UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS

FORMER EDGEWATER STEEL PROPERTY
BROOKS AND BLAIR WATERFRONT PROPERTIES, LTD
PARCEL A AND PARCEL C, RIVER'S EDGE

41 ALLEGHENY AVENUE
OAKMONT, PENNSYLVANIA

EPA ID NO. PAD 074 966 789

Prepared by
Office of Pennsylvania Remediation
Land and Chemicals Division
August 2017

Table of Contents

Figures

List of Acronyms

EAF	Electric Arc Furnace
EPA	Environmental Protection Agency
GPRA	Government Performance and Results Act
mg/kg	milligram per kilogram
mg/l	milligrams per liter
ug/l	microgram per liter
MSC	PA Act 2 Medium Specific Concentration
PADEP	Pennsylvania Department of Environmental Protection
PCBs	Polychlorinated Biphenyls
RCRA	Resource Conservation and Recovery Act
SVOCs	Semi-Volatile Organic Compounds
VOCs	Volatile Organic Compound

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis to solicit public comment on its proposed remedy for the former Edgewater Steel Property, Parcel A and Parcel C, River's Edge, (hereafter referred to as Facility or River's Edge) in Oakmont, Pennsylvania. The Facility is subject to the corrective action provisions of the Resource Conservation and Recovery Act (RCRA).

EPA is proposing that the Pennsylvania Department of Environmental Protection (PADEP) approvals of investigation and cleanup measures completed at the Facility are protective of human health and the environment, and that no further action is necessary.

EPA's proposed remedy for the Facility consists of implementation of engineering controls, and compliance with and maintenance of groundwater and land use restrictions. These restrictions have been implemented and will be enforced by PADEP. This Statement of Basis highlights key information relied upon by EPA in proposing its remedy for the Facility.

The Facility is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 et seq. The Corrective Action program requires that owners and/or operators of facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from their property. The Commonwealth of Pennsylvania (Commonwealth) is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth for the Corrective Action Program.

EPA is providing a thirty (30)-day public comment period on this Statement of Basis. EPA may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the public comment period has ended.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating to https://www.epa.gov/hwcorrectiveactionsites.

The Administrative Record for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 8, Public Participation, below, for information on how you may review the Administrative Record.

Section 2: Facility Background

Parcel A and Parcel C, River's Edge, is part of the 57-acre former Edgewater Steel Property that was owned and operated by Edgewater Steel Company from 1916 until its last bankruptcy in 2002. It is located along the Allegheny River in Oakmont, Allegheny County, Pennsylvania. (Figure 1 – Facility Location Map)

The property is now divided into the following two areas.

- River's Edge – This 23-acre area (Parcel A and Parcel C) is the southern half of the property. It is the subject of this Statement of Basis.
- Edgewater at Oakmont – This 34-acre area (Parcel B) is the northern half of the property.

Steelmaking operations at the former Edgewater Steel Property included forging, machining, melting, quenching and fabrication of steel railroad wheels and rolled circular rings.

Edgewater Steel Company operated a storage/disposal pile on the former Edgewater Steel Property to manage electric arc furnace dust. This unit operated under RCRA interim status, thus the entire property became subject to the corrective action provisions of RCRA.

A map of the entire former Edgewater Steel Property delineating these parcels is included as Figure 2 – Property Parcels. EPA has prepared two Statements of Basis – one for River's Edge (Parcels A and C) and one for Edgewater at Oakmont (Parcel B). Together, these two documents represent EPA's proposed remedy for the total 57-acre former Edgewater Steel Property.

Parcel A and Parcel C, now referred to as River's Edge, were sold to the Joseph B. Fay Company (Fay) in 1994. Brooks and Blair Waterfront Properties, Ltd. (Brooks and Blair) purchased the property for development in 2005. Parcel C includes a completed apartment building. The Parcel A redevelopment is planned to include apartments, condominiums, and single family residences. These housing units will be constructed in multiple phases.

Brooks and Blair completed an Act 2 Remedial Investigation for River's Edge and received PADEP approval of the investigation in October 2007. An Act 2 Final Report for the initial phase of redevelopment was submitted in July 2015/revised February 2016. PADEP approved the Final Report in March 2016.

Parcel B, now referred to as Edgewater at Oakmont, was developed by Edgewater Properties, L.P. Development is nearly complete; ultimately comprising 242 residential units, including townhomes, multi-family and single family homes. A small area in the northwest corner of Parcel B includes an electrical substation owned by Duquesne Power and Light (referred to in several drawings and reports as Parcel B-1). Cleanup of Parcel B was completed under Pennsylvania's Act 2 program. The cleanup included tank and drum removal, soil capping, and certain use restrictions. The Pennsylvania Department of Environmental Protection approved the Final Report for this parcel in February 2016.

River's Edge

River's Edge is bounded by Parcel B to the north, the Allegheny River to the west/southwest, and Plum Creek to the east/southeast. The groundwater exists within the historic fill areas and a clayey/sandy silt zone 20 to 30 feet below the ground surface. Depth to groundwater is 24 feet (or greater) below the ground surface. The groundwater flow from the Facility discharges directly to the Allegheny River. Plum Creek is not a receiving stream in this area, as the stream bed elevation is above the groundwater table.

The subsurface of much of the Facility consists of historic fill that was placed to raise the land surface above the Allegheny River floodplain. The fill in the northern third is comprised of industrial waste material; including slag, refractory material, and demolition debris. These materials are classified as residual waste under Pennsylvania regulations. Edgewater Steel Company also operated an electric arc furnace (EAF) on Parcel B, to produce carbon and low-alloy steel, from 1964 to 1985. EAF dust is a regulated hazardous waste under the RCRA program. An EAF dust storage pile was located on Parcel A.

Section 3: Environmental Assessment and Completed Actions

EPA has reviewed the environmental investigations completed by the respective developers and contained in the Remedial Investigation reports submitted to the PADEP Act 2 program. These investigations and subsequent reports followed guidelines laid out in the Act 2 Technical Guidance and were approved by PADEP. To remain consistent with the language in the investigation reports, this document refers to the Medium Specific Standards (MSCs) screening levels. MSCs are the chemical-specific screening levels for the Pennsylvania Statewide Health Standards under the Act 2 program. MSCs are established in a Technical Guidance manual and are consistent with EPA risk-based standards for the specific contaminants found at the Facility. EPA reviewed all data generated and concurs with PADEP's approval of both investigations.

Brooks and Blair submitted a combination report, Remedial Investigation, Risk Assessment, and Cleanup Plan, July 2007. The report documents the results of the environmental investigations, and assesses the risks and necessary protective measures for the proposed redevelopment of the Facility for residential use. The combined report was approved by PADEP in October 2007.

Remedial Activities Completed

EAF Dust - In 1992, Edgewater Steel removed approximately 14,450 cubic yards of EAF dust and associated material. PADEP approved the removal action as clean closure of the waste pile in December 1992.

Residual Waste Capping - Fay acquired the Facility in May 1994, while Edgewater Steel was in bankruptcy. Fay became responsible for capping the residual (industrial) waste area. The area was capped with two feet of compacted soil, in accordance with the approved closure plan. PADEP approved the closure in April 1999.

Metallic Waste Removal - During the Act 2 investigation, a metallic waste material was discovered near the northeast corner of the Facility. The material tested high in arsenic, lead and iron. In August 2006, approximately 510 tons of the metallic waste was excavated and disposed of off-site. The northwest edge of the waste extends beneath a concrete slab located about 3 to 6 feet below the ground surface. This area of waste was left in place due to the difficulty accessing the material. An estimated 10 to 20 tons of the waste remains under the concrete slab at a depth of about 5 to 10 feet below the ground surface.

Remedial Investigations

Historical investigations at the Facility included groundwater monitoring of the residual waste area from 1984 until 1993, and an environmental assessment on behalf of Fay in 1993.

Brooks and Blair conducted a multi-phase Remedial Investigation of River's Edge in 2004 through 2006. The scope of the investigation was based on the materials handled during Edgewater Steel operations and the results of past investigations.

Investigation work included sampling of surface soil, subsurface soil, surface water and groundwater. Sample locations are identified on Figure 3 – Sampling Location Map.

Soil Investigation

Surface and subsurface soil samples were collected from 20 borings across the Facility. Samples were analyzed for volatile organic compounds (VOCs), metals, and polychlorinated biphenyls (PCBs). The analytical results were screened against the Act 2 MSC screening standards for residential direct contact (the most protective soil screening standard).

Only arsenic and lead exceed the screening standards. An additional 45 soil samples, including surface soil samples and 7 additional borings, were analyzed for arsenic and lead to further characterize the contamination.

- Arsenic
  - Concentrations exceeded the MSC of 12 milligrams per kilograms (mg/kg) in 28 of the 65 samples.
  - Concentrations ranged from 3.7 to 75 mg/kg.
  - The highest concentrations were in samples from the industrial waste area.
  - Arsenic concentrations were above the screening level in both native soil and fill material. Native soil concentrations range from 9.7 to 25 mg/kg.

- Lead
  - Concentrations exceeded the MSC of 500 mg/kg in 5 of the 53 samples. Four of those samples were from the industrial waste area.
  - Concentrations ranged from 16 to 920 mg/kg.

Groundwater Investigation

Groundwater sampling took place between 2004 and 2005 at 5 monitoring wells to assess the groundwater quality beneath the Facility and potential contaminant discharge to the Allegheny River.

The analytical results of the groundwater samples were screened against the Act 2 MSC screening standards for a used aquifer (the most protective groundwater screening standard), although the aquifer is not used and institutional controls are in place to prevent future use.

Only manganese and two PCB compounds exceeded the screening standards.

- Manganese
    - Concentrations exceeded the MSC of 0.3 milligrams per liter (mg/l) in 4 of the 5 wells, both in the 2004 and 2005 samples.
    - Concentrations ranged from non-detect (MW-1) to 7.2 mg/l, with one sample (MW-4, 2005 sample) at 33 mg/l.
    - The average concentration was 6.3 mg/l.

- PCBs
    - Aroclor-1254 was detected in one sample (MW1, 2004 sample) at 1 microgram per liter (ug/l), above the MSC of 0.38 ug/l.
    - Aroclor-1260 was detected in one sample (MW4, 2004 sample) at 1.4 ug/l, above the MSC of 1.1 ug/l.
    - Samples were collected in 2005 using low-flow sampling to minimize entrained sediment. No PCBs were detected in the 2005 samples.

The Act 2 MSC screening standards for a non-use aquifer were not exceeded in any groundwater sample, with the exception of the anomalously high concentration of manganese in one sample. As noted, groundwater use at the Facility is not permitted. Non-use aquifer screening standards are 1,000 times the used aquifer screening standard.

Surface Water

Surface water samples along the edge of the Allegheny River and Plum Creek were analyzed for manganese due to the elevated levels of manganese in groundwater. Samples were collected at three locations along each stream bank. Concentrations ranged from 0.47 to 0.96 mg/l. PADEP has not established a surface water quality standard for Manganese.

Metallic Waste Removal Investigation

Post-excavation samples were taken after the 2006 metallic waste removal (northeast corner of Facility). Samples were collected from the waste removal area and the waste remaining under the buried slab. Samples were analyzed for the constituents of concern in the waste material, lead and cadmium.

Elevated concentrations of lead and cadmium were present at depths of 5 to 10 feet in the waste material remaining under the slab.

- Lead concentrations of up to 2,600 mg/kg exceeded the Act 2 MSC screening standards for residential direct contact of 500 mg/kg.
- Cadmium concentrations of up to 82 mg/kg exceeded the Act 2 MSC screening standards for residential direct contact of 1.2 mg/kg.

Concentrations from the waste removal areas were below screening level.

Risk Assessment

A Risk Assessment was conducted to evaluate potential impacts of site conditions on human health and the environment. The assessment evaluated potential exposure pathways under current and planned future use of the Facility. The exposure evaluation included pathway elimination, where appropriate, based on the engineering and institutional controls proposed in the redevelopment Cleanup Plan. The provisions of the Cleanup Plan are described in the Facility Redevelopment / Cleanup Plan section (below).

Groundwater Exposure

- There are no current or future users of the groundwater.
- Depth to groundwater is 24 feet or greater, preventing exposure to construction or utility workers.

Vapor Intrusion to Indoor Air

- There are no volatile contaminants of concern to present a vapor intrusion hazard.

Direct Contact to Soil

- Exposure was evaluated for all pathways (ingestion, dermal contact, ect.) for residential use scenario.
- Exposure was evaluated for direct contact by a child, adult, utility worker, and construction worker.
- Areas of greatest contamination are in the industrial waste area. This area will be capped to prevent direct contact.
- Calculated risks were below levels of concern.

Groundwater to Surface Water

- Groundwater to surface water modeling evaluated the concentrations of manganese discharging to the Allegheny River.
- Estimated in-stream concentrations were below levels or concern for acute or chronic fish criteria.

The risk assessment demonstrated that planned engineering and institutional controls would result in safe and protective conditions under the planned residential redevelopment. The evaluation demonstrates that there are no exposure pathways of concern.

Facility Redevelopment / Cleanup Plan

The Cleanup Plan presents details of engineering and institutional controls that will address potential exposure to site workers and residents, under the proposed residential redevelopment of the Facility. A cap will be placed over portions of the Facility where industrial wastes are present. Deed restrictions will prohibit groundwater use and excavation beneath the cap.

1. A cap, as outlines in Figure 3, will extend over the industrial waste area and the remainder of the metallic waste area, and the industrial fill (slag) area along the western margin of the Facility. The cap will consist of either buildings, paving, or at least 2 feet of compacted fill material underlain by a witness barrier.

2. An Environmental Management Plan details procedures to be followed during property soil management activities, such as excavation and grading.

3. An environmental covenant will be placed on the redeveloped property to restrict land and groundwater uses to prevent incidental exposure to contaminants remaining at the Facility.

The required engineering and institutional controls are being implemented as redevelopment of the Facility progresses. The cap and environmental covenants for the initial phase of redevelopment are already in place.

Environmental Indicators

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental cleanup indicators for each facility: (1) Current Human Exposures Under Control, and (2) Migration of Contaminated Groundwater Under Control. The Facility met both of these indicators in September 2003.

Section 4: Corrective Action Objectives

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

Soils - The Corrective Action Objective is to prevent direct contact exposure to soil contamination above residential direct contact screening standards. Consequently, the cap/cover requirement should be maintained.

Groundwater - The groundwater beneath the Facility exceeds drinking water screening standards. Consequently, the groundwater throughout the Facility should not be use as a potable water source.

Section 5: Proposed Remedy

EPA's proposed decision for redevelopment of the Facility for residential use is compliance with and maintenance of the engineering controls and land and groundwater use restrictions approved by PADEP under the Act 2 Program. Details of the requirements are included in the following PADEP-approved reports:

Remedial Investigation, Risk Assessment, and Cleanup Plan, July 2007, and

Final Report, Site-Specific Remediation, Initial Phase, River's Edge, July 2015, with October 2015 and February 2015 Addenda.

Engineering controls include construction of caps, as outlines in Figure 3, over the industrial waste area and the remainder of the metallic waste area, and the industrial fill (slag) area along the western margin of the Facility. The caps will consist of either buildings, paving, or at least 2 feet of compacted fill material underlain by a witness barrier.

Institutional controls include the following restrictions:

- excavation into the protective cap must comply with the requirements of the Cap Maintenance Plan (Final Report, Site-Specific Remediation, Initial Phase, River's Edge, July 2015, Appendix F), to prevent possible exposure to contamination beneath the cap, and
- groundwater may not used be for potable or agricultural purposes.

Maintenance of the engineering and institutional controls is established in the Cap Maintenance Plan.

These requirements run with the land and cannot be modified without PADEP approval.

Section 6: Evaluation of Proposed Remedy

This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance.

Threshold Criteria	Evaluation
1) Protect human health and the environment	EPA is proposing that PADEP-approved use restrictions and soil management requirements will protect residents and workers from unacceptable risk due to contaminants remaining in the groundwater and soil.

2) Achieve media cleanup objectives	Investigation results at the Facility indicated that contamination was detected above PADEP Act 2 residential MSCs. The PADEP approved cleanup plan will be protective for residential use by eliminating exposure to contaminated soils and groundwater through a combination of cap, cap maintenance, and use restrictions.
3) Remediating the Source of Releases	In all proposed remedies, EPA seeks to eliminate or reduce further releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment. The Facility met this objective. Source control actions have removed waste material and some contaminated soil, and established caps for other areas.

Balancing Criteria	Evaluation
4) Long-term effectiveness	The long-term effectiveness of the proposed remedy for the Facility will be maintained by compliance with use restrictions by the current and all subsequent property owners bound by the controls.
5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	Reduction has already been achieved, as demonstrated by the data from the groundwater monitoring and soil sampling results.
6) Short-term effectiveness	EPA's proposed remedy does not involve any activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment.
7) Implementability	The use restrictions proposed in this Statement of Basis have already been implemented by PADEP. PADEP can enforce these restrictions under Pennsylvania law if it should become necessary.

8) Cost	The costs associated with this proposed remedy are minimal (estimated cost of less than $1000 per year).
9) Community Acceptance	EPA will evaluate community acceptance of the proposed remedy during the public comment period, and it will be described in the Final Decision and Response to Comments.
10) State/Support Agency Acceptance	PADEP has approved the proposed remedy for the Facility under the Act 2 Program.

Section 7: Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. EPA is proposing that no financial assurance be required.

Section 8: Public Participation

You are invited to comment on EPA's proposed remedy. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, email, or phone to Maureen Essenthier at the address listed below.

EPA may hold a public meeting upon request. Requests for a public meeting should be made to Ms. Essenthier at the address listed below. A meeting will not be scheduled unless one is requested.

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

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Maureen Essenthier (3LC20)
Phone: (215) 814-3416
Email: essenthier.maureen@epa.gov

Section 9: Signature

Date: 8-24-17

Catherine A. Libertz

Catherine A. Libertz, Acting Director
Land and Chemicals Division
US EPA, Region III

Section 10: Index to Administrative Record

1. Environmental Covenant, River's Edge of Oakmont Phase 1 Residences, Brooks and Blair Waterfront Properties, Ltd., 5/31/2016

2. Environmental Covenant, River's Edge of Oakmont Parcel C, Brooks and Blair Waterfront Properties, Ltd., 5/16/2016

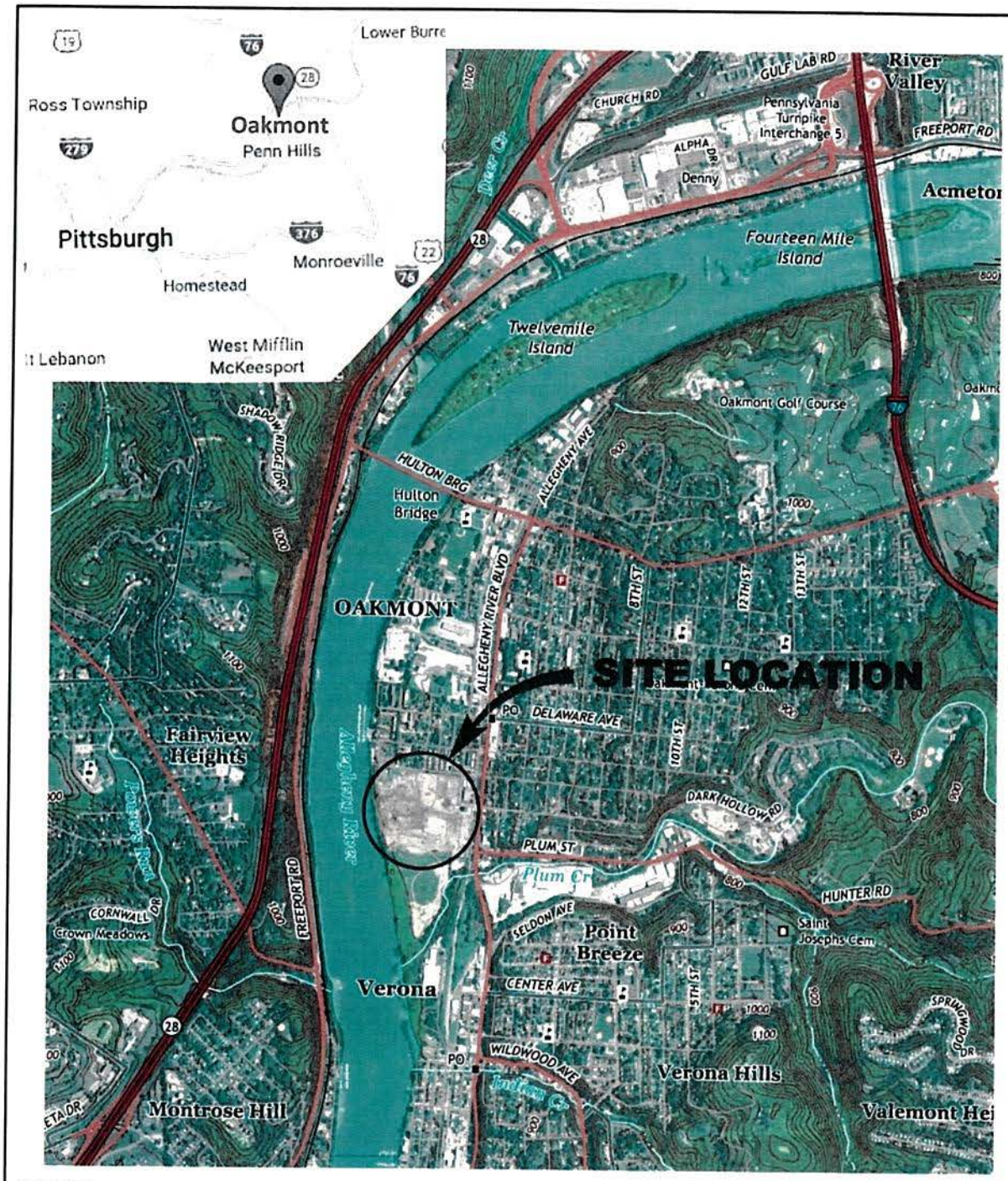
3. PADEP ECP – Land Recycling Program, Act 2 Final Report Technical Memo Summary, 2/11/2015, for:
   Former Edgewater Steel Property, Phase 1 and Parcel C, Brooks and Blair Waterfront Properties, Ltd

4. Site-Specific Final Report Approval, PADEP, 3/3/2016 for:
   Former Edgewater Steel Property, Phase 1 and Parcel C, Brooks and Blair Waterfront Properties, Ltd

5. Final Report, Site-Specific Remediation, Initial Phase, River's Edge, July 2015, Alan Halperin PG, LLC for Brooks & Blair Homes LLC, with October 2015 and February 2015 Addenda

6. Remedial Investigation, Risk Assessment, and Cleanup Plan, July 2007, prepared for Brooks & Blair Homes LLC July 2007, including
   - PADEP Approval - Cap Closure, Residual Waste Landfill, 4/8/1999
   - Certification of Cap Closure Residual Waste Landfill, Joseph B. Fay Co., 12/8/1995
   - PADER Certification of Final Closure Activities, EAF Dust Pile, 12/19/1992
   - Certification and Summary of Final Closure Activities, EAF Dust Pile, Earth Sciences Consultants, 9/15/1992

7. Final Environmental Indicator Inspection Report, Former Edgewater Steel Corporation, March 2002, Foster Wheeler Environmental Corp. for USEPA Region 3



REFERENCE:
USGS 7.5-MIN TOPOGRAPHIC QUADRANGLE NEW KENSINGTON WEST, PENNSYLVANIA, DATED 2013.

SCALE - FEET
0 2000

REVISION	DATE	DESCRIPTION

APPROVED	-
CHECKED	-
DRAWN	RAM 11/06/2014
CAD FILE NO.	14384A001
PROJECT NO.	EP14384ESP

KU Resources, Inc.
22 South Linden Street
Duquesne, PA 15110
412 469 9331
412 469 9336 fax
www.kuresources.com

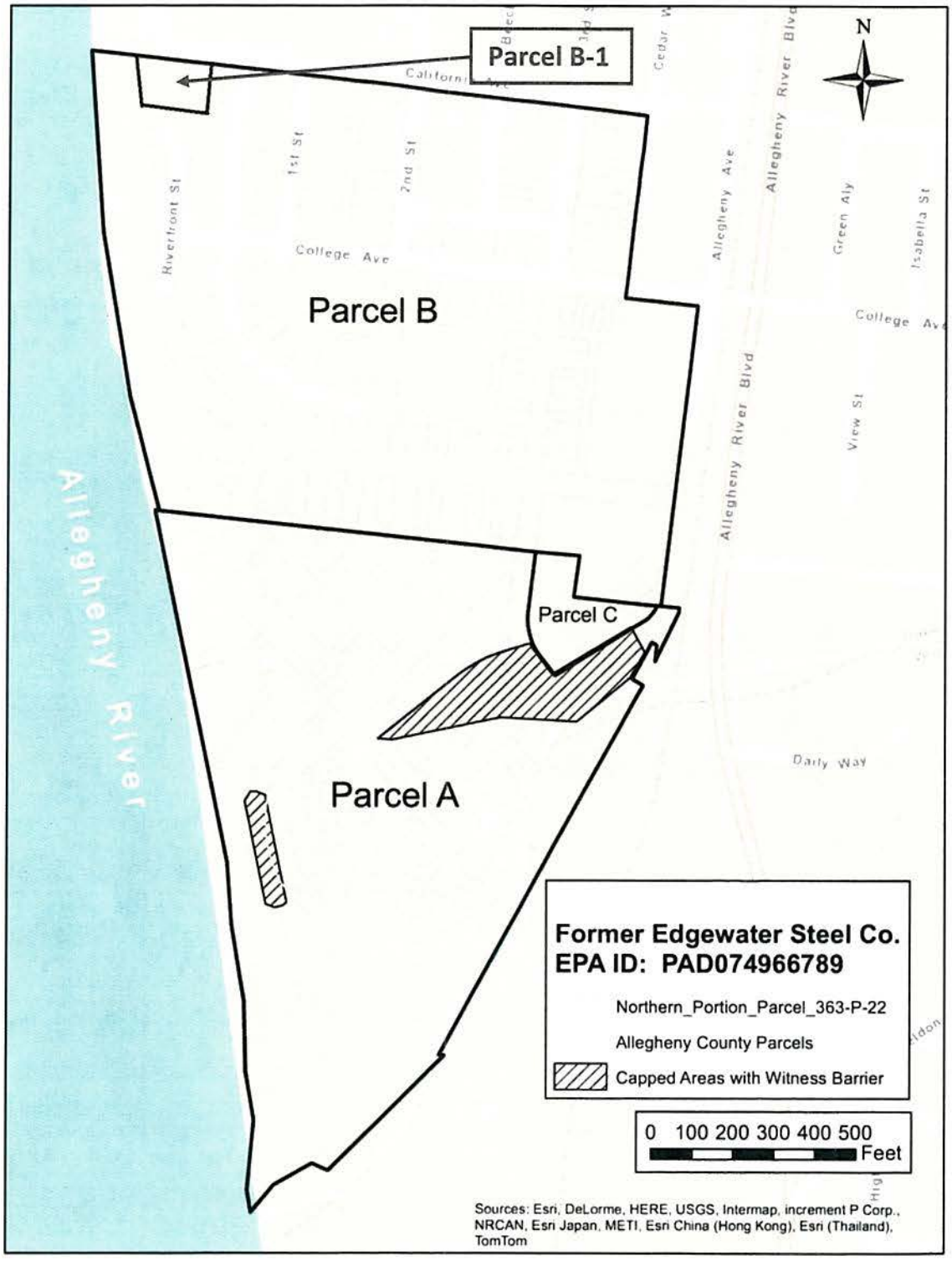
PROPERTY LOCATION MAP
FORMER EDGEWATER STEEL PROPERTY

BOROUGH OF OAKMONT
ALLEGHENY COUNTY, PENNSYLVANIA

PREPARED FOR
EDGEWATER PROPERTIES, L.P.
MURRYSVILLE, PENNSYLVANIA

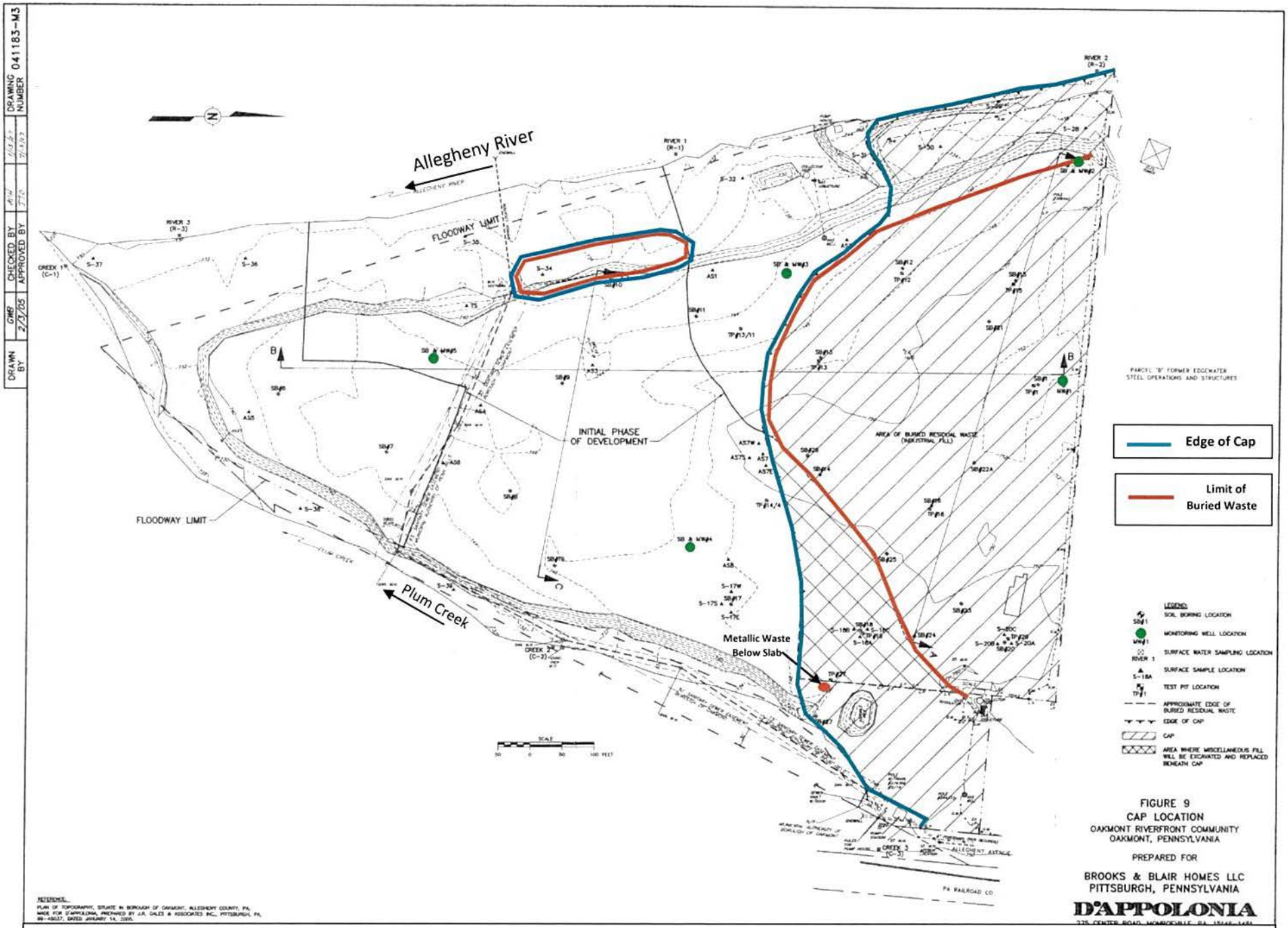
FORMER EDGEWATER STEEL PROPERTY
Statement of Basis

Facility Location Map
Figure 1



FORMER EDGEWATER STEEL PROPERTY
Statement of Basis

Property Parcels
Figure 2



Former Edgewater Steel Property
Parcel A and C – River's Edge
Statement of Basis

Sampling Location Map
Figure 3