



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
STATEMENT OF BASIS

December 2015

**TRIMODAL TERMINAL, L.P.**  
**600 VETERANS DRIVE**  
**FOLLANSBEE, BROOKE COUNTY, WEST VIRGINIA**  
**VRP # 13627**  
**WVD004319539**

## Table of Contents

I Introduction .....	3
II Facility Background .....	3
III Summary of Investigations.....	4
A. Soil Exposure Pathway .....	4
B. Groundwater Exposure Pathway .....	5
C. Groundwater Migration to Surface Water .....	7
D. Vapor Intrusion Pathway .....	7
IV. Corrective Action Objectives.....	8
V. Proposed Remedy .....	9
A. Engineering Controls.....	9
B Institutional Controls .....	9
VI. Evaluation of EPA’s Proposed Remedy .....	11
VII. Financial Assurance.....	13
VIII. Public Participation .....	14

References / Administrative Record List

Figure 1 Site Map

Figure 2 Soil Impact Zone

Figure 3 Vapor Impact Zone

## **I Introduction**

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the Trimodal Terminal, L.P. (Trimodal) parcel located at 600 Veterans Drive, Follansbee, Brooke County, West Virginia (hereinafter referred to as the “Parcel”). The 80-acre Parcel was formerly owned by Wheeling Pittsburgh Steel Corporation (WPS). The Parcel was once operated as part of the former WPS Facility. Respondent purchased the Parcel from the bankruptcy estate of RG Steel, LLC in 2013. EPA’s proposed remedy for the Parcel consists of: 1) installation of a permanent cover over contaminated soil in the defined soil impact zone; 2) implementation of a Soil Management Plan to protect the permanent cover and prevent exposure and the spread of contaminated soil during construction; 3) installation of Vapor Mitigation Systems (VMS) beneath future buildings within the defined vapor impact zone; 4) implementation of a land use restriction; and 5) implementation of ground water use restrictions. This SB highlights key information relied upon by EPA in making its proposed remedy.

The Parcel is subject to the Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, (42 U.S.C. §§ 6901 et seq.). EPA issued an Administrative Order on Consent (AOC) to the owner of the Parcel in December 2013. Trimodal also entered into an agreement with the West Virginia Department of Environmental Protection (WVDEP) on April 9, 2014 for the performance of remedial work pursuant to its Voluntary Remediation Program (VRP). EPA has prepared this SB in cooperation with WVDEP to satisfy both programs.

The Administrative Record (AR) for the Parcel contains all documents, including the data and quality assurance information, on which EPA’s proposed remedy is based. See Section VIII, Public Participation, for information on how you may review the AR.

## **II Facility Background**

The Parcel is located at 600 Veterans Drive, Follansbee, Brooke County, West Virginia on the west side of State Route 2 adjacent to the Ohio River. Past operations on the former WPS Facility included operation of a battery of coke ovens to produce metallurgical-grade coke for use in steel production, processing of coke-oven gas in a byproducts plant, and treatment of generated wastewater. Primary coke production and byproducts recovery operations took place at a location on the former WPS Facility outside of the Parcel (WPS Property). Past activities at the Parcel were limited to material storage of iron ore, sinter ore, raw material, and coke stockpile. In addition, operation of a former tar decanter sludge impoundment, a former

Sinter Plant, an active rail line, and an active vehicle maintenance garage were also on the Parcel.

### III Summary of Investigations

Pursuant to a 1998 EPA Unilateral Order, WPS and its successors completed certain investigations at the Parcel that included installation of five soil borings and one groundwater monitoring well; collection of ten surface soil, five subsurface soil and six groundwater samples; and hydrogeologic characterization at the Site. The investigations identified metals and Polycyclic Aromatic Hydrocarbons (PAHs) in surface soil; metals and PAHs in subsurface soil; cyanide, metals, PAHs, benzene, toluene, ethylbenzene, and xylenes in perched groundwater, and metals in alluvial groundwater. Surface soil is defined as 0-2 feet below ground surface (bgs) where direct human contact exposure is plausible and subsurface soil is greater than 2 feet bgs.

In May 2014, Triad Engineering, Inc. collected 24 grab surface soil samples and analyzed them for target volatile organic compounds (VOCs), target semivolatile organic compounds, target metal analytes, cyanide, acetophenone, aniline, acetonitrile, pyridine, bis(2-chloroisopropyl)ether, butyl benzyl phthalate, and n-nitroso-di-n-propylamine. Surface soil samples included: five from the former sinter plant ore storage area, two from the former sinter plant stockpile area, four from the Ohio River shoreline, nine from the former sinter raw materials storage, one from the Murphy Consolidated area, one from the southern edge of the Parcel, and two from the potential viable habitat area. The results of the investigation are summarized below for each environmental media and/or exposure pathway.

#### A. Soil Exposure Pathway

Based on sampling data of the surface soil, a soil impact zone is defined in Figure 2 to cover all sampling locations where one or more of the contaminants of concern, as identified in Table 1, were detected above West Virginia industrial soil de minimis values<sup>1</sup>. West Virginia de minimis values for industrial soil exposure are based on EPA cancer risk protection level of  $1 \times 10^{-5}$  and non-cancer risk Hazard Quotient of 1 for direct contact.

---

<sup>1</sup> West Virginia Voluntary Remediation and Redevelopment Rule, June 1, 2014, Title 60 Code of State Rules, Series 3), Table 60-3B, soil de minimis values for industrial/commercial exposure

**Table 1**

Parameter	Units	WV VRRR Industrial Soil De Minimis <sup>1</sup>	Maximum concentration detected in surface soil
Arsenic	milligram/ kilogram (mg/kg)	27	36.9
Vanadium	mg/kg	140	391
Thallium	mg/kg	20	29.8
Benzo[a]anthracene	mg/kg	29	180
Benzo[a]pyrene	mg/kg	2.9	240
Benzo[b]fluoranthene	mg/kg	29	300
Dibenzo(a,h)anthracene	mg/kg	2.9	47
Indeno[1,2,3-cd]pyrene	mg/kg	29	190

**B. Groundwater Exposure Pathway**

Sampling data from the alluvial aquifer wells have detected the contaminants identified in Table 2 at levels above West Virginia groundwater de minimis values<sup>2</sup>. The West Virginia groundwater de minimis values are based on EPA Maximum Contaminant Levels (“MCLs”) for drinking water codified at 40 C.F.R. Part 141 and promulgated pursuant to the Safe Drinking Water Act, 42 U.S.C. §300f, et seq. If an MCL is not available for the contaminant, the EPA cancer risk protection level of  $1 \times 10^{-6}$  or non-cancer Hazard Quotient of 1 for ingestion and inhalation of groundwater is used.

Historically, slag fill has been placed throughout the Parcel. This practice has contributed to the metal contamination in the Parcel groundwater due to presence of background metal concentrations in the slag fill. The neighboring WPC property generated organic contaminants from its historical coke oven operation. As a result, migration of

---

<sup>2</sup> West Virginia Office of Water Resources Rule (Title 46 Code of State Rules, Series 12 or 46CSR12)

groundwater from the neighboring property contributed to the volatile and semi-volatile organic contamination in the Parcel groundwater.

Although both metal and organic contaminants exceed drinking water standards, there is no current direct exposure to groundwater at the Parcel given that it is not used as a drinking water source and there is no anticipated future exposure given the restrictions proposed.

Table 2

Parameter	Units	WV VRRR Groundwater De Minimis <sup>2</sup>	Maximum concentration detected in groundwater
Cadmium, dissolved	Micrograms per liter (ug/l)	5	8
Cobalt, dissolved	ug/l	4.7	45
Iron, dissolved	ug/l	11000	54000
Manganese, dissolved	ug/l	740	46000
Benzo[a]anthracene	ug/l	0.029	0.84
Benzo[a]pyrene	ug/l	0.2	0.81
Benzo[b]fluoranthene	ug/l	0.029	0.98
Benzo[k]fluoranthene	ug/l	0.29	0.54
Dibenzo(a,h)anthracene	ug/l	0.0029	0.22
Indeno[1,2,3-cd]pyrene	ug/l	0.029	0.52
Naphthalene	ug/l	0.14	0.48

### C. Groundwater Migration to Surface Water

The alluvial aquifer at the Parcel is hydraulically connected to the Ohio River. The impact on the Ohio River from Parcel related contaminants was evaluated in the June 2015 Human Health and Ecological Risk Assessment (HHERA) by modeling surface water concentrations resulting from migration of alluvial groundwater to Ohio River, taking into consideration the substantial dilution capacity of the Ohio River. The modeled surface water concentrations, based on estimated dilution factors of 38,760 for human health and 350 for benthic organism exposure, were compared with West Virginia Water Quality Standards<sup>3</sup>. In the absence of a water quality standard from West Virginia or the Ohio River, the aquatic life screening value based on EPA Region III BTAG Freshwater Screening values (US EPA, 2004c) was used. The modeled surface water concentrations do not exceed applicable water quality standards for the Ohio River which acts as a hydraulic boundary to prevent further migration of the groundwater plume by dilution.

### D. Vapor Intrusion Pathway

The perched aquifer is the uppermost aquifer with the potential for vapor intrusion into overlying buildings. Due to its greater toxicity and concentrations detected in the perched aquifer, benzene is the risk driving constituent for vapor intrusion. While other volatile and semi volatile organic constituents of concern were also detected in the perched aquifer, they pose less risk than benzene due to lower toxicity and/or concentrations. The alluvial aquifer was also evaluated and determined to have no vapor intrusion potential due to non-detectable level of benzene and low levels of other volatile and semi volatile organic constituents of concern. Additionally, the alluvial aquifer is confined above by a semi-permeable clay layer that retards upward migration of vapor. Therefore, the potential for vapor intrusion to future occupied buildings was evaluated for and driven by benzene risk in the perched aquifer.

Benzene concentrations in the perched aquifer were compared with a screening level of 130 ug/l estimated in the HHERA using EPA's Vapor Intrusion Screening Level Calculator Version 3.3.1, version May 2014, with the following input assumptions:

*Commercial exposure scenario, target cancer risk =  $1 \times 10^{-5}$ , target hazard quotient for non-carcinogens = 1, and average groundwater temperature = 12.50°C based on average shallow groundwater temperature map for the Follansbee region.*

Several perched zone wells were dry at the time of measurement, and only one perched zone well, TW-VA3, showed benzene concentrations above the screening level. However, due to the scarcity of perched zone wells, and to account for the transient water level in the

---

<sup>3</sup> West Virginia Title 47 Code of State Rules, Series 2, Requirements Governing Water Quality Standards,

perched aquifer, a conservative vapor impact zone that is inclusive of the dry wells was defined in Figure 3.

#### **IV. Corrective Action Objectives**

EPA's Corrective Action Objectives for the specific environmental media at the Parcel are as follows:

##### **1. Soils**

EPA's Corrective Action Objective for the surface soil is to control direct contact of hazardous constituents remaining in the soil that are above West Virginia industrial soil de minimis values, which are based on EPA cancer risk protection level of  $1 \times 10^{-5}$  and non-cancer risk Hazard Quotient of 1.

##### **2. Groundwater**

Where technically practical, EPA requires a final remedy to restore usable groundwater to its maximum beneficial use within a reasonable timeframe. Where restoring contaminated groundwater to its maximum beneficial use is not technically practicable, EPA will generally require a facility to prevent or minimize the further migration of a plume, prevent exposure to the contaminated groundwater, and evaluate further risk reduction options. Technical impracticability (TI) for contaminated groundwater refers to a situation where achieving groundwater cleanup standards associated with final cleanup standards is not practicable from an engineering perspective. The term "engineering perspective" refers to factors such as feasibility, reliability, scale or magnitude of a project, and safety.

EPA has determined that restoration of groundwater to drinking water standards is technically impracticable at the Parcel due to the presence of background metal concentrations, specifically cadmium and cobalt in groundwater that exceed West Virginia Groundwater De Minimis values (equivalent to EPA's primary drinking water standards, Section 1412 of the Safe Drinking Water Act, 42 U.S.C. Section 300g-1). The source of background metals is from the slag fill placed extensively throughout the Parcel. Remediation by removal of the slag fill is not practical given the extensive areal extent and depth of the fill

Therefore, EPA's Corrective Action Objective for groundwater is to control consumptive exposure to hazardous constituents remaining in the groundwater that are above drinking water standards and to ensure that the groundwater plume is contained and will not migrate beyond the extent of the current groundwater plume.



## **V. Proposed Remedy**

The proposed remedy for the Parcel consists of both engineering and institutional controls.

### **A. Engineering Controls**

#### 1. Soil

The proposed remedy requires installation of a permanent cover over the contaminated soil within the defined soil impact zone in Figure 2. The permanent cover can be clean soil or impervious surfaces. Clean soil cover will be comprised of a minimum 6-inch thick compacted clean soil, aggregate or other suitable fill material. Impervious cover will be comprised of a minimum 3-inch layer of asphalt or 5-inch layer of concrete pavement with appropriate base stone. A building on slab is considered a permanent cover.

#### 2. Vapor Intrusion

The proposed remedy requires installation of a Vapor Mitigation System (VMS) beneath any buildings constructed within the defined vapor impact zone as depicted in Figure 3 unless it can be demonstrated to WVDEP that vapor intrusion does not pose a threat to human health, and WVDEP, in consultation with EPA, provides prior written approval that no VMS is needed. Any such VMS shall be approved prior to installation by WVDEP and shall be maintained in operational condition until it is demonstrated to WVDEP, in consultation with EPA, that terminating the operation would not pose unacceptable human health risk or a threat to human health, and WVDEP, in consultation with EPA, provides prior written approval for such termination.

#### 3. Groundwater

EPA's proposed remedy for the Parcel groundwater is the establishment of a TI zone covering the entire Parcel as delineated by the property boundary and Ohio River. Long term monitoring for the containment of the plume is not necessary because, as described in Section IIIC, Ohio River provides a hydraulic boundary to prevent further migration of the plume by diluting the concentrations to below applicable water quality standards.

### **B. Institutional Controls**

The proposed remedy includes the following institutional controls (ICs):

- a) The Site shall not be used for residential purposes;

- b) The owner shall install and maintain the integrity of the permanent cover by conducting annual inspections and making timely repairs if needed.
- c) Groundwater shall not be used for any purpose unless it is demonstrated to WVDEP, in consultation with EPA, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy and WVDEP provides prior written approval for such use;
- d) A VMS, the design of which shall be approved prior to installation by WVDEP, in consultation with EPA, shall be installed, operated, inspected and maintained in new structures constructed inside the defined vapor impact zone as depicted on Figure 3, unless it is demonstrated that vapor intrusion does not pose a threat to human health and WVDEP provides prior written approval that no VMS is needed.
- e) The Parcel shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the final remedy;
- f) All earth moving activities, including excavation, drilling and construction, shall be conducted in compliance with WVDEP approved Soil Management Plan such that the activity will not pose a threat to human health and the environment or adversely affect or interfere with the final remedy. No such activities shall take place at the Parcel unless WVDEP, in consultation with EPA, provides prior written approval;
- g) Any owner of the Parcel property shall allow the EPA, WVDEP and/or their authorized agents and representatives, access to the Parcel to inspect and evaluate the continued effectiveness of the final remedy and, if necessary, to conduct additional remediation to ensure the protection of the public health and safety and the environment.

The land and groundwater use restrictions necessary to prevent human exposure to contaminants at the Parcel will be implemented through an enforceable institutional controls such as an order and/or an Environmental Covenant pursuant to the West Virginia Uniform Environmental Covenants Act (WV Code Chapter 20 Article 22B). If EPA determines that additional maintenance and monitoring activities, institutional controls, or other corrective actions are necessary to protect human health or the environment, EPA has the authority to require and enforce such additional corrective actions through an enforceable mechanism which may include an order or Environmental Covenant, provided any necessary public participation requirements are met. If any individual with an interest in the Parcel believes that information shows that any use restriction proposed in this remedy and later selected by EPA is no longer necessary to protect public health and the environment, the individual may submit such information to WVDEP for consideration. WVDEP, in consultation with EPA, can change

any such restriction if it determines it is no longer necessary, after any required public comment period.

## **VI. Evaluation of EPA's Proposed Remedy**

### **A. Threshold Criteria**

#### **1. Protect Human Health and the Environment**

The proposed remedy will continue to protect human health and the environment from exposure to contamination, including future risks. Because contaminants remaining in the soil and groundwater at the Parcel are above levels appropriate for residential use, EPA's proposed remedy requires land and groundwater use restrictions to restrict activities that may result in exposure to those contaminants. EPA proposes that the restrictions be implemented and maintained through ICs.

The primary human health and environmental threats are potential human consumption of contaminated groundwater, exposure to contaminated soil, and intrusion of soil vapor into overlying buildings within the defined vapor impact zone in Figure 3. The proposed remedy will implement ICs to prevent consumptive use of groundwater, restrict land use to non-residential, install and maintain permanent covers and implement ICs to prevent exposure to contaminated soil above industrial risk-based concentrations. The requirement to install VMS in buildings constructed within the defined vapor impact zone will prevent vapor intrusion above commercial exposure scenarios.

#### **2. Achieve Media Cleanup Objectives**

EPA's proposed remedy meets the cleanup objectives appropriate for the expected current and reasonably anticipated future land use. The proposed remedy meets the cleanup standards for current and future use of groundwater, since no current on-site receptors exist for groundwater and the proposed remedy provides that all uses of groundwater other than operation, maintenance and monitoring activities are to be prohibited. The proposed remedy does not, however, meet groundwater cleanup standards that would allow for the beneficial use of groundwater at the Facility because achieving groundwater MCLs is technically impracticable. Therefore, concentration specific cleanup goals for groundwater were not developed since EPA is granting a TI waiver for the groundwater. Specific soil cleanup standards are not set because the proposed use restrictions will protect public health and the environment under non-residential exposure scenarios.

#### **3. Remediating the Source of Releases**

In its RCRA Corrective Action proposed remedies, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. The source of metal contaminants in soils throughout the Parcel is the slag fill which was historically placed throughout the Parcel. EPA's proposed remedy reduces the maximum extent practicable, further releases that may pose a threat to human health and the environment by restricting activities that may result in exposure to remaining contaminants. Similarly, the slag fill is also the source of metal contaminants in groundwater. Given the slag fill was placed historically throughout the Parcel without a localized, discernible source area, remediation of the source material has been demonstrated to be technically impracticable. In addition, EPA has determined that the WPS Property is the source of volatile and semi-volatile organic contaminants in the groundwater. EPA's proposed remedy for the Parcel does not address source removal at the neighboring former WPS Property.

## B. Balancing/Evaluation Criteria

### 4. Long-Term Effectiveness

The proposed remedy will provide long-term effectiveness in protecting human health and the environment by controlling exposure to contaminants remaining in soils and groundwater. The land use restrictions will prohibit use of the Parcel for residences, schools, day care facilities, or recreational uses that would result in exposure to contaminated soil above residential risk-based concentrations. The groundwater use restrictions will prohibit groundwater withdrawal for potable, showering, washing, swimming or any activity that would result in oral contact. Additionally, the proposed remedy requires compliance with a WVDEP-approved Soil Management Plan to control exposure to and spreading of contaminated soil.

The preferred VMS may include a gas vapor barrier system or passive mitigation system to prevent vapor intrusion into future buildings constructed within the defined vapor impact zone in Figure 3. The ICs require periodic inspection and maintenance of the VMS.

Under EPA's preferred IC, an Environmental Covenant under Uniform Environmental Covenant Act (UECA), the land and groundwater use restrictions will run with the land and be binding on future owners, successors or assigns and their authorized agents, employees or persons acting under their direction or control. The ICs will also impose requirements to inspect the permanent covers no less than annually, and to make repair as necessary.

### 5. Reduction of Toxicity, Mobility, or Volume of the Hazardous Constituents

The hazardous constituents in the soil are largely immobile and confined within the Parcel boundary. Compliance with an agency approved Soil Management Plan will control

exposure and spreading of contaminated soil. No new activities are anticipated from the neighboring former WPS Property that would further or re-contaminate groundwater at the Parcel.

#### 6. Short-Term Effectiveness

The installation of permanent covers and the VMS require short installation time, minimum excavation, and likely no offsite disposal which minimize short-term exposure to contaminated soil. The work will only be performed by qualified persons following acceptable health and safety protocol and in compliance with an agency approved Soil Management Plan to further minimize exposure to and spreading of contaminated soil.

#### 7. Implementability

EPA anticipates that the land use and groundwater restrictions will be fully implemented shortly after the issuance of the Final Decision and Response to Comments (“FDRTC”).

#### 8. Cost

The proposed remedy will meet the corrective objectives at costs significantly lower than other alternatives. The cost estimate to install the permanent covers is about \$250,000 which can be incorporated into the developmental cost of the Parcel. Annual inspection and maintenance costs are de minimis. The installation of a passive VMS in new buildings eliminates high maintenance and electricity costs associated with maintaining an active VMS.

#### 9. Community Acceptance

EPA will evaluate community acceptance of the proposed remedy during the public comment period and will be described in the FDRTC.

#### 10. State/Support Agency Acceptance

WVDEP has reviewed and concurred with the proposed remedy for the Parcel. Furthermore, WVDEP has provided input and been involved throughout the investigation process.

## **VII. Financial Assurance**

EPA will require financial assurance in the amount of \$250,000 for installation of the permanent covers.

## VIII. Public Participation

Before EPA selects a final remedy for the Parcel, the public may participate in the remedy selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Parcel. The AR contains all information considered by EPA in reaching this proposed decision and is available for public review during office hours at two locations:

Follansbee Public Library  
844 Main St,  
Follansbee, WV 26037  
(304) 527-0860

Or

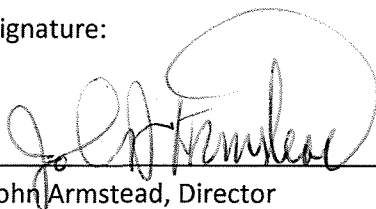
U.S. EPA Region III  
1650 Arch Street  
Philadelphia, PA 19103

Contact: Andrew Fan, Phone 215-814-3426, Fax 215-814-3113 [fan.andrew@epa.gov](mailto:fan.andrew@epa.gov)

Interested parties are encouraged to review the AR and 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. You may submit comments by mail, fax, or e-mail to Andrew Fan, EPA project manager. EPA will hold a public meeting to discuss this proposed remedy upon request which should also be made to Andrew Fan whose contact information is listed above.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrants a modification to the proposed remedy, EPA will modify the proposed remedy or select other alternatives based on such new information and/or public comments. EPA will announce its final remedy and explain the rationale for any changes in the FDRTC. All persons who comment on this proposed remedy will receive a copy of the FDRTC. Others may obtain a copy by contacting Andrew Fan at the address listed above.

Signature:



---

John Armstead, Director  
Land and Chemicals Division  
USEPA, Region III

Date:

12.3.15

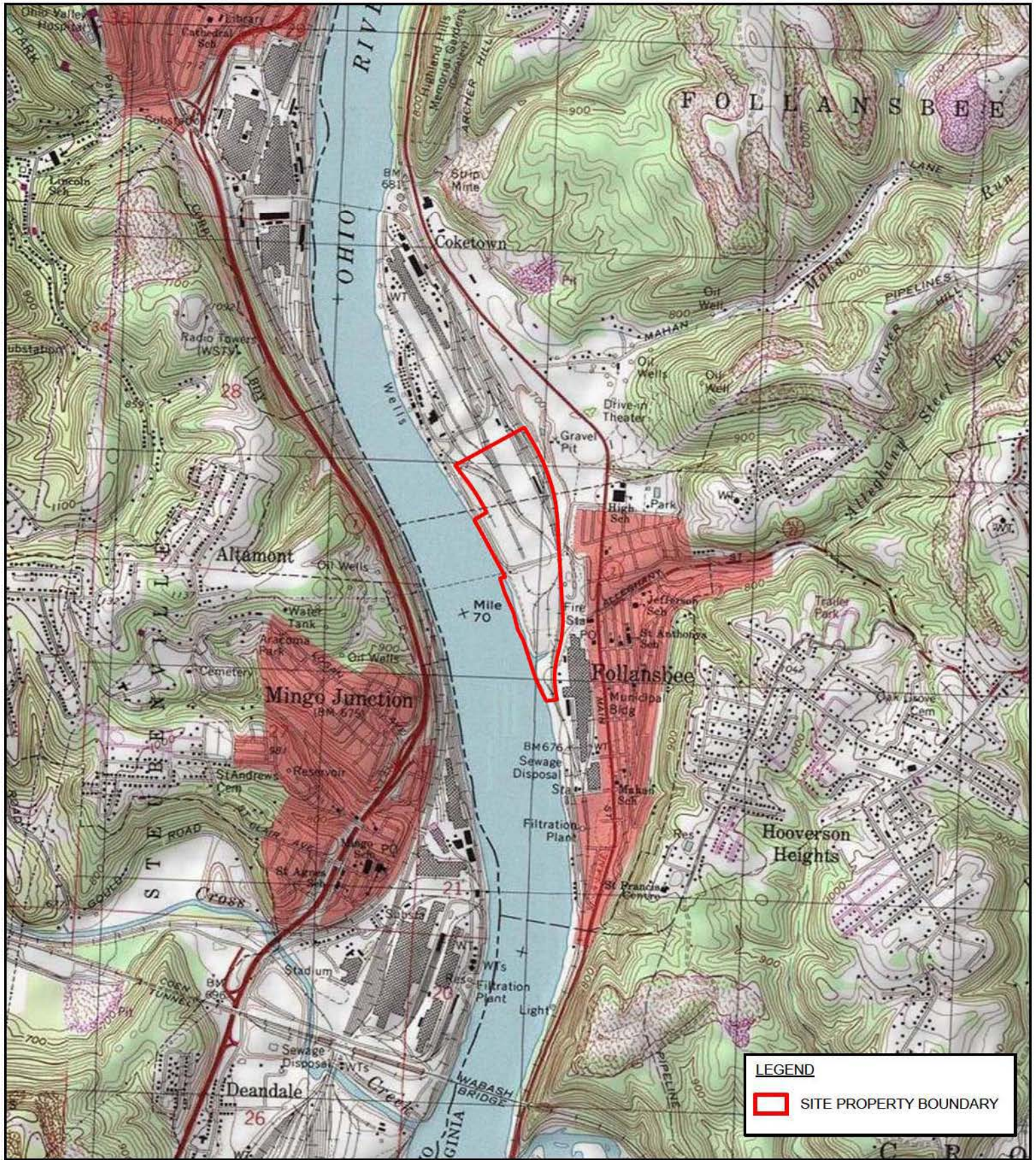
## References

### Administrative Record List

1. Human Health and Ecological Risk Assessment Report, Trimodal Terminal Site; Risk-Based Remedies, submitted August 2014, revised March 2015.
2. Phase II RFI Work Plan, Severstal International, Follansbee, WV Facility, WVD004319539, Administrative Order # RCRA-III-080-CA, September 4, 2009.
3. RCRA Facility Investigation Report Wheeling-Pittsburgh Steel Corporation, Steubenville East Coke Plant, Follansbee, West Virginia, September 2005.
4. Triad Engineering, Inc., Site Assessment Work Plan (SAWP), May 2014. Triad Engineering, Inc., Supplemental SAWP. Electronic mail, November 25, 2014.
5. Site Assessment Report (SAR) Addendum, VRP Project #13627 Trimodal Terminal, Trimodal Terminal, L.P., Triad Engineering, Inc., September 4, 2014. Triad Engineering, Inc., SAR – Revision 1, October 13, 2014. Triad Engineering, Inc., SAR – Revision 2, January 2015.
6. VRP Agreement, VRP Project #13627 Trimodal Terminal, Trimodal Terminal, L.P., submitted to WV DEP according to W. Va. Code §22-22-1 et seq., March 20, 2014.
7. VRP Application, VRP Project #13627 Trimodal Terminal, Trimodal Terminal, L.P., accepted by the WV DEP according to W.V. Code 22-22-3 and 14 W.V. Reg 452.60-3-4,
8. March 5, 2014.
9. West Virginia Voluntary Remediation and Redevelopment Rule, May 2012.
10. West Virginia Voluntary Remediation and Redevelopment Act Guidance Manual, Version 2.1.
11. West Virginia Office of Water Resources Rule (Title 46 Code of State Rules, Series 12 or 46CSR12)
12. West Virginia Department of Environmental Protection, Quality Assurance Program Plan, December 2011.

13. West Virginia Title 47 Code of State Rules, Series 2, Requirements Governing Water Quality Standards.
14. State of Ohio Water Quality Standards, Chapter 3745-1 of the Administrative Code.
15. US EPA Region III BTAG Freshwater Screening values (US EPA, 2004c).
16. WV DEP and US EPA comments received to the Trimodal Terminal Remedial Action Work Plan (RAWP) received via electronic mail, July 1, 2015.





**LEGEND**

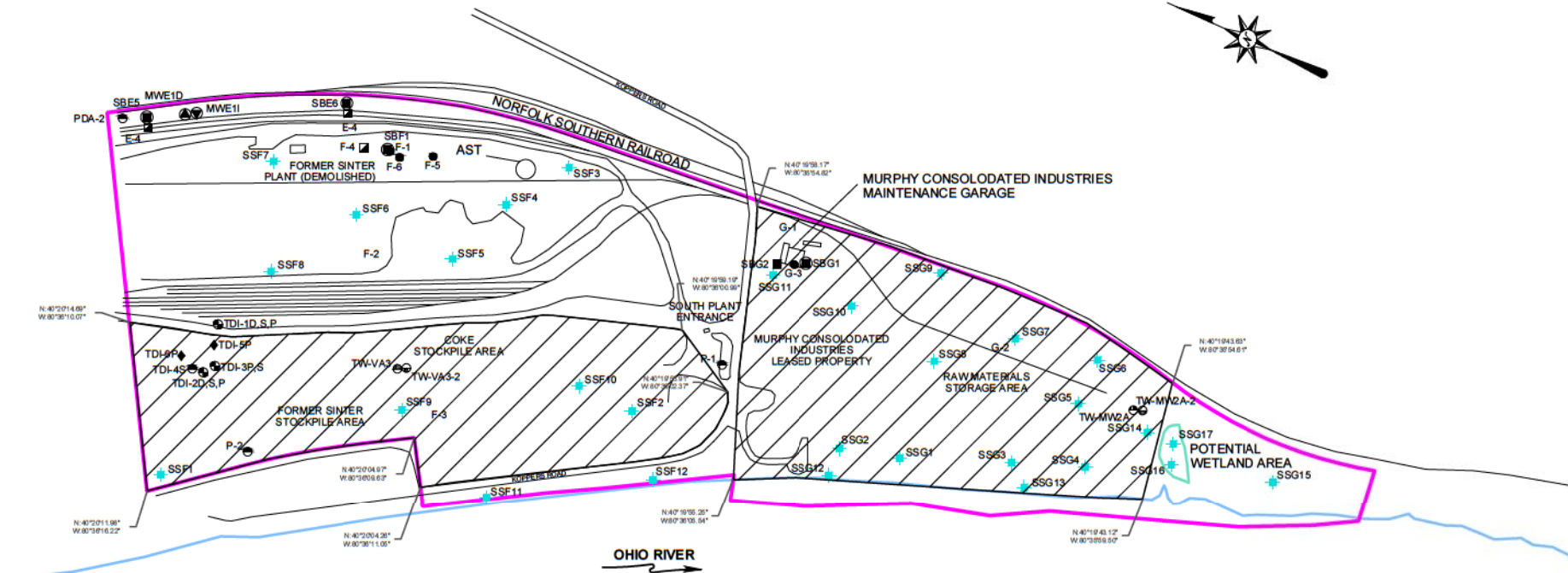
SITE PROPERTY BOUNDARY

TRIMODAL TERMINAL  
 VETERANS DRIVE  
 FOLLANSBEE, WV



















CREATION DATE: MAY 8, 2015	PROJECT NO.: 20156937 A
DRAWN BY: KWF	APPR'D BY: LW
CHEK'D BY: LW	REVISION: 0

**Figure 1**  
**Site Map**  
 TRIMODAL TERMINAL  
 FOLLANSBEE, WEST VIRGINIA



**LEGEND**

-  SOIL COVER
-  RIVER/STREAM
-  POTENTIAL WETLAND AREA
-  RAILROAD TRACKS
-  SITE BOUNDARY
-  TDI-5P PERCHED AQUIFER MONITORING WELL
-  PDA-2 UPPER ALLUVIAL AQUIFER MONITORING WELL
-  MW-2A LOWER ALLUVIAL AQUIFER MONITORING WELL
-  TW-MW2A TEMPORARY PERCHED AQUIFER MONITORING WELL
-  TW-MW2A TEMPORARY ALLUVIAL AQUIFER MONITORING WELL
-  F-4 COG DRIP LEG WITH SWMU IDENTIFICATION
-  F-5 SWMU IDENTIFICATION
-  TDI-3P S IMPONDMENT MONITORING WELL
-  MWE1D UPPER ALLUVIAL AQUIFER MONITORING WELL
-  MWE1I LOWER ALLUVIAL AQUIFER MONITORING WELL
-  SOIL BORING

**NOTES:**

- BASE FIGURE OBTAINED FROM TRIAD ENGINEERING, INC.



CREATION DATE:  
MAY 8, 2015

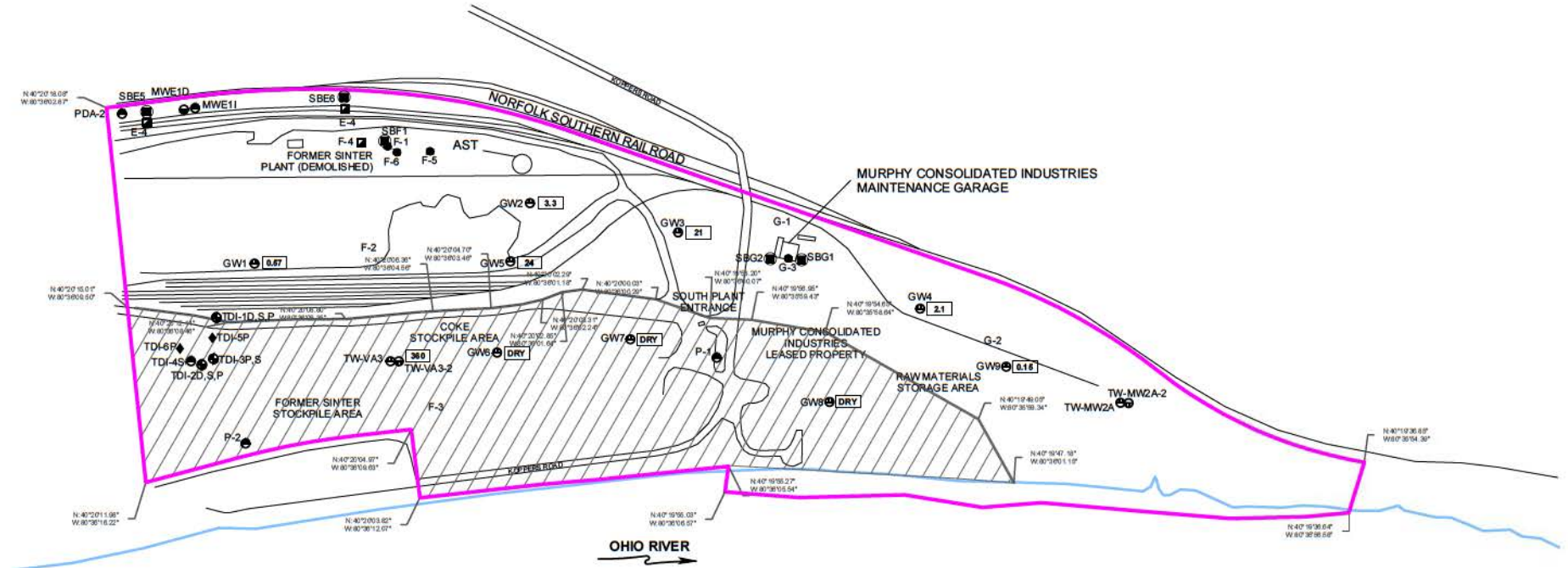
PROJECT NO.:  
20156937.A



DRAWN BY: KWF	APR'D BY: LW
CHEK'D BY: LW	REVISION: 0

**Figure 2**  
**Soil Impact Zone**

600 VETERANS DRIVE  
FOLLANSBEE, WEST VIRGINIA



**LEGEND**

- RIVER/STREAM
- POTENTIAL WETLAND AREA
- RAILROAD TRACKS
- SITE BOUNDARY
- GW-1 SHALLOW TEMPORARY GROUND WATER SAMPLE POINT
- PDA-2 UPPER ALLUVIAL AQUIFER MONITORING WELL
- MW-2A LOWER ALLUVIAL AQUIFER MONITORING WELL
- TW-VA3 TEMPORARY GROUND WATER SAMPLE POINT
- 2004 RFI PERCHED GROUNDWATER FROM TEMPORARY PIEZOMETER
- 2004 RFI PERCHED ZONE MONITORING WELL
- 2.1 PERCHED GROUNDWATER BENZENE, IN PARTS PER BILLION
- VAPOR INTRUSION MITIGATION

**NOTES:**

- BASE FIGURE OBTAINED FROM TRIAD ENGINEERING, INC.



CREATION DATE:  
MAY 8, 2015

PROJECT NO.:  
20156937.A



DRAWN BY: KWF	APRVD BY: LW
CHEK'D BY: LW	REVISION: 0

**Figure 3**  
**Vapor Impact Zone**

600 VETERANS DRIVE  
FOLLANSBEE, WEST VIRGINIA