0.00202)	0.218 B (0.00109)	0.069 (0.0011)	0.0644 (0.0421)
PCB-049 (2,2',4,5'-TeCB)	--	--	0.275 (0.00319)	0.394 B (0.0015)	0.536 (0.00168)	0.915 B (0.000903)	0.25 B (0.00093)	0.254 BC (0.0421)
PCB-050 (2,2',4,6-TeCB)	--	--	0.145 (0.00372)	0.203 (0.00175)	0.239 (0.00196)	0.306 B (0.00105)	0.14 (0.0011)	0.164 C (0.0421)
PCB-051 (2,2',4,6'-TeCB)	--	--	0.15 B (0.00401)	0.214 B (0.00189)	0.252 (0.00212)	0.35 (0.00114)	0.14 (0.0012)	0.165 BC45 (0.0421)
PCB-052 (2,2',5,5'-TeCB)	--	--	0.538 (0.00373)	0.769 B (0.00175)	1.06 B (0.00197)	1.69 B (0.00106)	0.51 B (0.0011)	--
PCB-053 (2,2',5,6'-TeCB)	--	--	0.145 (0.00372)	0.203 (0.00175)	0.239 (0.00196)	0.306 B (0.00105)	0.14 (0.0011)	0.164 C50 (0.0421)
PCB-054 (2,2',6,6'-TeCB)	--	--	U (0.00359)	0.00866 J (0.00238)	0.00679 J (0.00213)	0.00845 JQ (0.00158)	0.0062 JQ (0.0016)	U (0.0421)
PCB-055 (2,3,3',4-TeCB)	--	--	U (0.003)	0.00915 J (0.00141)	0.00677 EMPC J (0.00158)	0.0153 J (0.000849)	0.005 J (0.00088)	U (0.0421)
PCB-056 (2,3,3',4'-TeCB)	--	--	0.0771 (0.00282)	0.128 B (0.00133)	0.158 (0.00149)	0.373 B (0.000799)	0.066 B (0.00083)	0.0655 (0.0421)
PCB-057 (2,3,3',5-TeCB)	--	--	U (0.00285)	0.00269 EMPC J (0.00134)	0.00175 EMPC J (0.00151)	UB (0.000808)	U (0.00084)	0.00193 J (0.0421)
PCB-058 (2,3,3',5'-TeCB)	--	--	U (0.00284)	0.00176 EMPC J (0.00133)	0.00137 EMPC J (0.0015)	UB (0.000804)	0.0014 J (0.00083)	U (0.0421)
PCB-059 (2,3,3',6-TeCB)	--	--	0.0298 J (0.00276)	0.0528 B (0.00129)	0.0564 (0.00145)	0.105 B (0.00078)	0.03 J (0.00081)	0.0278 J (0.0421)
PCB-060 (2,3,4,4'-TeCB)	--	--	0.0252 JQ (0.00291)	0.0539 (0.00137)	0.0695 (0.00153)	0.152 (0.000823)	0.029 J (0.00085)	0.0213 J (0.0421)
PCB-061 (2,3,4,5-TeCB)	--	--	0.313 B (0.00275)	0.496 B (0.00129)	0.651 B (0.00145)	1.52 B (0.00078)	0.27 B (0.00081)	--
PCB-062 (2,3,4,6-TeCB)	--	--	0.0298 J (0.00276)	0.0528 B (0.00129)	0.0564 (0.00145)	0.105 B (0.00078)	0.03 J (0.00081)	0.0278 J (0.0421)
PCB-063 (2,3,4',5-TeCB)	--	--	0.00644 JQ (0.00265)	0.0136 J (0.00124)	0.0135 J (0.0014)	0.0339 J (0.000749)	0.0058 J (0.00077)	0.00478 J (0.0421)
PCB-064 (2,3,4',6-TeCB)	--	--	0.128 (0.00261)	0.19 (0.00123)	0.232 (0.00138)	0.437 B (0.000739)	0.12 B (0.00076)	0.121 B (0.0421)
PCB-065 (2,3,5,6-TeCB)	--	--	0.453 B (0.00346)	0.65 B (0.00163)	0.843 B (0.00183)	1.38 B (0.00098)	0.39 B (0.001)	0.445 BC44 (0.0421)
PCB-066 (2,3',4,4'-TeCB)	--	--	0.167 (0.00273)	0.257 B (0.00129)	0.344 B (0.00144)	0.815 B (0.000774)	0.14 B (0.0008)	0.133 (0.0421)
PCB-067 (2,3',4,5-TeCB)	--	--	U (0.00257)	0.0098 J (0.00121)	0.00977 J (0.00135)	0.0246 BJ (0.000727)	0.0047 EMPC J (0.00075)	0.00318 EMPC J (0.0421)
PCB-068 (2,3',4,5'-TeCB)	--	--	UB (0.00259)	UB (0.00122)	0.0074 BJ (0.00136)	0.0176 BJ (0.000732)	UB (0.00076)	0.00368 B (0.0421)
PCB-069 (2,3',4,6-TeCB)	--	--	0.275 (0.00319)	0.394 B (0.0015)	0.536 (0.00168)	0.915 B (0.000903)	0.25 B (0.00093)	0.254 BC49 (0.0421)
PCB-070 (2,3',4',5-TeCB)	--	--	0.313 B (0.00275)	0.496 B (0.00129)	0.651 B (0.00145)	1.52 B (0.00078)	0.27 B (0.00081)	0.264 BC61 (0.0421)
PCB-076 (2,3',4',5'-TeCB)	--	--	0.313 B (0.00275)	0.496 B (0.00129)	0.651 B (0.00145)	1.52 B (0.00078)	0.27 B (0.00081)	0.264 BC61 (0.0421)
PCB-071 (2,3',4',6-TeCB)	--	--	0.202 (0.00387)	0.316 (0.00182)	0.374 (0.00204)	0.677 B (0.0011)	0.19 (0.0011)	0.208 C40 (0.0421)
PCB-072 (2,3',5,5'-TeCB)	--	--	U (0.00278)	0.00843 J (0.0013)	0.00688 J (0.00146)	0.0199 J (0.000786)	0.0052 J (0.00081)	0.0031 EMPC J (0.0421)
PCB-073 (2,3',5',6-TeCB)	--	--	0.0153 J (0.00362)	0.0242 J (0.0017)	0.027 J (0.00191)	0.0371 BJ (0.00102)	0.011 J (0.0011)	0.0101 EMPC J (0.0421)
PCB-074 (2,4,4',5-TeCB)	--	--	0.313 B (0.00275)	0.496 B (0.00129)	0.651 B (0.00145)	1.52 B (0.00078)	0.27 B (0.00081)	0.264 BC61 (0.0421)
PCB-075 (2,4,4',6-TeCB)	--	--	0.0298 J (0.00276)	0.0528 B (0.00129)	0.0564 (0.00145)	0.105 B (0.00078)	0.03 J (0.00081)	0.0278 J (0.0421)
PCB-077 (3,3',4,4'-TeCB)	--	--	0.00705 J (0.00268)	0.0199 J (0.00125)	0.018 J (0.00143)	0.062 B (0.000763)	0.0068 J (0.00078)	0.00567 EMPC J (0.0421)
PCB-078 (3,3',4,5-TeCB)	--	--	U (0.00295)	U (0.00139)	U (0.00156)	U (0.000835)	U (0.00086)	U (0.0421)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-05-20150604	MB-MW-05-20170425	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20111026
Sample Method	Bladder Pump	Bladder Pump	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	6/4/2015	4/25/2017	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	10/26/2011
Comments									
PCB Congeners [ng/L] (continued)									
PCB-079 (3,3',4,5'-TeCB)	--	--	U (0.00259)	0.00416 EMPC J (0.00122)	0.0045 J (0.00137)	0.00939 J (0.000733)	0.0029 EMPC J (0.00076)	U (0.0421)	
PCB-081 (3,4,4',5'-TeCB)	--	--	U (0.00267)	U (0.00126)	U (0.00139)	UB (0.000751)	U (0.00078)	U (0.0421)	
PCB-016 (2,2',3-TrCB)	--	--	0.427 (0.0056)	0.507 (0.00479)	0.503 (0.00275)	0.544 B (0.00165)	0.39 (0.0018)	0.46 (0.0421)	
PCB-017 (2,2',4-TrCB)	--	--	0.579 (0.00467)	0.677 (0.004)	0.736 (0.0023)	0.749 B (0.00138)	0.5 (0.0015)	0.569 (0.0421)	
PCB-018 (2,2',5-TrCB)	--	--	1.14 (0.00413)	1.33 B (0.00354)	1.46 B (0.00203)	1.51 B (0.00122)	1.1 B (0.0013)	1.28 BC (0.0632)	
PCB-019 (2,2',6-TrCB)	--	--	0.423 (0.00572)	0.441 (0.0049)	0.422 (0.00281)	0.397 (0.00169)	0.41 (0.0018)	0.443 (0.0421)	
PCB-020 (2,3,3'-TrCB)	--	--	0.358 B (0.00226)	0.491 B (0.000955)	0.652 B (0.00124)	1.1 B (0.000635)	0.33 B (0.00072)	0.428 BC (0.0421)	
PCB-021 (2,3,4-TrCB)	--	--	0.177 (0.00227)	0.236 B (0.000957)	0.314 B (0.00125)	0.489 B (0.000637)	0.16 B (0.00073)	0.21 BC (0.0421)	
PCB-022 (2,3,4'-TrCB)	--	--	0.115 (0.0023)	0.156 B (0.000973)	0.194 B (0.00127)	0.316 B (0.000647)	0.1 B (0.00074)	0.129 EMPC (0.0421)	
PCB-023 (2,3,5-TrCB)	--	--	U (0.00235)	U (0.000992)	U (0.00129)	UB (0.00066)	U (0.00075)	U (0.0421)	
PCB-024 (2,3,6-TrCB)	--	--	0.00661 JQ (0.00391)	0.0159 EMPC J (0.00335)	0.0134 EMPC J (0.00192)	0.0173 J (0.00115)	0.0076 EMPC J (0.0012)	--	
PCB-025 (2,3',4-TrCB)	--	--	0.0495 Q (0.0021)	0.0719 (0.000885)	0.0878 (0.00115)	0.139 B (0.000588)	0.053 (0.00067)	0.0631 (0.0421)	
PCB-026 (2,3',5-TrCB)	--	--	0.114 (0.00222)	0.151 B (0.000939)	0.183 (0.00122)	0.277 B (0.000624)	0.11 B (0.00071)	0.134 C (0.0421)	
PCB-027 (2,3',6-TrCB)	--	--	0.157 (0.00338)	0.179 (0.00289)	0.174 (0.00166)	0.19 (0.000995)	0.14 (0.0011)	0.156 (0.0421)	
PCB-028 (2,4,4'-TrCB)	--	--	0.358 B (0.00226)	0.491 B (0.000955)	0.652 B (0.00124)	1.1 B (0.000635)	0.33 B (0.00072)	0.428 BC20 (0.0421)	
PCB-030 (2,4,6-TrCB)	--	--	1.14 (0.00413)	1.33 B (0.00354)	1.46 B (0.00203)	1.51 B (0.00122)	1.1 B (0.0013)	1.28 BC18 (0.0632)	
PCB-029 (2,4,5-TrCB)	--	--	0.114 (0.00222)	0.151 B (0.000939)	0.183 (0.00122)	0.277 B (0.000624)	0.11 B (0.00071)	0.134 C26 (0.0421)	
PCB-031 (2,4',5-TrCB)	--	--	0.398 B (0.00221)	0.517 B (0.000933)	0.686 B (0.00121)	1.04 B (0.00062)	0.37 B (0.00071)	0.475 B (0.0421)	
PCB-032 (2,4',6-TrCB)	--	--	0.377 (0.00331)	0.45 (0.00283)	0.505 (0.00163)	0.453 (0.000975)	0.33 (0.0011)	0.397 (0.0421)	
PCB-033 (2,3',4'-TrCB)	--	--	0.177 (0.00227)	0.236 B (0.000957)	0.314 B (0.00125)	0.489 B (0.000637)	0.16 B (0.00073)	0.21 BC21 (0.0421)	
PCB-034 (2,3',5'-TrCB)	--	--	U (0.00231)	0.00553 EMPC J (0.000977)	0.00473 EMPC J (0.00127)	0.0121 BJ (0.000649)	0.0042 J (0.00074)	0.00402 EMPC J (0.0421)	
PCB-035 (3,3',4-TrCB)	--	--	U (0.00238)	0.00492 EMPC J (0.001)	0.00549 J (0.00131)	UB (0.000667)	0.0029 EMPC J (0.00076)	U (0.0421)	
PCB-036 (3,3',5-TrCB)	--	--	U (0.0023)	U (0.00097)	0.0113 EMPC J (0.00126)	UB (0.000645)	U (0.00074)	U (0.0421)	
PCB-037 (3,4,4'-TrCB)	--	--	0.035 J (0.00236)	0.0588 B (0.000995)	0.0736 (0.0013)	0.202 B (0.000662)	0.035 J (0.00076)	0.0416 J (0.0421)	
PCB-038 (3,4,5-TrCB)	--	--	U (0.00242)	U (0.00102)	U (0.00133)	UB (0.00068)	U (0.00078)	U (0.0421)	
PCB-039 (3,4',5-TrCB)	--	--	U (0.00215)	0.00524 EMPC J (0.00091)	0.000715 EMPC J (0.00118)	UB (0.000605)	0.0026 J (0.00069)	0.00229 EMPC J (0.0421)	
PCB									
PCBs (total)	U (0.01)	U (0.011)	U (0.00293)	U (0.00299)	U (0.00311)	U (0.0632)	U (0.0029)	U (0.55)	
Aroclor-1016	U (0.01)	U (0.011)	U (0.00252)	U (0.00257)	U (0.00267)	U (0.00262)	U (0.0025)	U (0.55)	
Aroclor-1242	U (0.01)	U (0.011)	U (0.00186)	U (0.00189)	U (0.00197)	U (0.00193)	U (0.0019)	U (0.55)	
Aroclor-1248	U (0.01)	U (0.011)	U (0.00227)	U (0.00232)	U (0.00241)	U (0.0283)	U (0.0023)	U (0.55)	
Aroclor-1254	U (0.01)	U (0.011)	U (0.00229)	U (0.00233)	U (0.00243)	U (0.00238)	U (0.0023)	U (0.55)	
Aroclor-1260	U (0.01)	U (0.011)	U (0.00136)	U (0.00138)	U (0.00144)	U (0.00141)	U (0.0014)	U (0.55)	
Aroclor-1268	U (0.01)	U (0.011)	U (0.00272)	U (0.00277)	U (0.00288)	U (0.00283)	U (0.0027)	U (0.55)	
CDDF [pg/L]									
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	U (1.81)	--	4.34 J (0.59)	--	U (0.57)	--	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	U (1.43)	--	2.37 J (0.489)	--	U (0.54)	--	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	--	32.7 J (2.27)	--	225 B (1.03)	--	40 BJ (1.9)	--	
Octachlorodibenzo-p-dioxin	--	--	480 (2.81)	--	3520 B (1.3)	--	700 J (3.3)	--	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	--	U (3.25)	--	0.382 BJ (0.394)	--	U (0.41)	--	
1,2,3,7,8-Pentachlorodibenzofuran	--	--	U (1.22)	--	U (0.377)	--	U (0.52)	--	
1,2,3,4,7,8-Hexachlorodibenzofuran	--	--	U (0.88)	--	UB (0.322)	--	U (0.54)	--	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	--	7.49 J (1.1)	--	35.8 BJ (0.36)	--	9.7 BJ (0.87)	--	
Octachlorodibenzofuran	--	--	26 J (2.05)	--	273 B (0.599)	--	80 BJ (1.2)	--	

- Notes:
- All concentrations are presented in ug/L (ppb) unless otherwise noted.
 - Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-06-20120425	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010	MB-MW-06-20141031	MB-MW-06-20150604	MB-MW-06-20170425	MB-MW-06-20170425
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	Bladder Pump
Sample Date	4/25/2012	10/18/2012	4/11/2013	10/10/2013	10/31/2014	6/4/2015	4/25/2017	4/25/2017
Comments								
SVOC								
Acenaphthene	1.8 (0.2)	2.2 J (2.3)	U (2.3)	1.7 J (1.9)	3.3 (2.4)	1.6 J (2.2)	1.6 J (2)	
Acenaphthylene	U (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Acetophenone	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (20)	
Anthracene	0.19 J (0.2)	0.24 J (2.3)	0.46 J (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Benzaldehyde	0.73 J (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (20)	
Benzo(a)anthracene	0.083 J (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Benzo(a)pyrene	0.044 J (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Benzo(b)fluoranthene	0.64 B (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Benzo(g,h,i)perylene	0.05 J (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Benzo(k)fluoranthene	U (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Biphenyl	0.1 B (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
bis(2-Chloroethyl) ether	U (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
bis(2-Ethylhexyl)phthalate	U (2)	U (23)	U (23)	U (19)	U (24)	U (22)	U (20)	
Butylbenzylphthalate	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
Caprolactam	U (5.1)	U (57)	U (57)	U (49)	U (60)	U (55)	U (50)	
Carbazole	U (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
4-Chloroaniline	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
2-Chlorophenol	UL (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
4-Chlorophenyl-phenyl ether	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
Chrysene	0.07 J (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Dibenz(a,h)anthracene	0.5 (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Dibenzofuran	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
2,4-Dichlorophenol	0.039 J (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Diethylphthalate	0.16 J (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
2,4-Dimethylphenol	UL (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
Dimethylphthalate	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
Di-n-butylphthalate	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
4,6-Dinitro-2-methylphenol	UL (5.1)	U (57)	U (57)	U (49)	U (60)	U (55)	U (50)	
Di-n-octylphthalate	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U* (10)	
Fluoranthene	0.22 (0.2)	0.25 J (2.3)	0.3 J (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Fluorene	U (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Indeno(1,2,3-cd)pyrene	0.38 (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Isophorone	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
2-Methylnaphthalene	0.17 B (0.2)	U (2.3)	U (2.3)	U (1.9)	0.18 J (2.4)	U (2.2)	U (2)	
2-Methylphenol	UL (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
3&4-Methylphenol	UL (1)	U (11)	U (11)	U (9.7)	3.8 J (12)	U (11)	U (10)	
4-Methylphenol	--	--	--	--	--	--	--	
Naphthalene	0.42 B (0.2)	U (2.3)	U (2.3)	U (1.9)	1.1 J (2.4)	U (2.2)	U (2)	
N-Nitrosodiphenylamine	U (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
Pentachlorophenol	UL (1)	U (11)	U (11)	U (9.7)	U (12)	U (11)	U (10)	
Phenanthrene	0.076 J (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
Phenol	0.1 J (0.2)	U (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (10)	
Pyrene	0.14 J (0.2)	0.29 J (2.3)	U (2.3)	U (1.9)	U (2.4)	U (2.2)	U (2)	
PCB Congeners [ng/L]								
13C12-PCB 114	--	--	--	--	--	--	--	
PCB-001 (2-CB)	--	--	--	--	--	--	--	
PCB-002 (3-CB)	--	--	--	--	--	--	--	
PCB-003 (4-CB)	--	--	--	--	--	--	--	
PCB-209 (DeCB)	--	--	--	--	--	--	--	
PCB-004 (2,2'-DiCB)	--	--	--	--	--	--	--	
PCB-005 (2,3-DiCB)	--	--	--	--	--	--	--	
PCB-006 (2,3'-DiCB)	--	--	--	--	--	--	--	
PCB-007 (2,4-DiCB)	--	--	--	--	--	--	--	
PCB-008 (2,4'-DiCB)	--	--	--	--	--	--	--	
PCB-009 (2,5-DiCB)	--	--	--	--	--	--	--	
PCB-010 (2,6-DiCB)	--	--	--	--	--	--	--	
PCB-011 (3,3'-DiCB)	--	--	--	--	--	--	--	

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-06-20120425	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010	MB-MW-06-20141031	MB-MW-06-20150604	MB-MW-06-20170425	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	4/25/2012	10/18/2012	4/11/2013	10/10/2013	10/31/2014	6/4/2015	4/25/2017	
Comments								
PCB Congeners [ng/L] (continued)								
PCB-012 (3,4-DiCB)	--	--	--	--	--	--	--	--
PCB-013 (3,4'-DiCB)	--	--	--	--	--	--	--	--
PCB-014 (3,5-DiCB)	--	--	--	--	--	--	--	--
PCB-015 (4,4'-DiCB)	--	--	--	--	--	--	--	--
PCB-170 (2,2',3,3',4,4',5-HpCB)	--	--	--	--	--	--	--	--
PCB-171 (2,2',3,3',4,4',6-HpCB)	--	--	--	--	--	--	--	--
PCB-172 (2,2',3,3',4,5,5'-HpCB)	--	--	--	--	--	--	--	--
PCB-173 (2,2',3,3',4,5,6-HpCB)	--	--	--	--	--	--	--	--
PCB-174 (2,2',3,3',4,5,6'-HpCB)	--	--	--	--	--	--	--	--
PCB-175 (2,2',3,3',4,5',6-HpCB)	--	--	--	--	--	--	--	--
PCB-177 (2,2',3,3',4,5',6'-HpCB)	--	--	--	--	--	--	--	--
PCB-176 (2,2',3,3',4,6,6'-HpCB)	--	--	--	--	--	--	--	--
PCB-178 (2,2',3,3',5,5',6-HpCB)	--	--	--	--	--	--	--	--
PCB-179 (2,2',3,3',5,6,6'-HpCB)	--	--	--	--	--	--	--	--
PCB-180 (2,2',3,4,4',5,5'-HpCB)	--	--	--	--	--	--	--	--
PCB-181 (2,2',3,4,4',5,6-HpCB)	--	--	--	--	--	--	--	--
PCB-182 (2,2',3,4,4',5,6'-HpCB)	--	--	--	--	--	--	--	--
PCB-183 (2,2',3,4,4',5',6-HpCB)	--	--	--	--	--	--	--	--
PCB-185 (2,2',3,4,5,5',6-HpCB)	--	--	--	--	--	--	--	--
PCB-187 (2,2',3,4',5,5',6-HpCB)	--	--	--	--	--	--	--	--
PCB-188 (2,2',3,4',5,6,6'-HpCB)	--	--	--	--	--	--	--	--
PCB-189 (2,3,3',4,4',5,5'-HpCB)	--	--	--	--	--	--	--	--
PCB-190 (2,3,3',4,4',5,6-HpCB)	--	--	--	--	--	--	--	--
PCB-191 (2,3,3',4,4',5',6-HpCB)	--	--	--	--	--	--	--	--
PCB-193 (2,3,3',4',5,5',6-HpCB)	--	--	--	--	--	--	--	--
PCB-128 (2,2',3,3',4,4'-HxCB)	--	--	--	--	--	--	--	--
PCB-129 (2,2',3,3',4,5-HxCB)	--	--	--	--	--	--	--	--
PCB-130 (2,2',3,3',4,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-131 (2,2',3,3',4,6-HxCB)	--	--	--	--	--	--	--	--
PCB-132 (2,2',3,3',4,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-133 (2,2',3,3',5,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-134 (2,2',3,3',5,6-HxCB)	--	--	--	--	--	--	--	--
PCB-135 (2,2',3,3',5,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-136 (2,2',3,3',6,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-137 (2,2',3,4,4',5-HxCB)	--	--	--	--	--	--	--	--
PCB-138 (2,2',3,4,4',5'-HxCB)	--	--	--	--	--	--	--	--
PCB-139 (2,2',3,4,4',6-HxCB)	--	--	--	--	--	--	--	--
PCB-140 (2,2',3,4,4',6'-HxCB)	--	--	--	--	--	--	--	--
PCB-141 (2,2',3,4,5,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-143 (2,2',3,4,5,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-144 (2,2',3,4,5',6-HxCB)	--	--	--	--	--	--	--	--
PCB-146 (2,2',3,4',5,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-147 (2,2',3,4',5,6-HxCB)	--	--	--	--	--	--	--	--
PCB-148 (2,2',3,4',5,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-149 (2,2',3,4',5',6-HxCB)	--	--	--	--	--	--	--	--
PCB-150 (2,2',3,4',6,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-151 (2,2',3,5,5',6-HxCB)	--	--	--	--	--	--	--	--
PCB-152 (2,2',3,5,6,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-153 (2,2',4,4',5,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-154 (2,2',4,4',5,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-155 (2,2',4,4',6,6'-HxCB)	--	--	--	--	--	--	--	--
PCB-156 (2,3,3',4,4',5-HxCB)	--	--	--	--	--	--	--	--
PCB-157 (2,3,3',4,4',5'-HxCB)	--	--	--	--	--	--	--	--
PCB-158 (2,3,3',4,4',6-HxCB)	--	--	--	--	--	--	--	--
PCB-159 (2,3,3',4,5,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-160 (2,3,3',4,5,6-HxCB)	--	--	--	--	--	--	--	--
PCB-162 (2,3,3',4',5,5'-HxCB)	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-06-20120425	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010	MB-MW-06-20141031	MB-MW-06-20150604	MB-MW-06-20170425	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	4/25/2012	10/18/2012	4/11/2013	10/10/2013	10/31/2014	6/4/2015	4/25/2017	
Comments								
PCB Congeners [ng/L] (continued)								
PCB-163 (2,3,3',4',5,6-HxCB)	--	--	--	--	--	--	--	--
PCB-164 (2,3,3',4',5',6-HxCB)	--	--	--	--	--	--	--	--
PCB-166 (2,3,4,4',5,6-HxCB)	--	--	--	--	--	--	--	--
PCB-167 (2,3',4,4',5,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-168 (2,3',4,4',5',6-HxCB)	--	--	--	--	--	--	--	--
PCB-169 (3,3',4,4',5,5'-HxCB)	--	--	--	--	--	--	--	--
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	--	--	--	--	--	--	--	--
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	--	--	--	--	--	--	--	--
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	--	--	--	--	--	--	--	--
PCB-194 (2,2',3,3',4,4',5,5'-OxCB)	--	--	--	--	--	--	--	--
PCB-195 (2,2',3,3',4,4',5,6-OxCB)	--	--	--	--	--	--	--	--
PCB-196 (2,2',3,3',4,4',5,6'-OxCB)	--	--	--	--	--	--	--	--
PCB-197 (2,2',3,3',4,4',6,6'-OxCB)	--	--	--	--	--	--	--	--
PCB-198 (2,2',3,3',4,5,5',6-OxCB)	--	--	--	--	--	--	--	--
PCB-199 (2,2',3,3',4,5,5',6'-OxCB)	--	--	--	--	--	--	--	--
PCB-200 (2,2',3,3',4,5,6,6'-OxCB)	--	--	--	--	--	--	--	--
PCB-201 (2,2',3,3',4,5',6,6'-OxCB)	--	--	--	--	--	--	--	--
PCB-202 (2,2',3,3',5,5',6,6'-OxCB)	--	--	--	--	--	--	--	--
PCB-203 (2,2',3,4,4',5,5',6-OxCB)	--	--	--	--	--	--	--	--
PCB-204 (2,2',3,4,4',5,6,6'-OxCB)	--	--	--	--	--	--	--	--
PCB-205 (2,3,3',4,4',5,5',6-OxCB)	--	--	--	--	--	--	--	--
PCB-24/27	--	--	--	--	--	--	--	--
PCB-42/59	--	--	--	--	--	--	--	--
PCB-52/69	--	--	--	--	--	--	--	--
PCB-61/70	--	--	--	--	--	--	--	--
PCB-90/101	--	--	--	--	--	--	--	--
PCB-107/109	--	--	--	--	--	--	--	--
PCB-132/161	--	--	--	--	--	--	--	--
PCB-133/142	--	--	--	--	--	--	--	--
PCB-138/163/164	--	--	--	--	--	--	--	--
PCB-196/203	--	--	--	--	--	--	--	--
PCB-082 (2,2',3,3',4-PeCB)	--	--	--	--	--	--	--	--
PCB-083 (2,2',3,3',5-PeCB)	--	--	--	--	--	--	--	--
PCB-084 (2,2',3,3',6-PeCB)	--	--	--	--	--	--	--	--
PCB-085 (2,2',3,4,4'-PeCB)	--	--	--	--	--	--	--	--
PCB-086 (2,2',3,4,5-PeCB)	--	--	--	--	--	--	--	--
PCB-087 (2,2',3,4,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-088 (2,2',3,4,6-PeCB)	--	--	--	--	--	--	--	--
PCB-089 (2,2',3,4,6'-PeCB)	--	--	--	--	--	--	--	--
PCB-090 (2,2',3,4',5-PeCB)	--	--	--	--	--	--	--	--
PCB-097 (2,2',3,4',5'-PeCB)	--	--	--	--	--	--	--	--
PCB-091 (2,2',3,4',6-PeCB)	--	--	--	--	--	--	--	--
PCB-098 (2,2',3,4',6'-PeCB)	--	--	--	--	--	--	--	--
PCB-092 (2,2',3,5,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-093 (2,2',3,5,6-PeCB)	--	--	--	--	--	--	--	--
PCB-094 (2,2',3,5,6'-PeCB)	--	--	--	--	--	--	--	--
PCB-095 (2,2',3,5',6-PeCB)	--	--	--	--	--	--	--	--
PCB-096 (2,2',3,6,6'-PeCB)	--	--	--	--	--	--	--	--
PCB-099 (2,2',4,4',5-PeCB)	--	--	--	--	--	--	--	--
PCB-100 (2,2',4,4',6-PeCB)	--	--	--	--	--	--	--	--
PCB-101 (2,2',4,5,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-102 (2,2',4,5,6'-PeCB)	--	--	--	--	--	--	--	--
PCB-103 (2,2',4,5',6-PeCB)	--	--	--	--	--	--	--	--
PCB-104 (2,2',4,6,6'-PeCB)	--	--	--	--	--	--	--	--
PCB-105 (2,3,3',4,4'-PeCB)	--	--	--	--	--	--	--	--
PCB-108 (2,3,3',4,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-109 (2,3,3',4,6-PeCB)	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-06-20120425	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010	MB-MW-06-20141031	MB-MW-06-20150604	MB-MW-06-20170425	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	4/25/2012	10/18/2012	4/11/2013	10/10/2013	10/31/2014	6/4/2015	4/25/2017	
Comments								
PCB Congeners [ng/L] (continued)								
PCB-107 (2,3,3',4',5'-PeCB)	--	--	--	--	--	--	--	--
PCB-110 (2,3,3',4',6'-PeCB)	--	--	--	--	--	--	--	--
PCB-111 (2,3,3',5,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-113 (2,3,3',5',6'-PeCB)	--	--	--	--	--	--	--	--
PCB-114 (2,3,4,4',5'-PeCB)	--	--	--	--	--	--	--	--
PCB-115 (2,3,4,4',6'-PeCB)	--	--	--	--	--	--	--	--
PCB-116 (2,3,4,5,6'-PeCB)	--	--	--	--	--	--	--	--
PCB-117 (2,3,4',5,6'-PeCB)	--	--	--	--	--	--	--	--
PCB-118 (2,3',4,4',5'-PeCB)	--	--	--	--	--	--	--	--
PCB-119 (2,3',4,4',6'-PeCB)	--	--	--	--	--	--	--	--
PCB-120 (2,3',4,5,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-121 (2,3',4,5',6'-PeCB)	--	--	--	--	--	--	--	--
PCB-122 (2,3,3',4',5'-PeCB)	--	--	--	--	--	--	--	--
PCB-123 (2,3',4,4',5'-PeCB)	--	--	--	--	--	--	--	--
PCB-124 (2,3',4',5,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-125 (2,3',4',5',6'-PeCB)	--	--	--	--	--	--	--	--
PCB-126 (3,3',4,4',5'-PeCB)	--	--	--	--	--	--	--	--
PCB-127 (3,3',4,5,5'-PeCB)	--	--	--	--	--	--	--	--
PCB-040 (2,2',3,3'-TeCB)	--	--	--	--	--	--	--	--
PCB-041 (2,2',3,4'-TeCB)	--	--	--	--	--	--	--	--
PCB-042 (2,2',3,4'-TeCB)	--	--	--	--	--	--	--	--
PCB-043 (2,2',3,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-044 (2,2',3,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-045 (2,2',3,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-046 (2,2',3,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-047 (2,2',4,4'-TeCB)	--	--	--	--	--	--	--	--
PCB-048 (2,2',4,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-049 (2,2',4,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-050 (2,2',4,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-051 (2,2',4,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-052 (2,2',5,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-053 (2,2',5,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-054 (2,2',6,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-055 (2,3,3',4'-TeCB)	--	--	--	--	--	--	--	--
PCB-056 (2,3,3',4'-TeCB)	--	--	--	--	--	--	--	--
PCB-057 (2,3,3',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-058 (2,3,3',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-059 (2,3,3',6'-TeCB)	--	--	--	--	--	--	--	--
PCB-060 (2,3,4,4'-TeCB)	--	--	--	--	--	--	--	--
PCB-061 (2,3,4,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-062 (2,3,4,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-063 (2,3,4',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-064 (2,3,4',6'-TeCB)	--	--	--	--	--	--	--	--
PCB-065 (2,3,5,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-066 (2,3',4,4'-TeCB)	--	--	--	--	--	--	--	--
PCB-067 (2,3',4,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-068 (2,3',4,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-069 (2,3',4,6'-TeCB)	--	--	--	--	--	--	--	--
PCB-070 (2,3',4',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-076 (2,3',4',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-071 (2,3',4',6'-TeCB)	--	--	--	--	--	--	--	--
PCB-072 (2,3',5,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-073 (2,3',5',6'-TeCB)	--	--	--	--	--	--	--	--
PCB-074 (2,4,4',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-075 (2,4,4',6'-TeCB)	--	--	--	--	--	--	--	--
PCB-077 (3,3',4,4'-TeCB)	--	--	--	--	--	--	--	--
PCB-078 (3,3',4,5'-TeCB)	--	--	--	--	--	--	--	--

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
Field Sample ID	MB-MW-06-20120425	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010	MB-MW-06-20141031	MB-MW-06-20150604	MB-MW-06-20170425	
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Bladder Pump	Bladder Pump	Bladder Pump	
Sample Date	4/25/2012	10/18/2012	4/11/2013	10/10/2013	10/31/2014	6/4/2015	4/25/2017	
Comments								
PCB Congeners [ng/L] (continued)								
PCB-079 (3,3',4,5'-TeCB)	--	--	--	--	--	--	--	--
PCB-081 (3,4,4',5'-TeCB)	--	--	--	--	--	--	--	--
PCB-016 (2,2',3-TrCB)	--	--	--	--	--	--	--	--
PCB-017 (2,2',4-TrCB)	--	--	--	--	--	--	--	--
PCB-018 (2,2',5-TrCB)	--	--	--	--	--	--	--	--
PCB-019 (2,2',6-TrCB)	--	--	--	--	--	--	--	--
PCB-020 (2,3,3'-TrCB)	--	--	--	--	--	--	--	--
PCB-021 (2,3,4-TrCB)	--	--	--	--	--	--	--	--
PCB-022 (2,3,4'-TrCB)	--	--	--	--	--	--	--	--
PCB-023 (2,3,5-TrCB)	--	--	--	--	--	--	--	--
PCB-024 (2,3,6-TrCB)	--	--	--	--	--	--	--	--
PCB-025 (2,3',4-TrCB)	--	--	--	--	--	--	--	--
PCB-026 (2,3',5-TrCB)	--	--	--	--	--	--	--	--
PCB-027 (2,3',6-TrCB)	--	--	--	--	--	--	--	--
PCB-028 (2,4,4'-TrCB)	--	--	--	--	--	--	--	--
PCB-030 (2,4,6-TrCB)	--	--	--	--	--	--	--	--
PCB-029 (2,4,5-TrCB)	--	--	--	--	--	--	--	--
PCB-031 (2,4',5-TrCB)	--	--	--	--	--	--	--	--
PCB-032 (2,4',6-TrCB)	--	--	--	--	--	--	--	--
PCB-033 (2,3',4'-TrCB)	--	--	--	--	--	--	--	--
PCB-034 (2,3',5'-TrCB)	--	--	--	--	--	--	--	--
PCB-035 (3,3',4-TrCB)	--	--	--	--	--	--	--	--
PCB-036 (3,3',5-TrCB)	--	--	--	--	--	--	--	--
PCB-037 (3,4,4'-TrCB)	--	--	--	--	--	--	--	--
PCB-038 (3,4,5-TrCB)	--	--	--	--	--	--	--	--
PCB-039 (3,4',5-TrCB)	--	--	--	--	--	--	--	--
PCB								
PCBs (total)	U (0.01)	U (0.011)	U (0.011)	0.015 (0.0094)	U (0.01)	U (0.01)	U (0.01)	
Aroclor-1016	U (0.01)	U (0.011)	U (0.011)	U (0.0094)	U (0.01)	U (0.01)	U (0.01)	
Aroclor-1242	U (0.01)	U (0.011)	U (0.011)	0.015 (0.0094)	U (0.01)	U (0.01)	U (0.01)	
Aroclor-1248	U (0.01)	U (0.011)	U (0.011)	U (0.0094)	U (0.01)	U (0.01)	U (0.01)	
Aroclor-1254	U (0.01)	U (0.011)	U (0.011)	U (0.0094)	U (0.01)	U (0.01)	U (0.01)	
Aroclor-1260	U (0.01)	U (0.011)	U (0.011)	U (0.0094)	U (0.01)	U (0.01)	U (0.01)	
Aroclor-1268	U (0.01)	U (0.011)	U (0.011)	U (0.0094)	U (0.01)	U (0.01)	U (0.01)	
CDDF [pg/L]								
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	
Octachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	--	--	--	--	--	--	
1,2,3,7,8-Pentachlorodibenzofuran	--	--	--	--	--	--	--	
1,2,3,4,7,8-Hexachlorodibenzofuran	--	--	--	--	--	--	--	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	--	--	--	--	--	--	--	
Octachlorodibenzofuran	--	--	--	--	--	--	--	

Notes:
1 All concentrations are presented in ug/L (ppb) unless otherwise noted.
2 Only compounds with at least one detection are shown.

APPENDIX H – VAPOR INTRUSION SCREENING LEVEL RISK ASSESSMENT

Some groundwater contaminants at the Site are considered volatile. Building 7 is not in use, but plans for its reuse (and the rest of the Site) are underway. As part of this FYR, a vapor intrusion screening-level risk evaluation was conducted to analyze this potential exposure pathway and determine if it poses a future concern if occupiable structures are used or built on site. EPA's Vapor Intrusion Screening Level Calculator was used with its default assumptions and maximum detected volatile contaminant concentrations from this FYR period to estimate carcinogenic risk and noncarcinogenic HQs.⁷ A commercial scenario was assumed because residential use is prohibited on site. This screening-level evaluation estimates that the cancer risk falls within EPA's cancer risk management range and the noncancer HQ is below EPA's threshold value of 1, indicating that current groundwater concentrations are not expected to pose an unacceptable risk from vapor intrusion.

Table H-1: Vapor Intrusion Screening Level Calculator Results for Commercial Land Use

Contaminant ^a	Site Groundwater Concentration (µg/L) ^b	Calculated Indoor Air Concentration (µg/m ³)	Carcinogenic Risk	Noncarcinogenic Hazard
Naphthalene ^c	280	5.04	<i>1.4 x 10⁻⁵</i>	0.38
<i>Notes:</i> µg/m³ = microgram per cubic meter <i>Italicized</i> = risk is within EPA's risk management range a. Acenaphthene, anthracene, dibenzofuran, fluorene, 2-methylnaphthalene and pyrene are considered volatile, but EPA has not established inhalation toxicity values so their contribution to vapor intrusion could not be evaluated. b. Maximum detected concentration from this FYR period's groundwater sampling used; data from 2017 Long-Term Monitoring Annual Report, Table 2-4 c. Concentration is from MW-5.				

⁷ Vapor Intrusion Screening Level Calculator accessed on 3/7/2018 at https://epa-visl.ornl.gov/cgi-bin/visl_search.